CAN YOU SELL THIS OWNER A NEW HOUSE
By Taking His House in Trade?

In this issue...
READ HOW BUILDERS ARE DEVELOPING TRADE-IN SELLING

- BLUEPRINT HOUSE WITH FOUR COLOR ILLUSTRATIONS
- NATIONAL HOME MONTH HOW TO USE LOCAL NEWSPAPER ADVERTISING
- MODULAR CONSTRUCTION

Merchandising houses with X-RAY office
PROVEN PERFORMANCE

The performance of KWIKSET'S "400" Line of residential locksets has been proven by the fact that more than 17 million KWIKSET locksets are in guaranteed trouble-free service.

To have this guarantee and service

ALL YOU NEED IS A KWIKSET LOCKSET

KWIKSET SALES AND SERVICE COMPANY, ANAHEIM, CALIFORNIA
Home Buyers are Reading THIS AD

in Better Homes & Gardens and in Living For Young Homemakers. Below are what two prominent home builders are saying about Fenestra Windows.

For complete information on these popular Fenestra Windows, call your Fenestra Representative or write Detroit Steel Products Company, Dept. AB-7, 2260 East Grand Blvd., Detroit 11, Michigan.

1953 Window Models by Fenestra

NEW Fenestra "RAIN SHEDDING" PROJECTED WINDOWS

You don't have to run to shut your windows every time it rains—the projecting vents shed the rain outside, protecting your furnishings. And incoming drafts are deflected upward to protect your health and comfort. Fenestra's Metal Screens and Storm Sash go on quickly and ready from the inside, warm inside of the house and these beautiful, streamlined metal windows give your house a lower, spread-out appearance...emphasize the graceful, horizontal lines of your home.

They are available Super Hot-Dip Galvanized—never need painting. Come complete with casings to save building costs.

NEW Fenestra "BIG VIEW" WINDOWWALL

Fenestra's new WindowWall gives you extra view and more light because of its specially designed, slender steel frame. It adds to the outdoors—makes your room feel bigger. It enhances the graceful lines and neatness of your home. The awning-type ventilators give you protected ventilation. Screens slip easily on from inside the house. And you can have 1/3" double-pane insulating glass in this exciting new window.

Available Super Hot-Dip Galvanized for complete protection from rust.

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Graceful, easy-operating Fenestra Metal Casement, Fenestra Casings, Metal Inside Screen, "tailored-in" Fenestra Inside Storm Sash...all designed for each other. That's why they are trouble-free. With a gentle twist of the geared, ratch-adjuster, casement leaves swing out to catch the breeze and guide it in...where you want it. No tugging or lifting. These windows cannot swell or shrink or splinter. And you can wash them, screen them and put on the storm sash, all from the comfortable inside of your house. Available Super Hot-Dip Galvanized to eliminate your maintenance worries.

"We used your WindoWall in our 90-house project and they added substantially to the eye and sales appeal of our $10,000 class houses. We are pleased far beyond our expectations. To use the Fenestra name is synonymous with quality and satisfaction."

Jerome S. Cardin, Vice President, Admiral Construction Corporation, Baltimore, Md.

"Switched from double-hung wood windows to your Fenestra Casements with combination Inside-Outside Casings in our new development. The elimination of stools cut our installation time and costs and total savings went far beyond our initial planning. We'd be glad to give any builders our field findings on these units."

C. Albert Merritt, President, Woodbrook Homes, Inc., Baltimore, Md.
This modern, attractive drive-in theatre owes much of its inviting appearance to "Century" APAC sheets!

Year after year, this material will protect the structure it covers, needing practically no maintenance to keep it attractive, and never requiring protective paint. That's service!

These 4 x 8 foot sheets are made of two almost indestructible materials—asbestos fiber and portland cement. That means they are permanently fire- and weather-resistant, and proof against insects and rodents.

Add to these features the facts that "Century" APAC is low in cost and goes in place quickly and easily and you see why it is such a popular building material—for both inside and outside uses!

Keep "Century" APAC in mind for future projects. You and your men will like working with it, and you can be certain of customer satisfaction for years to come. Your K&M distributor will gladly give you detailed information about "Century" APAC or write directly to us.
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The No. 19, a "self-starter" garage door with "Powermatic" Action, for 9' x 7' openings. The No. 77 rigid-type, for doors 8' wide x 6'8" high. A popular budget-wise beauty. The No. 400, for luxury sectional-type convenience at minimum cost; a new winner!

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MORE SELLING FEATURES
FAST INSTALLATION
MODERN DESIGN
LOW HEADROOM
WIDE RANGE OF SIZES
YEARS OF TROUBLE FREE SERVICE

OVERHEAD GARAGE DOORS
AND HARDWARE

FEATURING
"GLIDE-O-MATIC" ACTION
for sectional-type doors

ONE OF FRANTZ' FAMOUS 14 FEATURES
The new Frantz No. 500, shown at right, has more features than you ever saw in an overhead garage door! Smart in appearance, modern with ranch-style panels, this sensational new Frantz model requires only 6" headroom (for single-width sizes.) Wonderful "Glide-O-Matic" Action provides for a mere turn of the chrome plated handle—and the door glides open as if by unseen hands!

AMERICA'S BEST ENGINEERED
OVERHEAD GARAGE DOORS

When you see these modern overhead garage doors in action—when you experience their easy-opening and compare their beauty and their many other features—you will understand why so many dealers and contractors prefer FRANTZ.

Here are more than 25 sizes and styles of single and double-width, rigid and sectional type overhead doors. Here, also, for your special convenience, is a selection of Overhead Hardware Sets second to none. Whichever you prefer—complete doors or hardware only—Frantz has the answer. Write for Frantz' New Catalog No. 302.
Now It's Mortgage Trouble

On May 18 VA’s Bert King issued his amazing “Fees and Charges” regulation declaring the warehousing and the discounting of mortgages to be felonies. What made the order doubly amazing is that it was issued when 3\(\frac{1}{4}\) per cent government bonds were being quoted at less than 99, and regular 2\(\frac{1}{2}\) per cent governments were selling at less than 90 for the first time in history. Another part of the regulation decreed that a builder may not pay more than five per cent simple interest plus 2\(\frac{1}{2}\) per cent for construction money.

Fees and charges are one thing, and the part of the regulation dealing with them could be construed as a move to check inflation. But, less than three weeks after the regulation was issued, President Eisenhower’s economic advisor said to NAHB’s President Spiegel, “We are not worrying about inflation.” The only conclusion that can be drawn from this statement, the government’s announced fiscal policy and King’s regulation, is that King is fighting an inflation straw-man, while the rest of the government is concerned about rapid deflation. The Administration is new. It must be allowed a quota of mistakes of both omission and commission. Undoubtedly, somebody will straighten King out on this score soon.

But, while fees and charges are one thing, the discount part of the regulation is something else. It is questionable in this writer’s mind whether King or anyone else has a right to dictate the terms on which a builder may sell his mortgages. If that right does exist then it should apply equally to government bonds being sold at whatever the market bids for them.

The home building industry is in competition with other industries and the government for long term credit, and if it is to get the money it needs to operate it must be allowed to sell its paper on the open market in competition with other paper. The discount part of the King regulation sounds like something dug up from the OPA graveyard.

The regulation is being fought, but in the meantime a number of builders have been forced to curtail operations because they can find no market for their mortgages. The situation is serious in many places, and critical in a few, but it should not be viewed with consternation.

There probably is a need to slow the tempo of home building operations in some areas where unsold inventories of low-cost houses indicate a slackening demand under current amortization and down payment terms. But the problem is local, and can be solved only by the builders themselves adapting their pace to the market. The King regulation can accomplish nothing but deflationary disaster. It can be predicted safely that the regulation will be rescinded, and that the market for mortgages will show signs of strengthening before the end of summer.
TRENDS—AB TELEGRAPHIC SURVEY

Here’s the Home Building Picture
Across the Nation

Will the financing dilemma be solved in time to keep the vast home building industry in high gear? What are the up-to-date facts as to buyer prospects, actual sales, price resistance, future costs?

Answers to these and other important questions are revealed in this expanded American Builder telegraphic survey—the latest quarterly digest of last-minute reports and opinion from home building authorities representing all sections of the nation.

The adjoining map indicates which states comprise each section making up this survey.

Consensus:

Higher interest rates have not given VA and FHA loans the expected shot in the arm. A majority of reporting cities disclose the action has brought about little or no change. Some say their supply of loan money has dried up completely.

Despite this, home starts are expected to roll along at last year’s pace, though individual areas list many changes in the columns for increased or decreased production.

Plenty of manpower exists generally, but there are a few scattered shortages, mainly among carpenters and laborers. Materials are available in great profusion.

The line of prospective buyers seems as long as ever, but financing conditions are seen behind a slight curtailment in sales.

Gradually increasing sales resistance is noted on a nationwide basis. Many areas have it to some degree in all price ranges; in most others it begins around $12,000-$15,000.

The direction of building costs is still upward, reflecting new labor contracts and higher prices for materials. However, a half-dozen cities east of the Mississippi look for a decrease averaging 5 per cent.

Most areas haven’t tried the trade-in home program as yet; are not optimistic about it. However, the plan “looks good” to enough cities to indicate it may receive a thorough trial.

Will Recent Interest Rate Rise Increase Availability of VA and FHA Loans?

Northeast: Long Island, which has had an uninterrupted flow of such loans, notes no specific change. Northern New Jersey and western New York areas expect little change in activity now, but hint availability will be improved later. Nearly all other areas are quite unified in the thought that the increase will have little or no effect. From a Washington, D.C., report: “New interest rate has not helped the sales of homes and you know why. At present, Washington is in the doldrums because our friends, the Republicans, are slicing payrolls right and left.”

Southeast: No signs of more mortgage money available yet, but it’s too early to tell, according to Atlanta and Memphis. So far, the plan has backfired in Jackson, Miss., which declares that “since the increase in interest rate, all lending institutions have discontinued making loans, both FHA and VA, in this area” to make “the worst mortgage loan market in history.”

Central: Most areas believe change will be of little or no help, but Kansas City and Sioux City, Iowa, look for better loan availability. “Expected money appears not to be forthcoming,” is sober note from Dayton, Ohio. Cincinnati adds that money is tightening up. Market would be strong if either FHA or VA money were available, according to Indianapolis. Most optimistic reply, from Lincoln, Nebr., believes rate changes will increase availability of VA loans from virtually none to ample; FHA loans from tight to ample. Cleveland says help will not come until late this year.

Southwest: San Antonio anticipates more money when market is settled. Houston sees moves of little help for some time. Amarillo thinks it will prove of no value whatever. Tulsa expects some relief in a few months.

West: Higher ceiling on interest will make available 30 per cent more VA loans, but have little effect on FHA business, according to Spokane, Wash. Seattle, adopting a wait and see attitude, notes money is still not available for either loan. Sacramento and Portland report no improvement in conditions. Salt Lake City says VA has cut off all interest in loans since rise. (Continued on page 8)
Acme Sliding Door Hardware is guaranteed for the life of the building. Write for complete, illustrated catalog.

resists wear like child's play

ACME sliding door hardware
TRENDS—AB TELEGRAPHIC SURVEY  (Continued from page 6)

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

Northeast: Optimism prevails in New England and New York, but as one heads farther south, forecasts are less rosy. Starts will rise 10 to 20 per cent, says Connecticut, except for drop around 5 per cent in Bridgeport region. Massachusetts cities see 3 to 7 per cent gain, but Providence fears 20 per cent reversal. Two new defense plants in Chenung Valley area, N. Y., are expected to boost home production 50 per cent. Rest of upstate New York, Westchester and Long Island areas anticipate 10 per cent improvement. Work will hold to pace of a year ago throughout New Jersey. Drop of 20 per cent likely in Philadelphia suburbs. Washington puts decline at 15 per cent, while Richmond, Va., may encounter a 30 per cent slide.

Southeast: Sole reporting bright spot is Birmingham, Ala., with 10 per cent increase. Miami and southern Florida look for continuation of last year’s rate. Pace expected to slacken 25 per cent in Atlanta and Jackson, Miss. Whopping 50 per cent cut looms for Memphis. Nashville expects some reduced activity.

Central: Trend fluctuates greatly from city to city, but consensus indicates starts of entire region will hold to former pace. Chicagoland expects 25 per cent rise and St. Louis believes it could be as high as 30 per cent but for teamsters’ strike which entered third week June 1. Kansas City, also feeling strike, looks for 5 per cent increase. Dayton, Ohio, reports starts will hold even only if a good flow of money is forthcoming, otherwise they may drop 35 per cent. Sioux City, Iowa, predicts 10 per cent more activity. Among decreases forecast are Minneapolis, 5 per cent; St. Paul, 10 per cent; Cincinnati and Indianapolis, 15 per cent; Cleveland and Lincoln, Nebr., 20 per cent. Ten builders of twelve polled in Wichita, Kans., expect 50 per cent slash.

Southwest: Sharply downward movement indicated in most reporting cities, particularly Houston, Amarillo and Phoenix which fear 50 per cent slowdown. San Antonio believes pace will continue unchanged. Drop of 20 per cent is anticipated in Oklahoma City; 7 per cent in Tulsa.

West: Little change is the general rule. Spokane, Wash. awaits a 30 per cent improvement, but starts may fall 10 per cent in San Mateo, Calif., 15 per cent in Portland and Seattle, 50 per cent in Salt Lake City.

Is Sales Resistance Increasing? In What Price Brackets?

Northeast: Down payment trouble continues to plague Albany in $10,000-$15,000 range. Resistance increasing in $10,000-$12,000 bracket in Pottstown, Pa.; $12,000-$16,000 range in New Haven area, and $15,000-$20,000 in Springfield, Mass., also above $12,000 in Richmond, Va., Worcester, Mass. and southern New Jersey. Hartford finds sales slowdown in $21,000-$25,000 class. Niagara Falls marks sales pace stiffening at $16,000; northern New Jersey at $19,000, Boston at $20,000 and decreasing, Long Island at $30,000 and Westchester County, N. Y., at $35,000.

Southeast: Most cities experiencing a slowdown in all price brackets due to down payments. Nashville notes resistance over $15,000 increasing. Miami finds tighter sales situation in $18,000-$17,000 bracket, but that it is easing off in the $22,000-$30,000.

Central: Resistance reported in all but the lowest brackets in St. Louis, but interest is picking up in the $20,000 to $30,000 range. Dayton, Ohio, finds most trouble in low-cost housing. Minneapolis has no problem. Sales are slowed over $16,500 level in Chicago; over $18,000 in Indianapolis; $20,000 in Kansas City, and $25,000 in Sioux City, Iowa. $12,000-$19,000 bracket increasingly sluggish in Wichita, Kans., and St. Paul.

Southwest: All price categories are feeling the sales pinch in most cities. It has dropped from the $12,000 to the $8,500 level in Houston and Oklahoma City and to $10,000 in the Texas panhandle region.

West: Mountain cities indicate presence of general resistance, but coastal areas find problem begins at around $12,000. Exceptions: Seattle places figure at $15,000; Portland at $16,000; Sacramento at $13,500. San Mateo points out resistance is not to sales, but due to lack of purchase mortgage money.

Are Home Buying Prospects Increasing or Decreasing?

Northeast: Buying prospects remain as strong as ever in most replying centers. However, Camden, N. J., reminds that potential customers have become much more particular and are “comparing every house.” Worcester, Mass., finds prospects increasing 10 to 20 per cent, and New Haven-Cheshire area reports improvement. But Pottstown, Pa., notes buyer potential is off 25 per cent and Richmond, Va., indicates the figure is down 50 per cent as compared to a year ago.

Southeast: Atlanta and Birmingham claim a 10 per cent increase, while Memphis lists substantial decrease, perhaps 40 per cent. No particular change elsewhere.

Central: Prospects off about 20 per cent, says Cincinnati, St. Paul and Lincoln, Nebr., “Same as last year” represents consensus. As many buyers around, believes Dayton, Ohio, “but with less down payment.”

Southwest: Potential buyers are shopping and will buy if they think they are getting a bargain. says San Antonio. Houston points out existence of tremendous demand for $7,500 and under homes, but adds that land cost rules out desirable locations.

West: Washington and Oregon find prospects as good and up to 10 per cent better than last year. Salt Lake City reports more prospects than ever. No special change elsewhere except San Mateo, Calif., which estimates a drop of 20 per cent.
What Will Be the Trend of Building Costs in the Second Half of 1953?

**Northeast:** Majority of centers still forecast increases, but for first time in a long while there are several exceptions. Springfield, Mass., looks for costs to drop 2-3 per cent; New Haven, Conn., 5 per cent due to competition and time-saving methods, and Washington, at least 7 per cent. On the higher-cost bandwagon are Providence, 1 per cent; Albany, 3 per cent; Boston and Camden, N. J., 5 per cent; Worcester, Mass., up to 7 per cent; and Long Island and Bridgeport, Conn., about 10 per cent. Undetermined drop seen for Niagara Falls.

**Southeast:** Costs figure to remain the same in the typical city. However, Jackson, Miss., predicts a rise of 5 per cent, while Atlanta expects this increase in cost of materials. Memphis believes a 5 per cent cut is in the offing.

**Central:** Jump of five per cent anticipated in Chicago, St. Louis, Kansas City; of 4 per cent in western Iowa; of 3-4 per cent in Ohio centers. Minneapolis and Indianapolis believe their costs will decrease 5 per cent. St. Paul and Wichita look for 3-5 per cent rise.

**Southwest:** Costs continuing on the march in Texas, with boost of 4-5 per cent in the cards. Tulsa concurs, but Oklahoma City expects no change.

**West:** California looks for increase around 5 per cent. Little change foreseen in Oregon and Washington, or mountain states, despite strike in Salt Lake City.

What's the Outlook for Trade-in Business?

**Northeast:** "Looks good," says Worcester, Mass., and northern New Jersey. "Very good," reports Hartford, chosen as pilot town. Pottstown, Pa., adds "it will keep us going." But bulk of centers feel plan is too remote to have any impact for some time.

**Southeast:** Jackson, Miss., and Birmingham indicate program will meet favorable reception, but Memphis warns trade-in business will be hazardous and will create no substantial volume. Other areas non-committal.

**Central:** Most centers report a good reception awaits the trade-in plan. Lincoln, Nebr., interested "if it can be worked." Cincinnati believes decreasing values of old property should stimulate trade-in activity and Dayton, Ohio, says plan, with proper financing, "will open large area since down payment is chief block to sales.

**Southwest:** Not too much agitation for trade-ins yet. declares San Antonio. Only Phoenix and Tulsa indicate interest.

**West:** Outlook for future good but little such work under way yet. reveals Seattle. Sacramento thinks business will be fair, but Spokane believes overvaluations on old properties will make it difficult.

In Which Direction Are Home Sales Headed?

**Northeast:** Sold out three months ahead, declares a report from New Haven area. Hartford and Bridgeport note 10 per cent drop. Westchester County, N. Y., says decrease may be due to extreme rainy weather; Providence, Washington and Richmond also cite slack-off in sales. Other areas find sales holding even or running ahead of former pace.

**Southeast:** Actual sales picture beclouded. Atlanta suggests that money conditions are causing many buyers to change plans and wait. Sales seen 10 per cent off in Birmingham, 30 per cent in Nashville, Tenn.

**Central:** Sioux City, Iowa, is lone reporting center anticipating early improvement. Most other areas are feeling slight decline, except Chicago, Indianapolis, Cleveland and Kansas City, where rate is expected to hold.

**Southwest:** Sales decline general, though San Antonio reports increased business for houses under $10,000. Activity holding up well in Phoenix.

**West:** Most coastal areas holding firm, except Seattle. Spokane noted active market. Portland expects increase.

Is the Labor Supply Adequate in All Trades?

**Northeast:** Most centers have all the manpower needed, but there are increasing instances of shortages. South Jersey area finds supply barely adequate and not enough carpenters available at present. Construction labor is "tight" for the summer in Portland, Me. Albany, N. Y., reports masons 20 per cent short, while Long Island, N. Y., could use 10 per cent more carpenters, Westchester, N. Y., and Worcester, Mass., seek more laborers. Niagara Falls more bricklayers. Central Connecticut (New Haven to Hartford) notes "more and better" mechanics now in the field.

**Southeast:** Atlanta has 10 per cent surplus in all trades. All other centers have adequate help, except Miami, where trowel trades are 5 to 10 per cent short.

**Central:** Teamsters' strike temporarily bogging things down in Missouri centers. Chicago situation is said to be "not adequate," and Minneapolis could use a few more cement finishers. Surplus of carpenters in evidence in Iowa. St. Paul sees pipe trades 10 per cent short.

**Southwest:** Labor ranges from adequate to slight surplus in all trades.

**West:** All trades 50 per cent long in Salt Lake City.

Are Materials Available in Sufficient Quantities?

**Northeast:** Supplies sufficient in every case. New Haven, Conn., area reports "everybody is trying to sell framing lumber down."

**Southeast:** Atlanta has 10 per cent surplus in all trades. All other centers have adequate help, except Miami, where trowel trades are 5 to 10 per cent short.

**Central:** No actual shortage, but strike of teamsters union is holding up Missouri deliveries.

**Southwest:** All materials in good supply.

**West:** No problems noted.
OUR RECENT STORY on the Cornell University kitchen mistakenly credited the College of Agriculture as collaborator with the Housing Research Center in the development of the kitchen. Collaborator was the women of the New York State College of Home Economics at Cornell.

SORRY FOR THE SLIP and hope this makes proper amends.

NO QUESTION that the market for new homes is tightening or has tightened. Today, it takes selling with all the merchandising tools available.

IT'S A CONDITION that American Builder's editors and all the leaders of the industry knew would arrive as long ago as 1948 when earnest discussions of the subject began.

WE TAKE what we hope is pardonable pride in our prediction of several years ago that the bloom would be off the rose by mid-1953. A very near miss—two to four months, depending on the section of the country.

BUT WE HAVE insisted that even with a tightened market, 1953 would produce more than one million new starts. We still believe it.

THERE IS, for the first time, an organized industry to meet this, the first market recession in more than a decade. Now we have arrived at the time when we prove that this newly organized industry knows how to sell.

CONTINUING IMPROVEMENT in design, and inclusion of luxury extras are part of the solution to opening new markets.

ONE EXAMPLE is afforded by the Plumbing and Heating Industries Bureau in a report that builders find a second complete bathroom in moderate-priced houses to have compelling sales appeal.

SAT IN AN INFORMAL meeting of some 20 builders recently in which a poll of sales activity was taken. Allowing for a certain amount of reluctance to divulge the whole truth, since they were all competitors, the pattern was pretty clear.

THERE IS NO LETUP in the number of qualified prospects, but there is a good deal of hesitation to buy.

ONE REASON is a possible general feeling that probable (that's a lot of hedging with qualifying adjectives) deflation of currency may tend to decrease prices. If that is all there is to it, we are simply in a period similar to that experienced in the spring of 1949.

BUT THE EVIDENCE is that there are more solid and lasting reasons for the slow-up. Statistics indicate that the backlog of NEED has been taken up, and that from now on—probably until 1958 or 1960—the NEED dictated by net new family formations per year, will not provide a market for more than 300,000 houses.

SO, THE ANSWER to taking up the slack between 300,000 houses NEEDED annually to house new families and the production capacity of the industry is sharpened merchandising tools.

THE TOOLS are available, and the potential new markets are waiting. There is no cause for pessimism, even admitting temporary mortgage money difficulties.

NATIONAL HOME MONTH promotion to consumers via the Better Homes & Gardens program has far exceeded even the most optimistic hopes which were projected for the promotion. The Readers' Choice House, which is the key feature of the promotion, will be constructed in more than 50 communities and stands an excellent chance of being viewed by two million or more prospects for new homes.

THE TIE-IN merchandising program in the form of a complete merchandising kit and timetable produced by Better Homes & Gardens, plus that magazine's promo-
tion, plus local newspaper advertising, already indicates that the impact of the program will set a new high in courting a market for the construction of new homes throughout 1953 and 1954.

A SAMPLE SURVEY among builders who are going to construct the Readers' Choice House reflects a new type of home sales promotion hitherto unknown in the industry.

THE SUCCESS of the program, clearly evident even before it breaks on the public consciousness, now proves the desirability of lengthening the concentrated period of demonstration and merchandising to a month or even more. Indications now are that what started as National Home Week should become National Home Festival and probably extend over a period of two months to provide sufficient time for demonstration and merchandising in major centers, and to provide enough flexibility to permit smaller communities to tie in at any given time in two months regardless of whether a local individual or a local organization wants a one-day program, a one-week program, a two-week program or a two-month program.

LATER ISSUES of American Builder will carry the details of how this dramatic projection of home design and home ownership on behalf of the home building industry was organized and conducted on the local level by a representative group of home builders located in all sections of the country.

MINNEAPOLIS, where winning National Home Week awards has become a habit, is off to a flying start again. With an industry-wide committee, representing every segment of production, distribution, finance, design, furnishings and building, the Minneapolis Home Builders Association recently held a joint luncheon meeting with the Chamber of Commerce.

PURPOSE was to acquaint business and professional men of the city with what National Home Week is and the importance of home building and home maintenance to the general welfare of the city.

(Continued on page 12)
This No. 2 Dimension Provides Ample Strength at LOWER COST

Here's adequate strength at definite savings for all loads and stresses to be expected in construction of residences, apartments and commercial buildings of moderate size.

Cost Economies With No. 2 Dimension

Substantial savings can be effected and are recommended by using the lower priced No. 2 framing illustrated here. This is an example of the increased stress value (1100F) recently assigned to No. 2 Grade, 2x4's and up, by the Southern Pine Inspection Bureau, the official grading authority.

This No. 2 Grade, now of closer grain than formerly, provides ample strength with adequate safety factors for the construction classifications named above, at a worth while saving below the cost of No. 1 Grade.

ARKANSAS Soft Pine BUREAU
753 Boyle Building
Little Rock, Arkansas

For complete data, illustrated grades, etc., send for our FREE Handbook.

On and Off the Record
(Continued from page 11)

IT WAS A BIG SUCCESS. Important labor leaders were enthusiastically present. The somewhat public-housing-minded mayor was attentively present. Using National Home Week as the theme, the meeting was one of the best public relations features in the interest of home building this writer has ever witnessed.

THERE'S NOTHING new about trade-in selling. We've been selling that way for centuries. But, as an industry, we have never promoted the idea. Now, with rapid advancement in design and equipment, and an organized home building industry, the tools for obsolescence selling are at hand.

IN PROMOTING trade-in selling it should not be forgotten that the owner now pays no income tax on "profits" when he trades in his old house on a new one.

DOWNTOWN STORES in several medium size cities are reported to be resisting the development of outlying shopping centers. It's like trying to resist a spring freshet by waving a feather at the oncoming flood. The resistors can take their choice between urging the development of such centers as sites for branch stores or openly inviting competition to come in and take the advantage.

THERE ARE MANY exceptions. Seattle is one. The largest downtown department store is the largest and most prominent tenant of Seattle's largest outlying shopping center.

IN DENVER it took a little doing to make the downtowners see the light, but a projected new outlying center will have at least one branch of a downtown store.

MARSHALL FIELD in Chicago recently announced a giant shopping center in suburban Skokie. They are so convinced of the soundness of the outlying centers that they are taking the lead in development.

OF COURSE, Marshall Field is no Johnny-come-lately in the branch store move. The company has for a number of years operated large suburban branch stores in the buying centers around Chicago. And Marshall Field is not alone in this.
**Everybody's Keyed Up!**

**ABOUT THE NEW RUSSWIN**

“I Stilemanor”

---

**BEAUTY**

NOW . . . A CHOICE Two attractive entrance door locksets . . . one with conventional rose, the other with a large escutcheon (long backset). Locksets in polished brass, satin finish bronze and aluminum. Lacquered finish assures enduring beauty.

**SECURITY**

THIS . . . AND MORE! All Stilemanor entrance door locksets have exclusive Russwin 5 ball bearing, pin tumbler cylinders. Concealed knob retainer prevents entry if outside rose is forcibly removed.

**UTILITY**

DESIGNED . . . FOR MODERN LIVING! All popular functions for greatest convenience and economy meet every need. Choice of front door lockset styles plus latches for bedroom-bathroom, halls and closets, and patio.

**DURABILITY**

ADVANCED CONSTRUCTION FEATURES! Eight exclusive features, including latch retractor that glides on ball bearings, plus thirteen outstanding features assure maximum service life. Compare the built-in quality features of this new Russwin Line* of locks and latches. Compare everything . . . from designing to labelling, packaging to price. Isn’t this what you’ve been looking for . . . A Russwin quality standard-duty lock at no premium in price? See your Russwin dealer’s display of the “Stilemanor”. Write for descriptive folder. Russell & Erwin Division, The American Hardware Corporation, New Britain, Conn.

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*Patents Applied For
NEW! ELJER Vari-Spray Shower Head

GRACEFUL OCTAGONAL SHAPE
EASY ACTING BALL JOINT
NON-CLOGGING SPRAY UNIT
SPRAY CONTROL LEVER

...WITH NEW SALES-MAKING FEATURES

The Eljer Vari-Spray is different and better. Here is why:

1. A turn of the lever provides a shower ranging all the way from a “needle” spray to a rinsing or “rain” spray.
2. Generous spray pattern—not just a circle of water.
3. Operates equally well on low or high pressure.
4. The Vari-Spray is non-clogging, non-liming... designed to minimize corrosion.
5. Ball joint operates easily and smoothly.

Your nearest Eljer Distributor will be pleased to show you how the Vari-Spray operates. See it today or write to Eljer Co., Box 192, Ford City, Pa. for more information.
New Housing Bill Won't Change Down Payments

An omnibus housing bill introduced in the Senate on June 10 would increase FHA insurance authorization by $1.5 billion, and would extend for one year most sections of the act now due to expire June 30.

A last minute decision by Administration and Congressional leaders led to removal from the bill of provisions which would have permitted lower FHA down payments. Federal Reserve and Treasury Department officials were known to oppose lower down payments on grounds they would be "inflationary."

Senator Capehart, who introduced the bill, called it "non-controversial." He said the June 30 deadline made it unnecessary. He expressed hope that further study would lead to new FHA amendments early next year.

The new legislation would continue Title IX until June 30, 1954, to allow housing programmed prior to June 30, 1953 to be completed. No new programs would be permitted after June of this year. Title IX mortgages could be made only for refinancing existing mortgages, or in cases where a pre-June 30 commitment was made.

The Wherry Act housing program would be extended as is for another year. Public housing construction in critical defense areas would end June 30, 1953 except for temporary units in AEC areas.

FNMA's prior commitment authority would be continued until June, 1954. The bill also would give FNMA statutory authority to continue the so-called "one for one" sale and purchase agreements.

Discount Practices Ruled Out by VA

Following the recent increase in interest rates, the Veterans Administration announced it was "sharply restricting" discount practices in the financing of home loans by lenders and builders.

VA said the 4 1/2 per cent interest rate, which became effective May 5, eliminated the "need" for discount practices. Charges considered reasonable under the old 4 per cent rate may be "entirely unjustified" under the new rate, the agency said.

Many builders do not agree. NAHB directors at the May meeting in Washington came out strong against the no-discount ruling. They said it has the effect of nullifying the hike in interest rates.

A statement issued by VA at the time of the new ruling had this to say: "The elimination of discount charges would remove pressure on builders to pass on discount costs to the veterans-borrowers in the form of a higher price or lower quality construction."

VA said its regional offices have been advised of a "maximum fee scale" which will apply under the new 4 1/2 per cent interest rate. The statement went on to say that regional offices will henceforth "require all builders to certify to the VA that they have not or will not pay or absorb, directly or indirectly, any charges or fees in excess of or in addition to those authorized by VA."

The new "maximum fee scale" provides that lenders may not, on construction advances to builders, charge in excess of: (1) Five per cent simple interest on construction advances actually disbursed; and (2) Two-and-one-half per cent of the total sum actually disbursed for the inspection and supervision charge.

FNMA Freeze Continues Pending Stable Market

The Federal National Mortgage Association "will maintain for the present its freeze on non-defense over-the-counter mortgage purchases, and will defer any resumption of the sale of mortgages until they can be disposed of on an orderly basis," Albert M. Cole, HHFA Administrator, told the National Savings and Loan League convention in St. Louis.

FNMA will defer decision on its future policies for the purchase or sale of home mortgage loans until the market has become stabilized, Cole said. He said FNMA will not "dump" mortgages at low prices, but will market them so they can be absorbed without impairing the normal market for home mortgages.

FNMA suspended over-the-counter purchases of FHA and VA mortgages on April 13. At the time it was called a "precautionary measure," in view of the pending increase in FHA and VA interest rates. The freeze did not apply to defense, military or disaster housing, pre-commitment contracts, or to mortgages delivered against FNMA purchase receipts.

Outlays for Homebuilding Continue Above Last Year

Expenditures for new residential construction in the first five months of 1953 ran 9 per cent above the like period of last year, the Departments of Commerce and Labor announced.

Estimates by the departments indicated outlays for the month of May were 8 per cent above April, and 7 per cent above May, 1952. Almost all types of private construction have been running above the level of last year.

Housing starts in April were estimated at 110,000 by the Bureau of Labor Statistics. This was an increase of 4 per cent over the same month last year. For the first four months of 1953, new starts were estimated at 356,100, compared with 352,700 in the like 1952 period.

BLS said most sections of the country have shared in this year's rise in private home building activity.

Slusser Named to PHA; Would Succeed Egan

Charles E. Slusser, mayor-manager of Akron, Ohio, since 1944, has been nominated by President Eisenhower to head the Public Housing Administration.

If confirmed by the Senate, Slusser would succeed John Taylor Egan, PHA commissioner since 1948. Slusser has been president of an insurance and real estate firm in Akron for many years. A Republican, he was born in Ohio in 1897.
**NAHB Directors Propose Program Extending Loan Periods**

Recommendations for a new program of government-insured loans to rehabilitate deteriorating property plus measures to step up the proposed trade-in system were key subjects discussed at the spring meeting of the Board of Directors of the National Association of Home Builders, held in Washington, D.C., May 22-26. The recommendations were predicated on an annual construction of at least one million new homes, and the reconditioning of another one million existing homes.

The meeting was attended by approximately 350 directors, with Emanuel M. Spiegel, NAHB president, presiding. Reports, with recommendations, were delivered by the Technical, Educational and Housing Rehabilitation Committees, the Research Institute and the Producers' Council-NAHB Joint Committee.

**Recommend Housing Act Changes**

The directors proposed that Congress put into effect a new section of the National Housing Act which would permit the Federal Housing Administration to insure loans up to $3,500 apiece, payable over a ten year period, to be used for home modernization and repair. Such legislation would offset the present limitation of $2,500, with a three year repayment term, on FHA modernization loans.

The proposed act would be available to home owners desiring to recondition and remodel their property, and would be especially beneficial in cities where organized clean-up programs for slum areas are being put into effect.

**Suggest Slum Improvement**

As a further measure of conserving the nation's housing inventory and preventing the spread of slums, the NAHB directors recommended that existing FHA laws for the financing of new housing be extended to cover property requiring extensive repairs and modernization to put it into livable condition. Such legislation would enable owners of slum housing to provide repairs required under the slum-law reenforcement program advocated by NAHB.

**FHA Mortgage Loan Urged**

To institute the trade-in program, the builders urged that FHA provide a mortgage loan, after a house has been "new conditioned," of 95 per cent of the first $8,000 of value, plus 80 per cent of the next $7,000 of value, plus 60 per cent of the next $5,000 of value, with a maximum insurance of 80 per cent in the $20,000 to $25,000 bracket.

**“One For One” Plan in FNMA**

As a further step to ease the current tight mortgage money situation, the NAHB directors called for the creation of a "one for one" plan in the operation of the Federal National Mortgage Association. Under such a plan, anyone who buys mortgages from FNMA would be able to sell back to the association within a given period a specified percentage (suggested 95 per cent) of the dollar amount bought. The effect would be to make FNMA a true revolving fund and a stabilizing influence on the mortgage market.

**Producers' Council Report**

The Producers' Council and NAHB Joint Committee, with William Gillette and Frank Robertson as co-chairmen, made specific recommendations to the board of directors as follows:

1. The continuation and expansion of the educational programs for use of local associations which should make use of this material, as it furnishes excellent program material, helping builders do a better job at a lower cost.
2. Circularizing associate members and individual members of the Producers' Council so that they can aid and cooperate in the development of the How-To-Do-It programs at the 1954 NAHB Convention.
3. The Executive Committee of NAHB should consider the use of the membership roster as a mailing list, and that the Committee at a later date would consider criteria for the use of the list.

**Research Institute Report**

The Research Institute, under Earl W. Smith serving as temporary chairman, made these recommendations to the board:

1. The continuation and development of the Trade Secrets reports.
2. Establishment of a trust fund for the purpose of handling research funds.
3. Encouragement of the expansion of the field trials program among builders, with systematic reporting of the results of these trials.
4. Spread of information on technical activities, with consideration of new methods to disseminate such information.
5. Recommendation that a considerable portion of the annual convention be devoted to technical and How-To-Do-It sessions.
The increase in interest rates is intended to maintain the competitive position of the average homebuyer, particularly the veteran, in the money market, Cole said. He said the government is relying on lenders for a "positive response" to assure homebuyers of full value loans, generally available without discount.

As an "encouraging example" of lender response to the new rates, Cole noted the U.S. League has set a billion-dollar target for GI loans and has named a 100-man committee to see that home loans become more available in less populated areas.

John R. Downs to Head Chicago Home Builders

John R. Downs, Chicago, has been named executive vice president of the Chicago Metropolitan Home Builders Association, succeeding the late Martin C. Huggett, president of the builders' group. For the past eight years, Downs has been executive secretary of the Mason Contractors Association of Cook County, with which he will terminate his services on or about July 1.

NAHB "Safety Code" Aim Is Accident-Free Homes

Housing research experts are drafting a "code" of safety standards to eliminate "built-in hazards" from the nation's homes. Purpose of the code is to reduce the deaths and injuries which occur each year in home accidents.

The safety code project was approved by directors of the National Association of Home Builders at their spring meeting in Washington, D.C. NAHB's Technical Committee is cooperating with the National Safety Council in drawing up the code.

NAHB has reported that builders throughout the country have pledged voluntary compliance with the proposed code. They hope to curb accidents traceable to a lack of safety consciousness in home design and construction.
Nothing is more precious to a quality builder than his reputation. Community respect is earned by good workmanship and quality materials—products like R-O-Ws Removable Wood Windows. R-O-Ws have the charm of carefully milled wood, plus the lift-out feature and pressure-fit construction.

See your local lumber dealer or write

R-O-W SALES COMPANY  1334 • 66 ACADEMY AVENUE • FERNDALE 20, MICHIGAN
YOUR R-O-W MANUFACTURER IS...

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GENERAL WOODCRAFT CO., INC.
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NORTH CAROLINA
DALTON-BUNDY LUMBER CO., INC.
Norfolk, Virginia
MILLER MILLWORK CORP.
Charlotte, North Carolina
R-O-W DISTRIBUTORS
Rocky Mount, Virginia

NORTH DAKOTA
JACK R. KINNARD & CO.
Minot, North Dakota

OHIO
FABROW MFG., INC.
Toledo, Ohio
THIEME SASH & DOOR CO.
Canton Youngstown, Ohio
R-O-W WHOLESALE DISTRIBUTORS, INC.
Norwood, Ohio

OKLAHOMA
LUMBERMEN'S SUPPLY CO.
Oklahoma City, Oklahoma

OREGON
ACME MILLWORK, INC.
Kirkland, Washington
SPOKANE SASH & DOOR CO.
Spokane, Washington

PENNSYLVANIA
ADELMAN LUMBER CO.
Pittsburgh, Pennsylvania
JOHNSON & WINSATT, INC.
Westville, New Jersey
A. ROBERSON & SON, INC.
Binghamton, New York

RHODE ISLAND
GENERAL WOODCRAFT CO., INC.
North Bergen, New Jersey

SOUTH CAROLINA
R-O-W DISTRIBUTORS
Rocky Mount, Virginia

SOUTH DAKOTA
WATERTOWN SASH & DOOR CO.
Watertown, South Dakota

TENNESSEE
V. E. ANDERSON MFG. CO., INC.
Owensboro, Kentucky
R-O-W DISTRIBUTORS
Rocky Mount, Virginia

TEXAS
B. J. BARFIELD & SONS, INC.
Amarillo, Texas
CHUPIK WOOD MFG. CO., INC.
Temple, Texas
LUMBERMEN'S SASH & DOOR CO.
Dallas, Texas
SOUTHWEST SASH & DOOR CO.
Houston, Texas
H. E. WOODRUFF CO.
Corpus Christi, Texas

UTAH
B. W. FRANK & CO.
Salt Lake City, Utah

VERMONT
GENERAL WOODCRAFT CO., INC.
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Norfolk, Virginia
R-O-W DISTRIBUTORS
Rocky Mount, Virginia

WASHINGTON
ACME MILLWORK, INC.
Kirkland, Washington
SPOKANE SASH & DOOR CO.
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D. PORTER & SON
Stellarton, Nova Scotia

Good contemporary homes must be both beautiful and functional. The primary functions of windows are to let in light and to permit a free choice between ventilation or weather protection. No windows are more beautiful or more functional than R-O-Ws. Only R-O-Ws have the patented R-O-W feature.

See your local lumber dealer or write
R-O-W SALES COMPANY  1334 • 66 ACADEMY AVENUE • FERNDALE 20, MICHIGAN

JULY 1953
The problem of slum blight that threatens the life of every major city in America is being tackled aggressively by the nation's organized home builders, and, for the first time in history, there is real hope of eliminating this cancerous growth.

While there is no secret medicine that can cure the slum sickness of our cities in one dose, the job can be done within ten years by any community that has an intelligent plan of action and the will to see it through. It is at once the greatest opportunity and the gravest challenge ever offered to our free enterprise system.

The solution to big city blight is a complex one, involving careful planning by civic authorities, strict enforcement of health, sanitation and safety ordinances, and an aroused community spirit that is determined to reverse the forces of neglect which are the root cause of slums.

New Department Created

The National Association of Home Builders recently took steps to translate this plan into action by creating a new Department of Housing Rehabilitation under the direction of G. Yates Cook, former Housing Director of the Baltimore Health Department and creator of the famed “Baltimore Plan” of slum clearance. The new NAHB Department offers expert technical consultation and practical assistance to cities in cleaning up their slums.

Cook's approach to the slum problem already has been demonstrated successfully in Baltimore, where 18,000 slum units have been rehabilitated, as well as in Pasadena, California; Charlotte, North Carolina, and other communities. Community interest and organization have achieved astounding results in those cities, and could do far more if better financing machinery were available.

One of the major obstacles to successful action at present is the lack of adequate financing tools to help slum owners—and owners of marginal homes that are sliding downhill for lack of maintenance and repair—to pay for the staggering rehabilitation job that must be done.

Tackle Financing Problem

The National Association of Home Builders is actively exploring a number of approaches to this problem. They include possible expansion of Title I of the National Housing Act to provide easier financing for individual owner-occupied homes in need of repair, the open-end mortgage, and a broadening of Sections 207 and 213 of the Act to aid owners of blighted multi-family rental housing.

It may even be found necessary to devise an entirely new financing arrangement to meet the peculiar needs of the rehabilitation program. Top officials of the Eisenhower Administration are keenly aware of the importance of this problem and are cooperating closely with private industry in the search for a workable solution. There is every hope that one will be found in the very near future.

The first big tests of the slum rehabilitation program will be undertaken shortly in a limited number of “pilot cities” to be chosen from among the scores of communities that have appealed for help in their fight against blight. The program that will be set in action will serve as a pattern which other slum-ridden cities can adapt to their own special needs.

Clean-Up Job Enormous

The scope of the job facing America is enormous. Practically every city in the nation has been affected by blight; many of them to the point where they face bankruptcy and ruin within a generation unless corrective action is taken promptly.

The 1950 U.S. Housing Census revealed that more than 10,000,000 dwelling units in the United States had unsatisfactory toilet facilities; almost 7,000,000 had no piped running water; more than 12,000,000 were without bathtubs or showers, and 2,600,000 were dangerously overcrowded. The total represents more than one-fifth of our national housing inventory with a potential value running into billions of dollars. In its present state, it is a liability to the nation.

Far more important than the economic loss is the human suffering, crime and disease spawned by our slums. In terms of future citizenship and national health, it is a loss that no nation can afford.
Minneapolis-Honeywell Sponsors National Home Week Contest

A nine-day, all expense trip to Mexico City and Acapulco is the prize being offered in a National Home Week contest sponsored by the Minneapolis-Honeywell Company. The contest is open to any builder-member of an NAHB chapter sponsoring a National Home Week observance. There will be twenty winners in all; one from each NAHB Region.

To be eligible to win a builder must have done an outstanding job promoting National Home Week in his community plus promoting and merchandising his own houses.

Each association participating in NHW will set up a jury to select its own local winner. All local winners will be forwarded to New Orleans at the time of the Fall Board of Directors Meeting where one winner will be picked from each of the 20 regions. No matter where the winning builder lives, he will be picked up by Minneapolis-Honeywell and flown to Mexico.

Award Given Pasadena's "Operation Junkyard"

As a fitting recognition of Pasadena's fight for housing betterment, the Home Builders Institute of Los Angeles, in joint sponsorship with the Pasadena Chamber of Commerce, honored the city through its mayor, Alson E. Abernethy, by the presentation of a plaque at a luncheon held in April at the Pasadena Elks Club.

A telegram from Emanuel M. Spiegel, president of NAHB, Washington, D.C., to K. Sande Semness, president of the Home Builders Institute stated: "My congratulations to the city of Pasadena on its successful 'Operation Junkyard' and for receiving the Home Builders Institute award. It should be an inspiration to every other American city. I am proud of your sponsorship of this award and extend my best wishes to you, your membership and the citizens of Pasadena for their whole-hearted support and cooperation in this program."

Pasadena is one of the first West Coast cities to make an effort to improve local slum conditions. With the cooperation of the entire community, "Operation Junkyard" was inaugurated. This community effort accounted for 9,085 inspections and re-inspections and the mailing of 4,164 notices of violation. These notices covered all kinds of violations of existing building, health and zoning standards, a fine example of a community's awareness of its civic responsibility to its housekeeping problems.

Dealer's Viewpoint

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

NRLDA Merchandising Calendar
Useful Advertising Budget Aid

Today, more than ever before, a good many retail lumber and building materials dealers are concerned about their advertising programs. Many of them suspect that they have not been spending their advertising budgets to best advantage, and they have asked their national association for help. Inasmuch as dealers collectively may be spending more than $40,000,000 a year for local advertising in one form or another, the problem certainly deserves attention.

NRLDA's first step in this direction will be the preparation of a Merchandising Calendar, which will suggest a good central theme for a dealer's newspaper and radio advertising, and for his salesroom displays for each season and each week of the year.

NRLDA's first step is in this direction will be the preparation of a Merchandising Calendar, which will suggest a good central theme for a dealer's newspaper and radio advertising, and for his salesroom displays for each season and each week of the year.

The Calendar, at least in its early stage, will be presented as a helpful guide rather than a definite merchandising schedule because it will take time to work out all the necessary regional variations and to take into account the fact that the sale of garages, for example, may have a tremendous potential in one city and not much of any in another.

To develop this project and others in the same field, NRLDA decided to appoint a Merchandising Committee and from all indications, that Committee will be most active because dealer interest in better merchandising is increasing steadily.

The idea of a Merchandising Calendar was first explored by a group of Midwest dealers who met informally in Chicago. The next step was the Merchandising Conference, held in connection with the May meeting of NRLDA's Board of Directors at which the Calendar was the subject discussed.

In its first stage, the Calendar is expected to appear as a chapter in the Dealer Operating Guide which is distributed to all members of NRLDA's Federated Associations. Then, it will be developed further with the thought that it will be revised annually as a separate project.

In the two conferences held so far, there has been general agreement that a dealer's weekly newspaper advertisement should consist of three basic parts:


2. A group of products which would be used in carrying out the theme; such as insulation, roofing, storm sash, etc., needed to get ready for winter.

3. A statement of the services the dealer is prepared to perform for the customers who want to carry out the theme of the advertisement; that is, offering help with plans, financing, and so on.

The next step is to decide on the best themes and to suggest the best timing for each.

JULY 1953
NRLDA Directors Stress Dealer Merchandising

Increasing interest in better merchandising on the part of retail lumber and building materials dealers was the theme behind the semi-annual meeting of the Board of Directors of the National Retail Lumber Dealers Association, held May 3-8 in Washington, D.C. Also stressed was the belief that the new administration in Washington is approaching the housing problem in a constructive and realistic manner.

Henry J. Munnerlyn

The association's current programs indicate the emphasis that dealers are placing on intensive merchandising, Henry J. Munnerlyn, association president reported. He was referring to the Dealer Operating Guide, the Dealer Training Manual, the Products Data Book and the Management Workshops being conducted by many of the federated associations of the NRLDA which reflect this emphasis.

Interest Rise Effect Told

Albert M. Cole, the new Housing and Home Finance Administrator, told the Board that the recent increase in FHA and VA interest rates represents an important step toward assuring that 1953 housing production will continue at the high annual rate required to meet current housing needs.

Cole also stated that he is giving full consideration to the suggested modifications in existing legislation concerning lower down payments and maximum loans on FHA insured mortgages. He stated further that the necessity of continuing home building at the rate of one million new units a year would be taken into account in the yet undecided future operations of FNMA and the modifications in the FHA down payments and maximum loan requirements.

Northup Makes Report

Executive Vice President of NRLDA, H. R. Northup, emphasized, saved in premium cost many times the price of their association dues.

National Home Week atmosphere prevailed throughout Long Island the third week in April, when the Institute distributed over 10,000 copies of its spring catalog of homes to prospective buyers at model houses, banks and real estate offices. LIHBI devoted the entire April issue of its “Long Island Builder” to the 60-page catalog, listing locations, styles, models, price ranges, etc., for the more than 100 operative builders who submitted the information. In addition, it provided names and addresses of custom builders, and revealed the range of their type of work.

The Institute disclosed that it had received 4,000 requests for the booklet after the supply was exhausted. Late-comers were advised to check reference copies on hand in the builders' headquarters, banks and realty offices.

More than 1,500 members and friends attended the group’s eleventh annual dinner and dance at the Commodore Hotel, New York, on April 18, held in honor of Frederick E. Gibson, past president, R. G. “Dick” Hughes, NAHB first vice president, was a guest at the “speechless” banquet.

N. J. Builders Ask Land Planning Act Passage

The New Jersey Home Builders Association, Newark, have requested that their state legislature adopt the Municipal Planning Enabling Act which strengthens the planning statutes and clarifies the responsibility of municipal planning boards.

Passage of the act was urged by Raymond Hanly, Camden, president of the state association, in his annual report at the recent Fifth Annual Convention and Exposition in Atlantic City, attended by more than 1,000 builders.

Hanly explained that the bill, already passed by the New Jersey State Senate and due for consideration by the Assembly, would remove conflicting, vague and contradictory elements in present legislation, and at the same time, correct procedures of questionable legality.

The Camden builder also reported that the first printing of the Standard Building Code of New Jersey is now ready for distribution to local home building associations. Pointing out that the purpose of promulgating a state Standard Building Code is to set up uniform administration and construction standards throughout the state of New Jersey, Hanly called for its adoption by local municipalities.
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.

LUDMAN Corporation
Box 4541, Dept. AB-7, Miami, Florida

UDMAN—WORLD'S LARGEST MANUFACTURER OF AWNING WINDOWS AND JALOUSIES
reader likes

“down to earth” treatment

Sirs: Have just looked your magazine over and find it’s what I’ve wanted for some time. It tops all I’ve seen, and we know there are lots of good books in circulation.

It has such a great variety of subjects, all explained in the down to earth way a schoolboy can understand. Above all, your magazine has not forgotten there are houses to be built for people of the lower income brackets. Also read “Ask The Experts,” another great item. The blueprint plan is worth the cost of a year’s subscription to brush up the mind and get the latest dope on utilizing space.

Charles Kauffman,
Chillicothe, Ohio

seeks course by mail in estimating and accounting

Sirs: I have received my copy of the American Builder 1953 Catalog Directory, and find it to be about as complete as could be hoped for.

However, I do not find any mention of a school of instructions where I might be able to take a course by mail in Estimating Costs and Keeping Accounts for the light construction industry.

Robert C. Castlen,
West Palm Beach, Fla.

Recommended to reader Castlen for courses in estimating and cost accounting in estimating—Chicago Technical College, 2000 S. Michigan Ave., Chicago, Ill., and Florida State College, Extension Department, Tallahassee, Fla.

—The Editor

Canadian town considers “municipal home week”

Sirs: We are operating at Arvida, Que., a townsite which contains 1,400 dwellings and a great number of our employees are interested in building their own homes.

In order to encourage our employees to build, we thought it might be a good idea to organize a municipal home week. Would you have any objections to supplying us with all available data on how to plan “Home Week”? We might interest builders and dealers to participate.

L. Roger Latraverse,
Aluminum Company of Canada, Ltd., Arvida, Quebec

> Guide booklets for the organization of local National Home Week programs were sent to the above reader. Several communities in New Zealand will also operate National Home Week programs in 1953.

—The Editor

readers comment on Catalog Directory

Sirs: Your 1953 Catalog Edition is excellent. Please send one copy each to the following and bill me:

(four copies to officers of Bonforte Construction Co. and Belmont Supply Co., Colorado Springs and Pueblo, Colo.)

John Bonforte,
Bonforte Construction Co.,
Pueblo, Colo.

sirs: we have just received the American Builder 1953 Catalog Directory for the light construction industry.

We are sure that we will find much use for it since we have inquiries most every day on materials and where they can be obtained.

V. H. Dent,
Executive Vice President,
Seattle Master Builders,
Seattle, Wash.

trade-in can reverse nomadic population trend

Sirs: I am delighted about your proposal to facilitate “trade-ins.” Reaction is that what is wrong with this country is that there are already too many nomads and here you go trying to create more of them. I see the potential market for more and better housing that can be created, and feel that, properly presented, your proposal can have the reverse effect on these nomadic tendencies.

Although a few people may want the very latest model every third year, I have a hunch that some of the excess moving . . . is caused by the fact that many people are try-

(Continued on page 30)
Nationally Famous
NON-WARPING, SOLID NOVOPLY

NATIONAL
SLI-D-O-O-RS

America’s newest, finest sliding doors, are made of United States Plywood Corporation’s amazing, new NOVOPLY. They are shipped as a complete package with doors, jambs, header and hardware—all precision cut for tight, clean fit. They slide smoothly without binding on a skillfully engineered overhead track. Because NATIONAL SLI-D-O-O-RS are desirable, trouble-free, economical and easy to install, they are specified increasingly by experienced builders throughout the country.

That’s why it will pay you to write today for a copy of NATIONAL DOOR’S informative new brochure on SLI-D-O-O-RS or to visit the dealer in your locality listed on the opposite page. He is particularly well qualified to point out the definite advantages of NATIONAL SLI-D-O-O-RS.

DIMENSIONS:

<table>
<thead>
<tr>
<th>2-DOOR OPENINGS</th>
<th>3-DOOR OPENINGS</th>
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<td>Outside jamb to outside jamb: 2'0&quot;, 2'6&quot;, 3'0&quot;, 3'6&quot;, 4'0&quot;, 5'0&quot;, 6'0&quot;, 7'0&quot;, 8'0&quot;,</td>
<td>Outside jamb to outside jamb: 6'0&quot;, 7'4&quot;, 9'0&quot;, 10'0&quot;, 12'0&quot;,</td>
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<tr>
<td>Outside header to finish floor: 6'9&quot; or 8'0&quot;,</td>
<td>Outside header to finish floor: 6'9&quot; or 8'0&quot;,</td>
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SPECIAL SIZES WILL BE MADE TO ORDER IF QUANTITIES WARRANT IT.
Jams available in specified widths as required. SLI-D-O-O-RS are also available without jambs.
NOW - the most complete

FITS-ALL
NO. 1
SCREEN DOOR
GRILLE
Adjustable from 18" to 37"
between stiles. Made of alai-
chrome, will not rust or tarnish.

Nu-WAY PUSH GRILLE
Use alone or with No. 1 Grille. Will not rust or
tarnish. Made for both 32" and 36" doors.

FITS-ALL
NO. 3
SCREEN DOOR
GRILLE
For lower section of screen
doors, with center cross bar.
Fully adjustable from 16
to 29" between stiles.

Nu-WAY “SUPER”
PUSH GRILLE
Just what you need for
aluminum doors! Sturdy
and ornamental. 16"
high—made for 32”,
and 36" doors.

FITS-ALL
NO. 5
SCREEN DOOR
GRILLE
Easily adjustable for wood or
aluminum doors. Silver stain-
Aluminum will not rust or tarnish.

Nu-WAY “DELUXE”
PUSH GRILLE
This new 6" high push
grille gives even more
protection to screens.
Will not rust or tarnish.

FITS-ALL
GRILLE
ORNAMENTS
Colorful decorations for
screen door grilles.
Please order separately
—ornaments not packed
with grilles.

DEALERS--ORDER NOW!
Your order will be shipped
same day received!

BUILDERS—
SOLD AT ALL HARDWARE, LUMBER
AND BUILDING SUPPLY DEALERS!
selection of M-D grilles ever offered!

FITS-ALL
NO. FS
SCREEN DOOR
GRILLE
Our full size grille offers complete protection for screen doors. Fully adjustable. Easily installed.

Nu-ART
GRILLE
ORNAMENTS
Cast aluminum with colorful shadow lines. Not packed with grilles—please order separately.

Nu-ART
GRILLE
ORNAMENTS
Ideal for grilles and other decorative uses. Not packed with grilles—please order separately.

FITS-ALL
NO. 2
SCREEN DOOR
GRILLE
Designed for doors with divided sections. Packed 12 pairs to carton.

Nu-WAY
ORNAMENTAL ALUMINUM
Perfect for trellises 16" wide 7" high.

Better Homes and Gardens
Advertised Nationally

MACKLANBURG-DUNCAN CO.
OKLAHOMA CITY 1, OKLAHOMA
"I've used SKIL Saws exclusively for 10 years... finest by every comparison!

says Carl W. Nelson, carpenter foreman, B. Stromberg Construction Co., Morton Grove, Illinois

"Before standardizing on SKIL Saws, I tried the other makes," says carpenter foreman Nelson, "and I just didn't get the consistent good performance I count on with SKIL. Using SKIL for the last ten years I've never had a bit of trouble. Power, durability and all 'round performance are the best!"

Building around 40 homes a year, the B. Stromberg Construction Co. furnishes each of its 14 carpenters with a SKIL Saw. Carl Nelson adds, "I use SKIL Model 67 with its precision cutting for fine finishing work. I use the SKIL Model 77 for rougher work because of its compact power. We've found that no matter what our cutting problem is, there's a model to fit the job."
"You Can See the Cut with a SKIL Saw," says Carl Nelson (right), "and that is all-important for greatest accuracy." Paul Olson (holding a Model 67 SKIL Saw at left) selects a new piece of lumber for paneling.

Arthur Gabel, here using a SKIL Model 77, says, "I seldom have to do any finishing after the clean cut the SKIL makes. We're using Cedar, Ash, White Mahogany, Birch and Red Gum on this job —SKIL Saw takes 'em all in stride!"
Ask the man behind the gun...

White gives you everything you want in an engineers' transit

![Image of White transit](image)

Shown, model 7014 with "A" standard, "U" type also available. $575.00 complete with tripod case and field equipment.

**Why** are more and more engineers and builders choosing White Engineers' Transits? Basically, the reason is simple: White transits are designed and built for the man in the field. They incorporate all the work-saving, accuracy-boosting features—the rugged construction—the simplified quality components that you want. In addition, you get coated optics, covered leveling screws and internal focusing Telescope. Wide frame tripod is optional.

Your choice of three reticles as shown below:

| Fig. 1 | Cross hair arrangement for our standard levels. |
| Fig. 11 | Studio hair arrangement for our standard transits. |
| Fig. 111 | Special Studio hair arrangement furnished upon request. |

To get the details on the complete White line of instruments for Engineers, Surveyors and Builders, write for Bulletin 1053. DAVID WHITE COMPANY, 51 W. Court Street, Milwaukee 12, Wisconsin.

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

*Prices subject to change without notice.*

letters...

(Continued from page 24)

...ing to improve their situation by moving into another neighborhood or a house that eliminates the pet peeves of their present domicile. They soon discover that they made another compromise and that this new home and neighborhood have other unforeseen limitations which in time will get their goats and they try it all over again—wishing all the time they were back in house Number One. In other words, can't the argument be reversed to show that these nomadic tendencies may be due in part to dissatisfaction with existing housing?

That word "dissatisfaction" brings up one criticism... Put obsolescence and dissatisfaction where they belong—as the shoddy, worn-out shoes of far too much of our present housing. Associate a shiny new pair—newness and satisfaction—with your idea. Unfortunately, some people may take the phrase, "sell obsolescence and dissatisfaction" literally.

Suggest that the National Association of Home Builders promote community bonfires for all of the obsolete house plans in the possession of contractors and others with a yen to build.

Carl M. Skonberg
Arlington, Va.

On the subject of selling dissatisfaction and obsolescence, we recommend only that the entire building industry continue to improve its product, then sell that improvement to the probable three out of eight who aim for the newest and latest. This would automatically force onto the market increasing numbers of serviceable houses, and at the same time force off the market the sub-standard units.

—The Editor

*another 3-year renewal*

Sir: Thanks for the privilege of renewing my subscription to a great magazine in a great country, and they're both—AMERICAN!

Please find enclosed check... for three year renewal. Keep up the good and complete publication.

W. A. Ross, Jr., Sec'y-Mgr.
Crown Woodwork & Cabinet Co.
Newport News, Va.

AMERICAN BUILDER
Genuine African Mahogany has long been acknowledged the Aristocrat of Woods . . . has long been synonymous with "Quality" to architect, contractor and home-owner alike.

Now Mengel offers you the unsurpassed beauty and sophistication of genuine African Mahogany, in all your doors, for less money than you'd pay for comparable doors, faced with many domestic woods!

Why? Because The Mengel Company operates its own logging concession in Africa's best Mahogany section, imports top-quality logs in tremendous volume, and passes the savings on to you.

Mengel Mahogany Flush Doors and Standardor Mahogany Flush Doors are designed, engineered and built to be better doors in their respective classes. Compare specifications and be convinced.

Door Department, THE MENGEL COMPANY, Louisville 1, Kentucky
New as it is, KenFlex has been thoroughly proven in actual use! One example of this exhaustive research is the test installation that was placed in a major, heavy-trafficked New York office building. Here, over 13,000,000 people have walked on a KenFlex Floor in the past 13 years...yet it shows no signs of wear...is attractive as if it had been installed yesterday.

KenFlex is truly a superior floor...combining the best qualities of vinyl and asbestos. It’s rugged for long, hard service...colorfully beautiful but never needs waxing except to make the glowing colors shine a bit more. And, KenFlex sets a new standard in grease resistance...it’s impervious to cooking and petroleum oils, alkalis, alcohols, most acids and reagents. Still, it cleans without scrubbing and colors never wear off...they go clear through the tough tile.
modern flooring advantage

institutions

In this drug store, the colorful KenFlex Floor is both beautiful and functional. And its grease-resistant properties save time, work and money...especially at the counter section. KenFlex colors shown are Marigold, Egret White and Ivy ThemeTile.

This kitchen-dining area owes much of its charm and efficiency to the modern KenFlex Floor that's so easy to clean with just a damp mop...needs waxing only to give the lustrous surface a brighter gleam. KenFlex colors shown are Desert Sand, Antique Coral, Bird ThemeTile and White Feature Strip.
Modularly framed, large glass areas simplify framing. Living room has three exposures.

**AMERICAN BUILDER**

**BLUEPRINT HOUSE**

**a T-SHAPED HOUSE**

**planned for a corner lot**
ARCHITECT:  
Harley H. Johnson, Minneapolis, Minn.

BUILDER:  
J. L. Crouse, Minneapolis, Minn.

TOTAL AREA:  1,482 square feet

COST:  $14.00 per square foot

H ere is a typical ranch-type house with a T-shaped plan that is as attractive to look at as it is easy to live in.

To get the best effect from the site, which is a wide corner lot, the architect ignored the side street in his planning and placed most of the large windows in the living room and bedrooms so they face south and east toward the inside of the property. In this way it is possible, when planting is completed, to get the feel of the out-of-doors without sacrifice of privacy and to encourage neighborhood development within the block.

The plan concentrates the bedrooms and baths in one wing with the living and food preparation area in the other. The front entrance located at the inside corner of the two wings, makes it possible to get to all rooms of the house without going through other rooms.

Features of this house include a raised hearth fireplace in living room with stone trim around opening, double-glazed fixed windows in principal rooms with ventilating louvers below, and strip windows in bedrooms high enough to place furniture under. Ample closets for all rooms and a full basement provide an abundance of storage area.
Screened porch placed to rear of kitchen for summer living completes cross of "T".

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

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

BRAND NAME PRODUCTS USED
- Armstrong linoleum counter tops and backsplash
- American Tile Company ceramic tile in bathroom
- Balsam-wool insulation
- Barco garage door
- Celotex (Weyerhaeuser) side wall shingles
- Case plumbing fixtures
- Celotex insulation
- DeVoe paint
- Flexscreen fireplace screen
- Goodyear vinyl flooring
- J-M asphalt roofing
- Kurt-Versen electric fixtures
- Modern Fold doors
- Nu-Tone door chimes
- Pella windows
- Square D low voltage equipment
- Solar-Air windows
- Stanley hardware
- Sargent hardware
- Trade Wind kitchen fan
- Thermopane glass
- U.S. Radiant baseboard heating
- Weyerhaeuser lumber

Front entrance door opens into hallway giving easy access to all rooms.
FRONT ELEVATION

SCALE: \( \frac{1}{8} = 1 \)

REAR ELEVATION

SCALE: \( \frac{1}{8} = 1 \)
FOUNDATION PLAN

SCALE: \( \frac{1}{8} \) " = 1'-0"

METAL STACK COVER

ROOF CONSTRUCTION SADDLE

ASH DUMP

FIRST FLOOR

FLOOR CONSTRUCTION

ASH PIT

BASEMENT FLOOR

ELEVATION

SECTION

FIRE PLACE AND CHIMNEY

TURN AND UNFOLD FOR ELEVATIONS, DETAILS AND QUANTITY LIST OF MATERIALS
Quantity List of Materials
For American Builder Blueprint House No. AB 190

Harley H. Johnson, Architect

General Information

House — Type ............................................ frame
Area ........................................... 1,482 sq. ft.
Cubed ........................................... 28,158 cu. ft.
Height taken for cube was 19 feet
Porch — Area ........................................... 196 sq. ft.

Excavating

Trench for foundation .................................. 40 lin. ft.
Chimney and column footings .................................. 2 footings
Excavation for basement ......................................... 358 yards

Cement Work

Foundations ........................................... 1,685 cu. ft.
Concrete Work ........................................... 1,500 sq. ft.
Waterproofing ........................................... 1,080 sq. ft. foundation wall
Miscellaneous ........................................... 9 metal areaways

Masonry

Type ........................................... stone
Walls ........................................... 1,141 sq. ft. chimney stone
Chimney ........................................... see above
Flue Lining ........................................... 8' — 8 1/2 x 12'
Cap ........................................... 1
Fireplace ........................................... 1
Throat and Damper Sets ........................................... 1
Miscellaneous ........................................... stone mantle and hearth detailed on plan

Iron Work

Structural ........................................... 32' 6" — 10" — 15 3/4' 1 beam
Lally columns ........................................... 2
Miscellaneous ........................................... 9 — 4" x 4" x 7/8" angles over basement windows
3 — 3" posts on porch 8' long
2 — 4" round columns in basement 7' 4" long
1/2" reinforcing rods in basement, entrance slab
and well slab ........................................... 9 — 3" long
5 — 7" long
12 — 5" long
68 — 20" long
24 — 32" long
46 — 14" long

Millwork

Windows — Type ........................................... casement and fixed with louvers
Material ........................................... wood
Windows Glazed including trim ................................ basement units 9 — 30" x 18" fixed
9 — 4" x 35" casements
9 — 18" x 26" fixed and louvered
2 — 18" x 26" 1 — 15" x 36" 1 — 30" x 18"
1 — 18" x 30" 2 — 50" x 64" 5 — 60" x 64"
2 kitchen — height not given
Exterior Doors — Material ........................................... wood
1 — 2' 6" x 8'
1 — 2' 10" x 8'
1 — 2' 6" x 8'
1 — 2' 10" x 8'
1 — 2' 10" x 8'
1 — 2' 6" x 8'
1 — 2' 10" x 8'
1 — 2' 6" x 8'
1 — 2' 10" x 8'

Exterior Millwork

Levers ........................................... 2 peak head per detail on plan
Exterior Doors — including jamb and trim ................................ 5 — 2' 8" x 6' 8"
2 — 2' 6" x 6' 8"
2 — 2' 6" x 6' 8"
1 — 1' 10" x 6' 8"
1 — 1' 6" x 6' 8"

Special Interior Doors ........................................... 1 — 3' accordion
3 sliding wardrobes with metal track hangers ................................ 1 — 4' accordion
1 — 3' x 10' — 16'
1 — 3' x 8' — 16'
1 — 2' 6" x 6' 8" 1 — 2' 24" x 6' 8"

Special Interior Millwork ........................................... hall cabinets
bathroom cabinets
kitchen cabinets

Carpentry

Beams and Girders ........................................... steel
Joists ........................................... 49 — 2' x 10' — 16'
42 — 2' x 8' — 16'
420 lin. ft.
Bridging ........................................... 420 lin. ft.
Studying and Plates ........................................... 270 — 2' x 4' — 8'
30 — 2' x 4' — 12'
45 — 2' x 4' — 12'
Ceiling Joist ........................................... 60 — 2' x 4' — 12'
Roof Rafters ........................................... 48 — 2' x 6' — 16'
96 — 2' x 4' — 12'
28 — 2' x 4' — 8'
34 — 2' x 4' — 12'
2 — 2' x 6' — 16'
2 — 2' x 6' — 14'
2 — 2' x 8' — 12'
2 — 2' x 8' — 16'
Subfloor ........................................... 1,750 b.f.m. 1 x 6" T & G
Roof Sheathing ........................................... 2,800 b.f.m. 1 x 6" T & G
Side Wall Sheathing ........................................... 1,300 b.f.m. 1 x 6" T & G
Side Wall Materials ........................................... 10 squares wood shakes
Carpenter Stairs ........................................... 13 — 2' x 10' — 3'
13 — 2' x 12' — 16'
13 — 2' x 12' — 16'
3 — 2' x 4' — 12'
3 — 2' x 4' — 12'
2 — 2' x 6' — 10'
Flooring — Hardwood ........................................... 1,090 sq. ft.
Softwood ........................................... 230 sq. ft.
Exterior Material ........................................... 630 sq. ft. to cover
Eaves ........................................... 208 — 1" x 6" fascia
Porches ........................................... 19 — 2' x 8" — 8' 0" framing for screens
Insulation ........................................... ceiling and side walls — 2,500 sq. ft.

Sheet Metal

Gutters ........................................... 228'
Dowspouts ........................................... 5 — 10'
Flashing ........................................... chimney flashing and saddle

Roofing

Type ........................................... asphalt shingles
Flash ........................................... 23 squares
Exterior Material ........................................... Area

Interior Walls

Area to be covered ........................................... 4,000 sq. ft.

* This quantity list will be subject to variation depending on the common practices in various sections and municipalities of the country, the techniques of individual builders, the types of materials available locally and cost factors. The list published here is a suggested one, complete enough so that it can be used in arriving at a reasonably accurate estimate of the quantities and cost of materials that will be required to complete the structure. It was prepared by experts at the Edward Hines Lumber Co., Chicago.
TRADING is older than Methuselah. Real estate has always been a big trading item. Yet today, springing up all over the country, is a new type of trading—a new type of trader.

This individual is building new homes and taking old ones in trade. His operation parallels the new car dealer who accepts old cars. His problems are much the same as the car merchant. His legal, financial and market problems are discussed in this article.

The American Builder has had editors combing the United States for the past six months to find the methods of trading builders are using and the problems that builders are encountering. To bring to our readers the truth about trades each builder was personally interviewed.

Baiting the Prospect

Finding buyers for the new house is a matter of making older house owners dissatisfied with their present homes.

Everywhere today's older house owner is barraged with reasons why his present house is not suited to his way of life, his position, or his pocketbook. Consumer magazines are helping to dissatisfy owners. Builders who show model houses and advertise them are also helping to create the dissatisfaction.

All a builder has to do is complete the selling job—pointing out where the older house is no longer suitable. Many builders are combing early postwar, small two-bedroom owners and finding them receptive to trading for more space, more bedrooms, more livability. Advertising "We Trade" has brought rich response to others who are sure of their trading ability and are ready for a trade-in deal. Many other builders are trading because potential buyers have simply queried—"Will you take a trade?" All in all builders have unearthed a new field, a new way to add to the profit ledger.

Four Types of Trades

Trading of houses can be broken down into four different types:

I. STRAIGHT TRADE-IN.

The builder accepts older house at a predetermined figure when he turns over the new house. His staff or a realty broker sells the older house. Usually the profit on the older house after selling expenses is near 10 per cent.

II. TRADE-IN GUARANTEE.

Here, the builder guarantees the owner of the older house a percentage of appraised value and starts construction on the new house. In the intervening 90 to 120 construction days every effort is made to sell the old house at the owner's price. If sold, the builder is washed out of the deal. If not, he takes the house at the predetermined figure. Builders who use this method find that 90 to 90 per cent of their guarantees are sold before the new house is finished.

III. TIME LIMIT TRADE.

The old house is never taken in by builder in this type of operation. A prospect can choose a house and has 90 to 120 construction days to dispose of his old house. The builder usually has a tie-in with a realtor who attempts to sell it in the time limit. Usually the realtor's biggest problem is getting the owner to accept a realistic value for the older residence. If the house is not sold in the predetermined time, the contract for the new house is void.

IV. REMODELED TRADE.

Some builders of low-cost, new homes trade for rundown older houses which require some remodeling to make them favorable on the selling market. Kitchens, baths, a new half bath, and exteriors are the portions that generally are remodeled. The builder may have a remodeling crew or subcontract the remodeling to an expert in the field. His appraisal must include the worth of the house after remodeling. This operation can tie up a substantial amount of his capital before the house is ready for the market. Yet there is a definite need today for this type of trading. It is part of America's basic renovation of older living units and has great potential.

$30,000 was guaranteed by Worthman for the relatively new house (right) which was traded for larger new house worth $40,000.
Worthman guaranteed $19,000 (see II Trade-in Guarantee) for colonial house (right) accepted in trade for a new ranch style which sold for $32,000. Colonial house was sold before new house was completed.

CASE HISTORIES

John Worthman, Builder, Ft. Wayne, Indiana

Worthman builds about 50 houses a year in the luxury price range. His figures show an ever increasing tendency to trade because of the large down payments required. He also finds buyers receptive to the trade-in plan as they are reluctant to make loans on new custom construction if the old house is not sold. Worthman uses Type II, the Trade-in Guarantee, offering 85 per cent of appraised value of the house on medium priced houses and 80 per cent of the appraised value on luxury houses. Worthman double checks his appraisal with a realty broker and usually has him sell the older house.

In 1952 Worthman signed 41 trade-in guarantees, about twice as many as in 1951. He took in only one house. Each of the others was sold before the new house was completed.

When the older house is sold by a realtor, at the owner's asking price, Worthman shares in the realty commission on a multiple listing arrangement. Worthman believes a realty broker is better qualified to sell the older house—his organization is accustomed to selling the new house.

Mrs. Henny Mollgaard, Builder-Realtor, Milwaukee, Wisconsin

Mrs. Mollgaard has completed 15 to 20 trades in the past year and estimates her profit has averaged 10 per cent. Her operation is much like Type II, the Trade-in Guarantee. She finds her biggest problem is obtaining a reasonable appraisal of the property from the owner.

Occasionally, the Mollgaard Company uses the blanket mortgage. This is done where buyers, with a large equity in their property, want an inflated price for their home and attempt to sell it themselves. If the house is not sold at the time the new house is ready, a blanket mortgage is made with a lending institution. The owner can then rent the house until he finds a buyer.

Financing in her operation is either through the bank or home loan organizations.

David Haecker, Builder, Lincoln, Nebraska

Haecker is a small builder, yet he has found trade-ins have helped him move houses in the past two years. He has made just three or four deals and believes that this type of operation has a future. Haecker also uses the Guarantee Type II method assuring the buyer of 85 per cent of the appraised value of the older house. He gives the buyer 90 days to sell the house at the buyer's price, after which he will take it over at a predetermined figure. Most of the houses are sold before the 90-day time limit.

Ken Stowell, Builder, Wichita, Kansas

Stowell is a trader from the old school. He has taken Cadillacs, farms, land, and houses in trade for his new construction. Stowell will also trade up as well as down. He uses the Type I, Straight Trade-in deal, for the most part. When Stowell acts as the broker he takes 5 per cent realty commission. When a house needs a little decorating Stowell will give 85 per cent of the appraised value. Stowell's appraisals many times are double checked by a qualified independent appraiser.

Harold Johnson, Builder, Minneapolis, Minnesota

Johnson was the only builder interviewed who has lost money on a trade. He was quick to admit that it was his own fault. Instead of giving 85 per cent of the appraised value of the trade-in house he allowed the full appraisal. The house was not sold during the period the new house was being constructed. It finally sold for $1,000 less than the appraisal. If he had given 85 per cent of the appraised value the house would have netted nearly $1,000 profit instead of the like loss.

Johnson believes in the future of trades but wants to see a more realistic mortgage pattern devised for the older house. He believes they...
Lincoln, Nebraska Builder David Haecker allowed $13,000 for the old house and gave owner 90 days to sell it. The owner sold it for $14,000 and bought the new one valued at $23,000. Buyer wanted builder's guarantee for old house before he would buy.

Lincoln, Nebraska Builder David Haecker allowed $13,000 for the old house and gave owner 90 days to sell it. The owner sold it for $14,000 and bought the new one valued at $23,000. Buyer wanted builder's guarantee for old house before he would buy.

Though he lost money on his first trade, Johnson plans to continue trading but with a more realistic value of the older house.

Milton Kauffman, Builder, Los Angeles, California

This builder uses the Type III method of Time Limit Trade. Recently in his 317-unit project of houses selling from $10,900 to $12,250 he advertised he would, "Take Trades," and, "Your old home may make the down payment on a new one." His response was very good.

He allowed buyers to sign for new houses and gave them 60 days to sell their old house. If after the 60-day time limit the old house was not sold, the buyer received his deposit and the contract was cancelled.

His deal called for an outside realty firm to make the arrangements with the older house owners and sell their houses. The biggest problem was to convince owners that they should take a realistic price for the old houses. About one-third of the deals washed out at the start. But this was not alarming according to Ray Millman, of Calreal Realtors, his realty broker, as in normal real estate practice three of every four listings are too high, and he refuses to handle them. He considered the one-third figure very low.

Sixty-eight older houses were sold by the realty firm. Only four houses were not sold and the owners were given back their deposits.

The realty firm had many older house owners take second mortgages on their property. For instance, a house sold for $8,950; the owner had an equity of $3,277. A mortgage was obtained for $4,000 and the owner took a second mortgage for $1,250. The down payment was $1,700. The down payment plus the difference of equity and the first mortgage gave the buyer enough down payment to purchase the new house.
builders ask questions about TRADE-INS...

In talking to builders not involved in the trade-in operation many questions were raised pertaining to various problems. These questions were recorded and the answers made part of this article.

1. How do you appraise an old house?

Appraisals of the older house are made by studying recent sales of like property in the same neighborhood. Other factors such as recent remodeling, condition of house, and livability do affect the appraisal. John Worthman and other builders check with realtors who are familiar with used property sales. The realtor usually gets the listing. Builders unanimously agreed that 85 per cent of the appraised value is a fair price for the trade-in. Luxury homes have been going for 30 per cent of the appraisal.

2. Do I set a time limit on the trade-in guarantee?

Builders find that a time limit must be established; otherwise, the builder might have to pay excessive interest on construction money. Usually builders want to know what is going to happen as they enter the finishing stages of the house. Many times they will give the buyer an extension before taking in the old house. When this is done the buyer must pay the interest on the outstanding money and also keep the old house heated if it is in the winter.

3. Do I need to remodel the old house?

Old property need not be remodeled if it is priced right. Most times it will sell at a higher figure when kitchen, bath, etc. have been modernized. Most builders believe that 25 per cent of the appraised value of the house is tops for the remodeling expenditure. Local market conditions usually dictate what remodeling is needed.

4. Who should sell the old house?

Most builders are not familiar with the used house market. These operators will do well to choose a realtor who is familiar with the old house market. His aid is also valuable at determining the appraisal. However, if a builder does have a large selling organization he might be able to sell the old houses. Builders agree that realty experience is needed.

5. What financing is available for the old house?

Standard 50 per cent mortgages are available at banks for 10-year amortization periods. Home loan associations will give 15-year loans of 65 per cent of the mortgage. FHA Section 203 loans are available for 20 years at 80 per cent of the value. However, if the house was built with FHA commitment, 90 per cent is available at the current value.

FHA Title I modernization loans can be used in conjunction with other loans when the house is remodeled.

This loaning device usually runs three years for a $3,000 loan. For a two or more family unit it can go as high as $10,000 and run for seven years. A 5 per cent discount rate is charged by the banker for loans under $2,500 and 4 per cent for loans over that amount. If it is used in conjunction with other loans for remodeled structures the new owner will have large monthly payments until the FHA Title I loan is repaid.

Real Estate contracts are also used and held by the builder until the amount is reduced to where a mortgage will finance the balance. If a builder has to dispose of land contracts he must take a 15 to 25 per cent discount.

Blanket mortgage on two properties, the old and the new, is sometimes available when owner of the old house has a large equity. Most builders interviewed want to see a new type of mortgage package designed for the older house. They wanted smaller down payments and longer amortization periods.

6. Can we get by with less investment?

Yes, builders can assume the

Many trades set off a chain reaction

Ken Stowell, Wichita, Kansas builder, had this 4-trade deal. House No. 1 worth $14,750 was exchanged for house No. 2 worth $17,250. House No. 2 was traded for No. 3 worth $13,950. No. 3 in turn was traded for House No. 4 worth $9,000

JULY 1953
outstanding mortgages on the trade-in property thereby reducing their own cost outlay. Best idea is to find buyer before new house is completed. Large operator might find time limit trades best.

7. What is considered a fair profit?
Net profit of 10 per cent on a trade-in is considered fair. The 15 per cent gross is usually enough to take care of many unforeseen contingencies. This figure is over and above the remodeling. Remodeling builders usually figure 25 to 35 per cent for their work.

8. Should we trade on existing new houses or future construction?
It is best to trade for houses not yet started. Then the owner or builder has a chance to sell the house before it is actually taken in. This type of operation, called Trade-in Guarantee, reduces the builder’s investment in used houses. Type I straight trade-ins are usually taken on existing new construction. The same percentage of appraisal applies for the Type I method.

9. Can you trade up as well as down?
It is usually agreed that trading down is the best procedure. However, John Worthman and Ken Stowell have traded up. They have taken more expensive houses for smaller, cheaper ones. They usually give the purchaser 30 per cent of the appraised value of the more expensive houses. Appraisals must be close when they get your house and money to boot.

10. Do builders trade for other items?
Yes, builders can take in other items of worth. Stowell has taken in automobiles, land, and farms. Worthman tells the story of taking $3,000 worth of dental treatment for himself and his sub. If it has value and you are sure of the marketability of the item, it can be traded.

11. How can you tie the trade-in buyer legally?
Buyer contracts drawn up by competent legal help can tie the trade-in buyer if both he and his wife sign the document. John Worthman has a trade-in form which outlines the complete procedure. This form appears on the last page of article so builders can study and use it for this type of operation.

12. What are the hidden factors in “trade-ins”?
Fluctuating market conditions present the greatest risk factor. Another factor is interim financing charges if the house is held too long. Remodeling can be another risk factor if the builder is not familiar with that type operation. To reduce risks the builder should consult with experts.

13. Do I get “capital gain” tax help if I hold the property over six months?
No. John F. McCarthy, American Builder Legal & Tax consultant, in an article in this issue entitled “No Income Tax Benefits Derived from Trade-Ins” points out that the trade-in becomes part of inventory and no tax help is available.

14. What can I do if I get stuck and cannot move an older house under any circumstances?
The house might be rented or sold under a land contract with little down. It might also be sold to realtors dealing in distressed property. At any rate, the initial transaction was a poor one.

15. Does the trade-in help the small custom builder?
Yes. It is made for the small custom builder who then has 90 to 120 days to build the new house. In the meantime, the owner or realtor can sell the old house at the owner’s asking price. The small operator will have less invested in the trading process.

16. Is trading feasible for the operative builder?
It depends on how much investment the operative builder wants to earmark for trading. If he has the money, he can go into it. Part II, Trade-in Guarantee, or Part III, Time Limit Trades are the better methods for him.

17. How do I find trade-in buyers for my houses?
Advertising, solicitation of old customers, and any other method to make buyers dissatisfied with their old house will start trades going.

18. Is there any formula for trading?
No, each case is different; very few will be alike. But these 10 commandments will help in turning a profitable trade.

1. Figure out the type of trade that suits your business best.
2. Be certain of appraisal.
3. Know your resale market.
4. Get previous financing commitments from your bank.
5. Don’t skimp on getting the house ready for resale.
6. Find buyers; don’t wait for them to come to you.
7. Be willing to take another trade for a trade.
8. Don’t get over extended.
9. Be firm on your time allotment.
10. Don’t overlook skilled help from realtors and remodeling builders.
Home Trade Contract

This agreement, made this __________ day of __________, by and between John R. Worthman, Inc., hereinafter known as Builder, and __________, Owners, WITNESSETH:

WHEREAS, the parties hereto are simultaneously with the execution of this contract, entering into a contract of (Real Estate Purchase) (Building) for a residence property at __________, the Contract is of same date herewith.

AND WHEREAS, the Owners desire to sell and dispose of their present residence property for the purpose of paying a portion of the said Contract price and the Builder is willing to guarantee the sale value of said residence property and to apply the same upon said Contract price;

NOW, THEREFORE, it is agreed by and between the parties hereto as follows:

1. That the Builder guarantees to the Owners that the Owners will sell their property known as Lot Number __________ in __________, being a subdivision to the City of Fort Wayne, Indiana, on or before __________ days from date hereof, for a net sale value to the Owners of __________, hereinafter called "Purchase Price," (represented and determined by a sale price of __________ less amount required to pay off mortgage of __________, leaving an equity of __________)

2. That the Owners will receive such sale value of said property by way of credit upon said Contract, (minimum credit has been given for __________)

3. The Builder and the Owners will both use their best efforts to sell said property for the best price and upon the best terms obtainable, and the Owners agree to sell and convey to such purchaser as may offer the best price and terms for said property, whether such purchaser is obtained by the Builder or by the Owners, provided the Purchase Price shall be not less than __________ net to the Owners, and the terms of sale satisfactory.

4. In the event that a purchaser is obtained for said property, for a contract price that, after the payment of real estate commissions, will leave a net Purchase Price equal to or more than __________, then it is agreed that if such Purchase Price the sum of __________ shall be turned over to the Builder in consideration of the credit of like amount previously given on said Contract, as above provided:

5. In the event that no purchaser is obtained for said property on satisfactory price and terms that will yield a Purchase Price to the Owners of not less than __________, then the Owners will have two options: Option 1—to convey to the Builder the said property in full payment of the credit provided for in said Contract as above set forth and up to the full sum of __________; or Option 2—to pay to the Builder the sum of __________ cash and retain title to said Property free of any further obligations under this contract.

6. Said property, Lot __________, in __________, being a subdivision to the City of Fort Wayne, Indiana, shall be sold subject to the taxes due and payable in the year of __________ and thereafter, all appurtenances, including screens, storm sash, shades, awnings, carpets, permanently installed mirrors, and linoleums, now used on said property, to go with the property, and on making such sale, the Owners shall furnish an abstract of title to the property showing a good and merchantable title and free from all liens and encumbrances, excepting current taxes, and mortgage balance as heretofore set out.

7. If the Owners elect to transfer title of said property to the Builder, the transfer (unless otherwise agreed upon in writing by the parties hereto) shall be made not later than __________ days from date hereof if possession is taken of home purchase at __________, then an executed deed shall be held in escrow until end of said __________ days, and the Owners shall pay all maintenance costs, fuel, utilities, interest, and insurance until possession is given.

8. The Owners shall have the right to cancel this agreement at any time within __________ days from date hereof, and in the event of such cancellation, said contract shall then be automatically altered so as to provide for the payment of the total consideration therein named in the form of cash instead of the application of credit as provided under this agreement.

IT IS MUTUALLY AGREED BY and between the parties hereto, that the time of payment, or the cancellation as provided herein, shall be essence of this Contract; and that all the covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators and assigns of the respective parties.

IN WITNESS WHEREOF, the Builder and the Owners have signed their names the day first above written.

John R. Worthman, Inc.

By: ____________________________

Builder________________________

Owners________________________
Cost conscious Project Builder W. C. Phillips of Orlando, Florida is using IBM's Service Bureau in Jacksonville, Florida to tabulate his labor costs each week. Phillips who has built extensively in central Florida in the postwar years believes his accounting subcontract is cheaper than hiring a trained accountant. The operation is faster and more accurate, according to R. E. Isted, secretary-treasurer of the company.

Labor costs are the key to this business; they can get out of hand, believes Isted. Material costs, according to the secretary-treasurer, are more stable and do not need watching.

Labor costs for the subdivision, for each house in the subdivision, and for each construction operation of every house are known each week. The master sheet received from the IBM concern is coded for easy comparison by the builder. Site labor costs are divided into 15 classifications. The indirect labor which covers the entire project and cannot be charged to any one house is divided into 23 classifications.

All foremen prepare a time card for every individual on the job. These cards carry the type of work, the job number, and the time spent on the operation. At the end of the week these are sent to the payroll department where extensions are made for pay purposes. The cards are then sent to Jacksonville where the IBM offices are located. The IBM concern tabulates the labor for the entire subdivision on mechanical accounting machines.

The builder is never more than five days behind the payroll in his cost information. He is able to tell the cost to date, and for that week, of the 23 indirect labor operations for the entire subdivision. He can also tell the cost to date as well as the cost of the current week of any house.

These actual labor figures can be balanced against the builder's estimates so that he can tell where he stands. Isted suggested that if a builder was considering using the system, he would find it advantageous to include the estimates for each operation. Then the IBM figures could include the increase or decrease of the actual labor cost over the estimate.

The builder produces a low-cost house. His packages range in size from 750 to 900 square feet of living space with a screened porch and carport. Prices of these houses range from $8,350 to $9,500.
### Master Sheet

**Master sheet** shows the week's total indirect costs for the project and the labor costs per house and their totals to date.

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Master copies of IBM weekly computation of labor costs

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**Labor Code**

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<tr>
<td>M</td>
<td>Misc.</td>
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</table>

**Labor Notes**

- **A—Layout**: Digging of footings, putting up batter boards, putting in sill and pouring concrete.
- **B—Blocks**: Laying of all block and bricks.
- **C—Cement**: Forming and pouring and finishing of all steps, pavers, ribbons, curbs and stepping stones.
- **D—Frame**: Covers all woodwork through sheathing up to siding.
- **H—Siding**: Siding and carnis work; also setting of outside frames.
- **T—Trim**: All interior trim, setting of cabinets, hanging of doors, porch ceilings, porch framing, screening, installing of windows & window screens, applying of all hardware.
- **V—Painting**: Covers all priming and painting.
- **L—Lathing**: Covers all lathing & rock wool insulation.
- **E—Electrician**: Covers all wiring.
- **M—Misc.**: Removing trees which cannot be designated to any specific house or clearing of any land which cannot be designated to any specific house.
- **K—Grass**: Planting of grass or sprigging.
- **J—Shrubbery**: Planting of shrubbery or trees.
- **G—Glazing**: Self-explanatory.
- **P—Plastering**: Covers all plastering—self-explanatory.
- **F—Roofing**: Self-explanatory.

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<tr>
<th>Labor Code</th>
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<th>Actual over Estimate Increase</th>
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Including estimated costs in the IBM tabulation enables the builder to tell at a glance whether the costs are running above or below original estimate.
Two bedroom plan has 731 square feet of living area. In addition the builder includes in the selling price a 174 square foot screened terrace and a storage carport. The house sells for $8,500.

Shed roof design has 880 square feet of living space. Three bedrooms, screened porch, sheltered entrance and carport are features. Price is $9,500.

Three bedrooms are included in this 900 square foot house. The screened porch is between the house and the carport. Both entrances lead to the screened porch.

BRAND NAME PRODUCTS USED

Armstrong linoleum and asphalt tile
Crane plumbing fixtures
Decatur steel windows
Flintkote shingles
General Electric refrigerator, range, laundry, garbage disposer, and hot water heater
Glidden paint
Hunter exhaust fan
International Harvester air conditioning
Kwikset hardware
National Gypsum wall sheathing and insulation
Ra-tax folding door
Roberts venetian blinds
Unique sash balance
U. S. Gypsum lath
U. S. Mengel doors
skin stress cantilevered truss
opens way to new design technique

It's a new concept of house building: a structure designed from the inside, outward to the perimeter walls, increasing the flexibility of the floor plan and reducing costs. The pilot model of 1,650 square feet has a firm contract price of $13,000 not including land.

Denver architect, William B. Sayre, A.I.A., designed the house and is building the first pilot model for his own use. Even before completion, the advanced method has caught the eye of many Denver builders and developers who are considering projects incorporating its techniques.

Secret of the new development is the rigid cantilevered frame. This roof supporting member has 4x4 top and bottom chords and two sheets of 1/2-inch plywood, engineered nailed, skin coverings. Posts, also 4x4's, can be set into frame to permit large or small overhangs, as desired. Variable lateral positioning of posts allows greater flexibility of floor plans. In the pilot model many frames are cantilevered as much as 21 feet and have deflected not over one-eighth inch.

The frames are 8 feet 6 inches on center, slightly longer than FHA allows for 2-inch roof decking. However, the six frames make up the complete framing of the house. All walls are non-bearing including the exterior. This accounts for the substantial savings gained with this method of building.

Engineering-wise, stress of the rigid cantilevered frame is between the plywood and the nail. Certain compression stresses are in tension between the top and bottom 4x4 chords. The chords also act as nailers and additional 4x4's are inserted where sheets of plywood butt together. The nailing pattern calls for staggered double rows of nails on 2-inch centers. Nails are 8d com-
Exterior masonry walls were laid up in panels. An expansion strip was inserted between units, and 1/4-inch rod was imbedded in the mortar every third course, reducing tendency to crack.

Each frame, built on the job site, costs $70 complete with material and labor.

Frames are supported on two 4x4 posts built integral with the frame and set into steel pipe sleeves. Posts are treated with a wood preservative.

The non-bearing walls allow all trades to be on the job at the same time. The model house was up in two weeks. Frames were made as the grade beams were poured. The masonry work was under way as the frames were lifted into position. Heating ducts, plumbing and electrical runs were completed as the 2-inch roof decking was being laid.

Dimensions and the level of the grade beams were watched carefully and the frames were found to be exceptionally true. Assurance of

Frames rest in steel pipe sleeves set in piers. Sleeves are grouted when the slab is poured. Posts are treated

Masonry work is underway while the frames are raised. All trades on the job at the same time reduced construction time.

Posts on this frame show the cantilever possibilities. Actually, the longer cantilevered length is 21 feet. The deflection after the roofing was applied is less than 1/4-inch
Shell interior shows the erected frames, combination radiant perimeter heating ducts, and electrical conduit.

The level reduced expensive carpentry labor as the components went together without fitting.

The block work was carried to a height of 6 feet 8 inches to correspond to height of door and window frames. In the next house it will be increased to seven feet so a wiring trough can be installed around the perimeter of the building. Wiring in the pilot model was installed in the floor. In future houses the architect wants the wiring easily accessible.

The block panels work out to 10 or 12 feet in length with expansion joints between. Each third course has a 1/4-inch rod. The rod and expansion joint minimize cracking. Blocks are lightweight with an insulating aggregate. The block received no other interior finish.

The heating combines a warm air perimeter system and radiant heat in the slab. A long plenum runs the length of the house and has multiple clay ducts radiating from the plenum to the perimeter floor registers. Warm air is carried through the many lateral ducts heating the floor.

Roof sheathing costs 55 cents per
square foot in place. The 2x6 t&g material was more expensive, stated the architect, but the installation costs were lower than conventional methods. The decking is exposed on the interior of the house. The exterior wall ran 55 cents per square foot in place. The lightweight aggregate block contract was $800 for material, labor, paint, and insulation. The 55 cents per square foot cost of the wall included the large glass areas.

Brand Name Products Used

- American Standard plumbing
- Benjamin Moore paint
- Celotex wall sheathing
- Crane hot water heater
- Danley fireplace damper
- Elkay stainless steel sink
- General Electric garbage disposer, range, refrigerator, dryer
- Lamidall kitchen counter material
- Lightolier lighting fixtures
- Maytag washing machine
- Mengle doors
- Minneapolis-Honeywell heating controls
- Napponee kitchen cabinets
- Pella windows and folding door
- Pryne exhaust fan
- Kennatrack sliding door hardware
- Wiser hardware
- United States Gypsum wallboard

Length of window area in bedrooms shows flexibility of the non-bearing walls

Large glass areas at rear of house show another treatment of the non-bearing walls
builder and client see eye to eye...

**on RO-WAY Beauty** Functional styling is built into every Ro-Way door. Clean, simple lines lend beauty to any home or commercial building. Only the highest quality, selected West Coast lumber is used. Millwork is both drum and *hand sanded* for a fine, lustrous finish.

**on RO-WAY Operation** The famous Ro-Way Power-Metered springs—individually matched to the exact weight of each door . . . the ball bearing Double-Thick Tread rollers . . . the Seal-A-Matic hinges . . . the Taper-Tite track . . . all are engineered for permanently *smooth* easy-up, easy-down operation—*year 'round, year after year*. And all are exclusive with Ro-Way—designed, engineered and manufactured in the Ro-Way plant—quality *controlled* from start to finish.

**on RO-WAY Dependability** Every Ro-Way door is built of only the finest materials available—engineered and constructed for a lifetime of dependable, trouble-free service. Mortise and tenon joints are both glued and steel doweled. Sections are rabbeted for weather-tight joints. Heavy gauge hardware is both Parkerized and painted after fabrication for maximum protection.

**So remember** when you’re specifying doors—for residential, commercial or industrial applications—you and your client will “see eye to eye” on every feature of Ro-Way Overhead Type Doors.
BUILDERS REVEAL

"GIVE YOUR HOMES
HEART APPEAL," SAY
LEADING BUILDERS!

For faster sales, give your homes heart appeal. Remember, Mr. and Mrs. Prospect buy with their hearts as well as their heads. That's the advice the nation's leading builders are giving today. These same builders give their own homes beauty and heart appeal by installing Complete Crosley Kitchens, America's most beautiful kitchens.

People are mighty interested in the kitchen. It's the room in which they expect to do a lot of living. Completely equipped with quality Crosley appliances, it can put them in a buying mood right from the start.

Crosley Kitchens keep prospects sold, too. Women, who spend so much time in these "care-free" kitchens, learn to appreciate Crosley's work-saving, step-saving features more every day. That's important to a builder whose reputation depends upon buyer satisfaction.

Contact the Crosley Distributor in your area today. He is equipped to help you plan a sales-winning kitchen with real heart appeal.

James Price, President of National Homes Corporation. With 42,000 sales behind them, he and his associates know what makes homes sell. Their new homes are equipped with Complete Crosley Kitchens.

Henry Doelger. He builds whole cities at one time. His building projects, like the giant Westlake Development in California, will run as high as 10,000 family units. Henry Doelger equips his homes with Crosley, too.

Stanley Praver of Praver and Sons. They line up to buy his Crosley-equipped homes in Kansas City. Selling for only $10,000, these homes feature "luxury" Crosley Kitchens.

L. B. Lovitt, Jr., partner in the firm of Jacobson & Lovitt says: "Prospects know their brands of appliances and what they want in their homes. That's why we include Crosley Kitchens in our Princeton Park Homes in Memphis."

Vaughn Dekle, leading Florida builder. He speaks from 12 highly successful years of experience when he recommends Crosley Kitchens for faster sales.
SALES SECRET!

There’s sales appeal in the heart appeal of this beautiful Complete Crosley Kitchen!

STEPS IN PLANNING FOR FASTER SALES

Before you build, let us give you an estimate on Complete Crosley Kitchens. You may be surprised to discover how economical these complete kitchens can be. Particularly when you consider the many advantages they offer.

Consult your source of financing. Make arrangements to have the Crosley Kitchens included in package mortgages for your prospects.

Know the sales advantages of your Crosley Kitchens. For instance, Crosley Shelvador® Refrigerators give your prospects more refrigerated storage space than most other makes using the same amount of floor space. Crosley Automatic Electric Ranges, with two-area heating in surface units and completely automatic ovens, are more economical to operate. Crosley all-steel cabinets are more durable . . . longer lasting . . . and provide really adequate storage space.

If a realtor handles your sales, he probably already knows these sales features. But play safe. Point them out to him.

Take advantage of the “back-door” sales approach. Take prospects through the back door into the Crosley Kitchen. That first impression counts heavily in your favor.

So—set your heart on faster sales with Complete Crosley Kitchens.

For More Free Information . . . Clip and Mail

Builder Sales, Dept. AB-73, Crosley Div., AVCO Manufacturing Corp.
1329 Arlington Street, Cincinnati 25, Ohio

Please send complete information on all Crosley products to:
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Company:
Address:
City_________Zone_________State_________

CROSLEY AVCO MANUFACTURING CORPORATION
CINCINNATI 25, OHIO
Now!

GET FAMOUS TRUSCON QUALITY IN NEW ALUMINUM CASEMENTS

In a New Range of Modular Widths...
Featuring Highest Quality Hardware;
Increased Light and Ventilation Area; Stronger, More Rigid Construction

Here's the improved aluminum casement that's backed by Truscon's 50-year history of outstanding service to the building industry. Look at the advantages it offers you:

- It is manufactured in a new range of modular widths which match standard masonry dimensions. This new "masonry-matched" feature means no off-size openings. It means savings for you on both labor and materials in masonry and in wood framing.
- It is extra strong. Heavy extruded aluminum sections are used throughout. Ventilator section is 1 1/2" deep, with web member increased 50% beyond normal thickness for adequate stiffness and airtight closing. Truss-type aluminum hinges add strength while retaining slender architectural lines.
- Hardware and accessories are aluminum and stainless steel.

- Larger glass sizes allow approximately 8% more light and ventilation per window opening. In the modern manner, new Truscon aluminum casements emphasize horizontal lines. Ventilators are wider.
- Aluminum screens and storm sash are available.
- Heights are identical with those of standard steel casements. You can install new Truscon aluminum casements in homes originally planned with windows of other widths.

Truscon aluminum casements are available for immediate delivery to job sites through Truscon dealers backed by Truscon warehouse stocks. You get Truscon responsibility to stand solidly behind its products. Write us for latest bulletins containing complete description and specifications; see Sweet's for details on other Truscon metal building products.

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REPUBLIC STEEL CORPORATION
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Write today for a free demonstration on one of your jobs... day or night or both.
Wide Andersen Casements with picture sash

Now! New wider sizes, wider

Two glazing styles in wide casement sash...horizontal or one-light—Norman Johnson, architect

25 STOCK SIZES ADDED BY NEW SERIES OF UNITS

Just look at the pleasing effects possible with the new wide Andersen Casement Window Units! With 4½" added to the sash opening, the new series gives larger glass areas, makes the distinctively narrow Andersen Casement mullions look even narrower. Particularly in the 5' height, sash proportions are more pleasing.

There's greatly increased selection of sizes, too. The wide casements add 25 stock units to the 34 formerly shown by
selection in Andersen Casements

Andersen in its unit catalog. And keep in mind, architects and builders can combine stock Andersen Casement Units and picture windows so that the number of possible combinations has no limit!

Sash of the new wide Andersen Casement are 1'-10½" wide. Available in single light or horizontal light glazing. Also groove glazed single light with new double insulating glass. Five heights and five widths, plus combinations with picture windows.

For more information, see your millwork dealer or write Andersen Corporation, Bayport, Minnesota.
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Small outside diameters make Chase lightweight Copper Tube “builder’s choice” for ceiling, floor and wall installations. Easy-bending long lengths mean fewer fittings …joints that are a cinch to make with leak-proof Chase Solder-Joint Fittings. And, of course, Chase Copper Tube gives you long service, excellent thermal conductivity, and corrosion resistance. Write today for FREE 50-page Book on Radiant Panel Heating.

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AMERICAN BUILDER
One man can handle and place with ease a full-size sheet of Colorbestos. Nail holes are pre-punched.

Colorbestos sheets are shipped on a pallet usually containing sufficient material to cover a complete house. Field cutting is kept to a minimum.

Colorbestos combines for the first time beautiful color and rich texture in large asbestos siding sheets ... meets the modern trend in house design and economy of construction.

Johns-Manville Colorbestos is a new pre-finished siding material in large, quickly applied sheets. It doesn't imitate other materials but sets a style of its own that is different and refreshing. Thousands of new homes already built with J-M Colorbestos signify its immediate acceptance with leading architects and builders.

Made of two practically indestructible materials, asbestos and cement, the sheets are 32” wide by 96” long and 3/16” thick. They are pre-decorated and will never require preservative treatment. They cannot rot or rust and, of course, they are fireproof!

The color and striated graining is imparted to the sheet by embedding ceramic granules in the asbestos cement. The graining is so striking, it is difficult for the eye to distinguish the vertical joints. No batten strips are needed.

For a free booklet showing the seven beautiful colors of this new material and giving full information, write Johns-Manville, Dept. AB, Box 60, New York 16, N. Y.
this house has been SOUNDPROOFED

Soundproofed throughout, and a self-contained apartment for the children are the distinguishing features of this two-level custom-built house in Vancouver, B.C.

The site covers two acres of forest land on the summit of a hill that slopes to a small stream. Excavating the west side of the hill provided two bedrooms, bath, and a playroom with a fireplace on the lower floor for the children's exclusive use. The apartment has its own outside entrance at grade level. Also on this floor are a furnace room, a large work shop, and a storage area. Walls of this lower portion are 10-inch concrete block. The floor is concrete insulated with a 4-inch subslab of vermiculite concrete for warmth.

Upstairs on grade are a spacious living room, two bedrooms, bath, utility room, and a large kitchen. A vestibule with clerestory windows runs from the rear entrance to the bedrooms and bath, keeping traffic out of the living room.

The house was designed on a four-foot module. North and east elevations are natural rough cedar siding. South and west elevations, which command a view of the harbor and Vancouver Island, are plate glass and 4x8-inch cedar timbers. Living room and master bedroom ceilings slope south. The roof is insulated with three inches of vermiculite fill.

Sound control and fireproofing were obtained with ceilings of vermiculite acoustical plastic, a half-inch thick over a base coat of vermiculite plaster. Sound transmission through the wall in back of the recessed, prefabricated metal shower...
Clerestory windows on the north side of the living room give glimpses of the forest. Mobile planting wall of wrought iron screens the rear entry hall.

- The stairway was quieted by filling it completely with the same material.
- The heating ducts were plastered inside with vermiculite insulating cement, 18 inches back from the outlet, to minimize noise from the heating system. The floors were covered with cork and asphalt tile.
- A three-foot overhang painted bright yellow on the under side surrounds the structure. Because of its isolation, twelve floodlights were placed under the overhang to illuminate the grounds at night for protection against prowlers. The floods flick on by a single switch.
- The rear and front entrances on the main floor occupy corner locations to obtain maximum uninterrupted wall space. Kitchen and living room are separated by a wide folding door.
- The kitchen is completely electric with the range fitted flush into the main counter. Cupboard shelving can be spaced to any desired height by changing the support pins.
- There is ample closet and storage space everywhere. Cupboards for the children's clothing and for cleaning equipment were provided in the rear entry. There are large walk-in closets in all the bedrooms. The
laundry-utility room walls are lined with cupboards with shallow shelves for storing preserves, canned goods, and other supplies; and there are two built-in fruit cupboards on the first floor.

The main floor bathroom has twin sinks to speed up washing before meals. Underneath the sinks there are cupboards for towels and soap. The bathtub is raised six inches off the floor for convenience when bathing the children or scrubbing the tub. In the small pony wall separating the tub from the shower is a general-purpose shelf for books and toilet articles.

Built-in three drawer bedroom cabinets are fastened to the wall to keep the floor area free.

The utility room, a continuation of the main walk-in kitchen cupboard, contains fully automatic laundry equipment.

Cost of the home was $25,000.
This split-level exhibit house was a model for the last 50 houses to be built in the 210-family Wantagh Oaks development.

Four-level house adapted to

ZONE AIR CONDITIONING

Builders Sidney Berg and Robert Bernhard opened this $15,290 house, the Fleetwood, as a model for the last 50 units in their 210-family Wantagh Oaks development in Wantagh, Long Island, N. Y. For an additional $875, they offered to add summer cooling to the warm air heating system. Within two weeks, they had sold half of the homes.

Containing 1,407 square feet of living space, plus garage and 24.7x18-foot basement area, the house was designed by the builders, with the assistance of Lester L. Lowey, consulting engineer.

Among the more unusual features is a 5x6-foot cedar-lined storage closet, fireplace, finished recreation room, 6-foot twin-bowl vanity-style lavatory, access to a storage attic (fifth level) through the linen closet, and four outside entrances.

The air conditioner, a two-ton unit by Clime-Matic, works on a two-zone principle to reduce operating cost. During the night, it cools the bedroom wing, while in the daytime, the cooling can be concentrated in the other wing.

A finished recreation room, floored with asphalt tile and containing 190 square feet of floor space with broad window overlooking street, proved to be a popular feature in the house.
This handsome version of an office-home combination for two people was designed by Edward Killingsworth of Long Beach, California. The problem was to provide, at reasonable cost, living quarters and office space on property fronting a main highway.

The house is built on a slab, has only 724 square feet, but gets ample elbow room by use of a completely enclosed patio. Cost was about $5,500 not including the land and with the owners doing the painting.
Night view of living room and bedroom from patio. Ceiling beams are 4x10's on 6-foot centers. Screen hides a gas wall heater. One wall of bedroom is a wardrobe with sliding door. Ventilation is by vents at top of the fixed glass window-walls.

Core of house is a narrow rectangle, but kitchen extension and enclosed patio make it seem wider.

Patio doubles living space.

Partial partition with file at end separates office from living space. In the top of the partition is a neon tube which lights both office and living room.
1. Notice how Keymesh is lapped and covers the entire ceiling surface. This assures smooth, long lasting plaster where it is most desired by builders, contractors, architects and owners.

2. Keybead protects the outside corners against nicks and cracks and makes an easy-to-follow plaster thickness guide. Outside plaster corners are more easily made with the help of these Keybead corner beads.

3. Keycorner on the inside corner, on joints above and below the window, at the corners of the window and at the entire ceiling-wall juncture provides the extra assurance against plaster cracks usually occurring at these areas.
to guard against plaster cracks

1 KEYMESH on ceilings
2 KEYBEAD on outside corners
3 KEYCORNER on inside corners joints and ceiling-wall junctures

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KEYBEAD produces strong, economical “true” outside plaster corners. The open-mesh design of the Keybead wings permits plaster to flow through the steel wires and give a generous bond of plaster to lath . . . a solid plaster corner results. This thorough steel wire embedment combined with the true-formed bead makes strongly reinforced, more highly crack-resistant outside plaster corners.

THE COMBINED USE of Keymesh on the entire ceiling area with Keycorner at inside corners and joints and Keybead on outside corners, results in trouble-free, lasting plaster beauty . . . a valuable selling advantage to plasterers, lathers, builders, contractors and architects alike. It promotes greater owner satisfaction—more quality plaster jobs.

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Model 728 "Ceil-N-Wall" Bantam
For Small Kitchens, Bathrooms, Etc.
This new intermediate size ventilating fan has all the advantages of its big brother, the 1021. More versatile because of its small size, it can be used in places where space is a limiting factor. 7" Turbo-Radial Impeller, 325 C.F.M.

Model 880 Ceiling Ventilating Fan
Designed especially for single story construction. Simple to install—mount in ceiling and attach to standard 8" round duct which is extended through the roof. Low cost and high efficiency make the 880 extremely popular. 8" blade, 475 C.F.M.

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Outside Wall Ventilating Fan
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For completely automatic ventilation at the flick of a switch. Wherever placement of the fan rules out a pull chain, choose this type. Flick a wall switch—the powerful fan opens the outside door. Turn it off—and a perfectly counterbalanced spring snaps the door closed, weather-tight. Model 882—8" blade, 575 C.F.M.; 1082—10" blade, 550 C.F.M.

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MORE POWER AT LOWER COST! Watch costs go down when you put the new heavy-duty power of Chevrolet's advanced Loadmaster engine to work! The new high-compression ratio of 7.1 to 1 in this great engine brings you more power and even greater economy than before. Chevrolet's Thriftmaster engine, too, in light- and medium-duty models offers exceptional economy of operation.

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JULY 1953
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Complete information can be supplied by your lumber dealer for Weldwood products, or visit your nearest United States Plywood or U. S.-Mengel Plywoods showroom.
A WARM, COSY ATMOSPHERE is given this TV-study room by Surfwood. Its deep-etched texture resembles weathered driftwood. Decorators like it because it blends well with either traditional or contemporary furnishings. You can leave it in its beautiful natural state or give it a variety of interesting finishes.

Rich pre-finished Plankweld is easy to install and gives luxury look at low cost to the homes you build.

Increasingly popular Weldtex paneling is being used by more and more builders for exteriors, walls and ceilings.

Capitalize on the public's acceptance of the Weldwood name—advertised to reach 15 million readers per month!
Here's a Way to CLINCH Sales

What looks like a model house is a sales office with large material display area and an X-ray exhibit of construction methods.

Side wall of the foyer shows some of the brand name products used.

Interior foyer from front door. Buyer sees a graphic display of materials, cutaway ceiling showing truss construction.

Looking through the floor joists buyer sees basement and crawl space construction. All parts are well marked so prospects can understand the details.

Semi-private office where sales force can talk to prospects without interference.
It's not a model house. The models are at the site. This is a builder's department store where his complete story is unfolded. The Chicagoland builders, Robert Bartlett Building Corporation, wanted a novel, eye-catching, sales presentation where customers could see all the components that make a house. But most important they wanted a place to sell houses.

The concern used a standard model (which will later be reconstructed and sold) for a combination X-ray house, sales office, and architect's headquarters.

"Salesmen for the first time have a place to talk with interested prospects without the drawbacks of the model house stigma," stated Edward A. Joers, vice president of the concern. Asked what he meant, Joers explained that selling in a model was very difficult.

"When a salesman has a hot prospect ready to buy, someone wanders through to see the house. Many a deal is killed by the interference of onlookers. We think we have solved this problem," states Joers. "We have semi-private sales offices where the sales staff is not bothered. We also have a private office where discussions can be held."

In the foyer the concern built an X-ray presentation of their construction methods. It shows in great detail the products and the framing in the house. Buyers can wander through this area and study it while waiting for a salesman. The company vice president pointed to the X-ray feature and stated, "People today know more about construction methods. When they can see how we are building they know it's quality construction. Prospects believe if we show it, it must be good."

Also in the foyer the concern has displays of the materials used, a series of exterior elevations, and the subdivision layout.

When a prospect has entered the buyer column he is led to a selection room. Here on display are all the materials used and their various colors. The prospect will sit down with the company designer and select the various components of his new home.

Prospects can see actual model houses. These are at the present building site which is on the far end of the subdivision.
This desert house near Phoenix, Arizona, has two bathroom-dressing rooms but no bedrooms, in a long, earth-hugging design carried out in steel and native stone. The builder was Ed Ast of Scottsdale, who also designed the house.

The house has a steel frame, the supporting posts being faced with stone. Electric conduits run up through them. A steel truss spans the posts over the glass wall facing the desert, taking the weight off the Arcadia sliding glass doors used in this wall.

Side walls are of pumice block. The roof is a built-up white rock surface. Floors are of native stone laid over 4-inch concrete and then ground smooth with a terrazzo grinder. Stone is also used for the fireplace wall and for the 7-foot wall that separates kitchen and living space.

The builder gets a perfectly straight beam for his beamed ceiling construction by applying 1x12-inch clear native pine to both sides of the 2x12-inch beam, and a piece of clear pine 1x5-inch to the bottom edge of the beam. Over the beams run 1x8’s, t&g, in herringbone pattern. Above these is Flintkote Ceiling Deck, 3 inches thick, for insulation.

But where do the occupants sleep? Guess.
The bottom sash of the Silentite awning window may be opened slightly while upper sash remain closed. All sash may be mechanically opened or closed as desired. The opening process may be stopped at any point, and the bottom sash closed to prevent drafts.

**Now Curtis Introduces striking new features in the Silentite Awning Windows**

Constant improvement is a Curtis watchword. And so today, Curtis introduces new, exclusive features in an all-climate wood awning window—features of weathertightness, beauty, and positive control which make these windows outstanding in their field...

**Plus these and many other important new features...**

A completely assembled unit—toxic water repellent treated—may be purchased open or with single or double glazing and aluminum screens—all frame parts interlocked for weathertightness—concealed, zinc plated hardware—pivot points are solid brass—large glass area with minimum of wood between sash—overlap sash affords deep shadow lines—units available in twelve sizes.

**weathertight under all conditions**

Spring leaf bronze weather-stripping is set in the head jamb—the rest of the unit is completely weather-striped with durable, refrigerator-type plastic. Completely non-porous, this plastic weather-stripping fits snugly, creating a weather-tight seal under all conditions. The specially-designed hardware operating the sash permits unlimited ventilation control. Single crank below the window operates all sash, and sash are easily cleaned from inside.

Get all the facts about Silentite Awning Windows—a new addition to the broad Curtis window line including Silentite double-hung windows and casements... picture windows... panel windows... circle windows. Mail the coupon!

Curtis makes a complete line of architectural woodwork and birch kitchen cabinets for homes of all types. Make your next home "all Curtis."
No special framing to build! Milcor Access Doors require no special framing, no cutting or fitting. Three types available for use with plaster, masonry or wallboard.

One finish coat usually covers! Milcor Access Doors are furnished painted with rust-inhibitive gray primer. No sanding or filler coats needed before finishing.

Good for the life of the building! Made of heavy-gauge steel, Milcor Access Doors cannot warp, crack, shrink, swell, or rot. Termite-proof and fire safe.

Gives fast, convenient service entry! Exclusive spring hinge lets door open 175°. Door may also be quickly removed by extracting hinge pin. Number of hinges and cam locks is determined by size of door.

Wherever specifications call for access doors, give home and building owners the advantages of steel - install Milcor Access Doors. Our No. 252 Catalog gives complete details on these and other Milcor steel building products. Write for your copy today.

11 different sizes, from 8" x 8" to 24" x 36" — ready to install in plaster or non-plaster walls. With or without expanded metal flanges.
How to install **sliding** doors faster, at **less cost**...

1. Mount track to header, keeping face of track flush with opening. (35 seconds)
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 \( \frac{3}{8}'' \). 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)

That's all! Time, less than 6 minutes for a pair of by-passing doors! Rocket Sliding Door Hardware goes up fast!

---

**You save twice** when you use Rocket Sliding Door Hardware. First on the cash-cost of the hardware, then on the time-cost of installing it.

**You get fine features** in the Rocket. The handsome self-facing track mounts flush, needs no facia plate. Headroom is low, nylon rollers are quiet and construction is absolutely sturdy.

**Pre-Packaging** brings Rocket Hardware to the job complete, protected and cut to standard size. (4', 5', 6' or 8' openings, for single, bi-parting or bypassing doors). Also special sizes.

**It all adds up!** Low cost, easy handling, fast installation and excellent operation make the Rocket the top seller in its field. See your supplier or write us for full information. Grant Pulley & Hardware Company, 31-63 Whitestone Parkway, Flushing, New York.

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**Grant Pulley & Hardware Company** manufacturers of Sliding Door Hardware, Drawer Slides, Sheaves & Track, Curtain and Drapery Hardware, Industrial Slides.
THIS BRAND NAME ON LUMBER ALSO BRINGS BUILDERS...

Design No. 5146

Design No. 4130

Design No. 4133

Design No. 4144

Design No. 6103
Effective Selling Help in the Small Home Field

THE WEYERHAEUSER 4-SQUARE HOME BUILDING SERVICE

As builders of small homes enter a period of increasing competition, successful selling and merchandising methods are always welcome.

The Weyerhaeuser 4-Square Home Building Service has been thoroughly time-tested and sales-proved. It has demonstrated its effectiveness in helping builders locate prospects and sell houses.

Builders who are using this Service report that it is successful because it assists them in delivering greater home values to owners... with the proved appeal of modern homes that are architect-designed and Weyerhaeuser-engineered for true economy.

Here you see a few of the “best sellers” in the Service. They reflect the freshness of modern styling, open planning, simplicity of design... and sound economical construction that is achieved through competent engineering and the use of standard building materials.

To strengthen the sales position of builders who use this Service, a continuous schedule of national advertising appears in leading home magazines. Builders may also obtain material for local promotion.

Each month Weyerhaeuser releases a smart, modern design, reproduced in full color, complete with blueprints and material lists. Today there are over one hundred designs available for your study and use without charge.

How can you use this Service? Simply see your Weyerhaeuser 4-Square Lumber Dealer. He will gladly show you the Service and help you in every possible way.

Design No. 5142

Weyerhaeuser Sales Company
ST. PAUL 1, MINNESOTA
JULY 1953
Now, as always, building in America is infinitely varied, assuming whatever shape, style or size is dictated by need, demand, taste or enterprise.

Anything but standardized itself, American building is nevertheless the world's foremost beneficiary of standardized, mass-produced building materials.

Thus, high-quality AETNA hollow metal doors, door frames and trim are found up and down the entire scale of American building — in a great 90-building (1223 garden apartment) home project such as Drexelbrook at Drexel Hill, Pennsylvania, as well as in the modest dream house of ex-GI Joe.

The reason? Standardized-quality mass-production eliminates guess-work; you get what you order and you get it in quantities large or small on scheduled delivery.

So, take the guess-work out of your building problems by ordering high-quality mass-produced materials such as AETNA hollow metal doors, door frames and trim!
If you’re in business for this . . .

it pays to tie in with this

The brand name that makes the most sense to the customer usually makes the most money for the dealer. That’s why a growing number of money-wise dealers are stocking the complete Barrett building materials line . . . and taking full advantage of Barrett’s great all-around promotion program.

You rate high as a source of building materials when you sell the high quality and highly acceptable Barrett line. Unusually varied and practical, it includes: asphalt roofing shingles . . . mineral surfaced asphalt roofings (in rolls) . . . rock wool insulation . . . insulated sidings . . . smooth-surfaced asphalt roofings (in rolls) . . . mineral surfaced sidings (in rolls) . . . wood preservatives . . . sheathings and building papers . . . roof cements and coatings . . . protective bituminous-base paints . . . damp-proof coatings . . . tarred and asphalt felts . . . waterproofings, etc.

We push hard to give you the greatest dealer support in the industry. Full-color window and counter displays . . . 3-dimensional natural color picture selling kits . . . mats and electros for local ads . . . samples . . . mailing pieces . . . outdoor signs . . . national advertising — to mention just a few of Barrett’s profit-building sales aids.

Now is the time to let Barrett help you set up your business for a greater profit potential. Get in touch with us TODAY!
The “prescription” technique builds fine highways for the Arkansas traveler!

In Arkansas—where miles of modern portland cement concrete highways, play host to the industrial, agricultural, and vacationing traveler—highway construction experts agree with outstanding concrete men everywhere on the principle of air entrainment.

They know that today’s air-entrained concrete helps to build highways that are longer lasting, more durable and more resistant to extraordinary climatic conditions than ever before. But they’ve also learned that correct air entrainment is no accident—that proper air entrainment results only when the air entraining agent is properly proportioned to the other elements of the mix.

That’s why the Arkansas Department of Highways specifies—“In all cases, air entrainment in concrete used in Arkansas highways will be achieved by adding the required amount of air entraining agent at the mixer.”

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

Marquette Cement
MANUFACTURING COMPANY
SALES OFFICES: Chicago • St. Louis • Memphis • Jackson, Miss. • PLANTS: Oglesby, Ill.
Des Moines, la. • Cape Girardeau, Mo. • Nashville, Tenn. • Cowan, Tenn. • Brandon, Miss.
PORTLAND • HIGH EARLY STRENGTH • AIR ENTRAINING • MASONRY

AMERICAN BUILDER
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.

**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.

**Glass block "belongs" with wood or brick...**

TRADITIONAL OR MODERN

Whether a home is wood, brick, stucco or stone... whether it is ranch or split level... traditional or modern, it can have the advantages of panels of Insulux Glass Block®. Patterns are available in a wide variety that "go" with any architectural design.

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 7, Box 1035, Toledo 1, Ohio, and get complete information about the many advantages Insulux can bring to the homes you build.

KIMBLE GLASS COMPANY

Toledo 1, Ohio—Subsidiary of Owens-Illinois Glass Company
The manufacturer of Thermopane recommends the use of a good knife grade, non-hardening glazing compound free from corrosive materials. Do not use putty.

**size of structural members needed**

If the basement of a one story house with unused attic is 29 feet wide and 75 feet long, what size I-beam should be used? This will be placed down the center, carrying the floor load, bearing partition, and plaster ceiling. Four inch posts under the beams are spaced 14 feet o.c.'s.

Are 2x8 rafters 24 inches o.c. safe for a slate shingle roof 4½-12 pitch, with 15-pound felt and 1x6-inch roof boards over a 24-foot span one-story house with bearing partition, 2x8 ceiling beams 24 inches o.c., and unused attic?

*R. W. D., Philadelphia, Pa.*

It will require an 3-inch WF 17# Steel Beam on ceiling of basement to carry load. 2x8-inch roof rafters 12 inches o.c. will be required to carry a roof with slate shingles, etc.

Could you advise where we might purchase a slide rule or book of tables for computation of plain and reinforced concrete? What we have in mind is a rule that would give us the size, thickness and concrete mix for footings and walls under different loads and loading.

*A. H. C., Chicopee Falls, Mass.*

We know of no slide rule which gives information on the design of reinforced concrete members. The only slide rule and tables along this line with which we are familiar give the amount of concrete and quantities of materials required for members of different sizes. A number of manufacturers of portland cement have developed or had prepared for them tables of this type. Several specialty companies also produce pocket-sized charts or slide rules useful in computing amounts of concrete required for different size members.

**cesspool or septic tank**

*I am building a house near the shore. I would like to know what to put in, cesspool or septic tank. The ground is all sand and I was told if I dug four feet I would hit water. If your answer is a cesspool would you kindly send me some information on how to construct it?*

*F. R., Philadelphia, Pa.*

I would suggest the installation of a septic tank and a dry well to empty discharge from tank. Build the dry well of porous concrete blocks or similar material and fill around outside of well with six inches or more of stone or gravel. This system dissipates water very rapidly.

(Continued on page 97)
Here's new economy...new speed in construction fastening! The Remington Stud Driver joins wood or steel sections to concrete or steel surfaces in seconds...easily sets as high as 5 studs a minute. Powerful 32 caliber charges drive studs arrow-straight. The tool's light weight—only 5 1/2 pounds—simplifies handling wherever studs are needed.

New guards for specific uses now make the self-powered Remington Stud Driver more versatile than ever. These attachments take all the guesswork out of stud location...assure fast, accurate fastening for every job. Illustrated are just 4 of these special guards. For full information about the complete line and about the Remington Stud Driver, send the coupon below.

**A complete line of guards for special applications**

Guard for Structural Channel  
Guard for Switch, Utility and Outlet Boxes  
Guard for "Unistrut" Sections  
Guard for Conduit Clips

---

**MAIL THIS COUPON TODAY**

Industrial Sales Division, Dept. AB-7  
Remington Arms Company, Inc.  
939 Barnum Ave., Bridgeport 2, Connecticut

Please send me my free copies of the new booklets showing how I can cut my fastening costs.

**Name:**  
**Position:**  
**Firm:**  
**Address:**  
**City:**  
**State:**
For merchandising-minded builders!
New, 24-inch wide Westinghouse refrigerators offer more de luxe features at less cost

Appliances with proved customer appeal make homes more salable—so say leading builders from coast to coast. For 1953, Westinghouse presents a handsome, new line of six 24-inch spacesaving models, purposely planned for home merchandising. Included is a Frost-Free* automatic defrosting model. Particularly space thrifty and budget priced are the new 8 cubic foot HE-8 (shown above) and 6.2 cubic foot HE-6 models, which offer these “most-wanted” features to your prospects:

- Full-width freezers; sturdy, triple-plated, chrome-finished shelves; smart arctic blue interiors; spacesaving hinges; full-length doors; self-aligning door latches; 1/4-hp Economizer Mechanism backed by a 24-year record of trouble-free performance.
- Contact your Westinghouse Distributor for complete specifications or write direct:

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division • Mansfield, Ohio

Makers of Refrigerators, Ranges, Laundromats®; Dryers, Dishwashers, Water Heaters, Vent Fans and Food Waste Disposers.

YOU CAN BE SURE...IF IT'S Westinghouse
I have a swimming pool to build with a half circle at each end. Would like some information on construction of forms for the half circle. One end of pool is 9 feet deep, the other is 5 feet deep. Wall is of 12 inch concrete.

Would also like some information on the construction of the scum gutter. What type of gutter is most generally used in a concrete pool?

J. V., Whitinsville, Mass.

The circular ends of the pool can be formed by a series of short chords, placing upright 2x4-inch studs at the chord points to provide a support for forming material which could be plywood. When the finish material is applied, the corners at the chord points are smoothed out to form the curve. The sketches show typical scum gutters that can be built of concrete.

I plan to attach a garage to my brick veneer home and since the inside wall will be that of the house, while the other three sides will rest on new footings, I am concerned over the possibility of veneer settling between the two structures. Shall I somehow anchor the garage wall to the building or just butt it? How shall I lay my footings? The house is two years old.

E. S., Homewood, Ill.

It is desirable where possible to tie the wall and footing into existing wall and footing. The footing for the garage could possibly rest on the house footing. Tie all brick courses in with existing brick courses.

JULY 1953
It will take more than "good looks" to sell a house!

You don't need a crystal ball to foresee that it's soon going to take more solid values to sell new homes. Deep down, fundamental quality in construction and equipment is steadily becoming more important in selling than superficial gadgets or design "glamor". Nothing is more convincing to your prospects ...

...no evidence more easily understood that you are offering honest heating quality well installed in your homes. Because Janitrol heating has an unmatched reputation for advanced design and long-life dependability ... many people assume Janitrol is more expensive.

While this isn't true, the assumption can be an important sales plus. You get credit for installing the finest heating available without necessarily increasing your costs. Use Janitrol's prestige ... its assurance of comfort ... proved fuel economy ... and long life to cinch sales that are becoming tougher to close.

SURFACE COMBUSTION CORPORATION • TOLEDO 1, OHIO

Here's what you can do about it.

Local Janitrol representatives are listed under "Furnaces", yellow pages of your phone book. They can tell you about the newest installation methods and the latest improvements in equipment design. Remember quality heating is not expensive in the beginning, and is less costly in the long run.
How to take the sign down SOONER!

A secret formula? Nope—the answer is simply: Make the most of your selling features!

Take credit for your quality materials. Would-be buyers won’t know about the “extras” you provide unless you tell them... with newspaper ads, folders and personal selling.

Take Fiberglas® Building Insulation... everyone recognizes this superior insulation as a sure sign of comfort, economy and quality construction.

Fiberglas is the insulation in leading ranges and refrigerators. And—Arthur Godfrey has been telling millions about it... week after week... over 32 TV stations and 186 radio stations. It’s featured in leading home magazines, too.

So merchandise the comfort-making and money-saving benefits of Fiberglas to your prospects. Identify your homes with the new “Fiberglas-insulated” signs. Use the new pamphlets and warranties. Supplies of these pieces—along with a free copy of the new brochure Time To Take Another Look at Your Insulation Specifications—are available from the dealers of these firms:

- Armstrong Insulite Corp.
- CertainTeed Products Corp.
- The Flintkote Company
- Minnesota and Ontario Paper Co.
- Kelley Island Lime & Transport Co.

Ask them about this material...today! Owens-Corning Fiberglas Corporation, Dept. 62G, Toledo 1, Ohio.

*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.
When open plans open up new sales problems, there's one way to close the sale...

...that's the beauty of Higgins Block*

Open plans shift customers' attention from walls and windows to large floor areas. Turn this into a competitive advantage for your houses: Sell the rich, quality look of Higgins Block! And just look at these practical advantages:

* 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
Grooved back anchors into adhesive — quiet and comfortable
Can be laid without special preparation on concrete slab — ideal for radiant heat
Blocks fit flush — without large, visible V-grooves

Higgins BONDED HARDWOOD BLOCK FLOORING
THE WORLD-FAMOUS BOAT BUILDERS

Use this coupon for free sample block and literature
Gentlemen: Please send sample block and literature to:
Firm Name
Address
City
State
Zone

The A connection indicated in the drawing is believed to be the stronger, because the member “a” is nailed into “b” and further supported by member “d”. In the case of connection B, member “a” is more likely to pull away from “d” due to lateral thrust.

latest on heating needed

Could you send us some information on "Crawl Space Plenum System" hot air heating, or let us know where we can find this information?
R. A. S., Sault Ste. Marie, Ontario

You will find construction and design recommendations for this system in "Manual No. 4—Warm Air Perimeter Heating," published by the National Warm Air Heating and Air Conditioning Association and available from the Canadian Chapter of the Association, Royal Bank Building, Yonge at Deloraine, Toronto 12, Ontario.

making garage exterior conform to house

Proposed construction of a two-car garage is planned for a slightly sloping site, a one-foot drop from front to back (20 feet). In order to have exterior appearance conform to residence, frame construction with shingle siding is planned.

(Continued on page 104)
In building or remodeling architects know the easiest way to increase the charm and value of any home is "window-styling" with Bee Gee Windows. Proportioned to fit with modern architectural trends, famous Bee Gee Windows provide an authentic styling touch for any type of construction...any kind of interior. 179 styles and sizes of all-wood casement, picture and corner picture windows, skillfully styled, crafted and detailed to bring new grace and glamor to every room in your home. And you can "Clean the Outside from the Inside".

"ribbon-styled...long—low—beautiful!
New type construction...designed to emphasize the modern lines of ranch-type and contemporary homes, with all the warmth, character and practical advantages that only wood windows provide.

every window available in 2 styles
Style "A"—a brilliant expanse of unobstructed glass. Style "B"—the glass divided to give you long horizontal lines. Choose the style that best fits your home.

BROWN-GRAVES CO. AKRON 1, OHIO
JULY 1953
You can tell a BUILDER by his stripes, too!

With the heat of competition bringing out the best in the best of our builders, you’ll find the most successful fellows are those who pay the most attention to cost details. And those who do are most likely to be building more and more roofs of red cedar shingles on spaced sheathing.

They have discovered, by careful cost accounting and selling experience, that spaced sheathing means an enormous saving on each house—and that cedar shingles add a luxury appearance that pays off in faster sales. They’ve figured their roofing costs in two ways: first, with ordinary roofing material which requires a solid roof deck of lumber plus the labor cost of constructing a deck of solid sheathing. Then they have figured their costs the economical way—using about half as much spaced sheathing and far less labor and nail cost applying it for use with cedar shingles.

And they have found that CERTIGRADE red cedar shingles, because they permit such savings on sheathing cost, and because they help to sell houses faster, are today’s smartest roofing choice.

Yes, you can tell a smart builder by the stripes of spaced sheathing you’ll see on the roofs of his homes under construction. You’ll know he has figured it out for himself and knows that the spaced sheathing idea, with CERTIGRADES, makes good sense.

Would you like to have a free cost estimating form that takes all the work out of figuring the difference between spaced sheathing and solid sheathing? We will be glad to send one to you. It will permit you to use your own labor and materials costs to get the accurate answer for your own area.

Once you have found how cedar shingles can save sheathing costs, we believe you’ll be convinced, as so many successful builders are, that cedar shingles belong on the homes you build too. Write or send a post card to: RED CEDAR SHINGLE BUREAU, 5510 White Building, Seattle 1, Washington or 425 Howe Street, Vancouver 1, B. C.
PRODUCT NEWS from AMERICAN-Standard

A review of products in the news and important features worth remembering

MIDWAY SINK. This new, island-type sink-and-cabinet combination saves steps and time. The 44” x 37½” cast iron sink has two deep bowls and spacious drainboard. Exclusive new fitting permits one-hand operation. Steel cabinet opens both front and back... has electrical outlets on both sides.

EMPIRE GAS BOILER. A compact, good-looking and efficient boiler that’s available in models for hot water or steam, basement or first floor installations. Burns any type of gas. Features include pintype cast iron sections which absorb maximum heat... precision controls to guard safety and fuel consumption... heavy insulation to prevent heat loss... colorful, streamlined jacket.

For further information on American-Standard products see Sweet’s Light Construction File.

NEW BUDGET WATER HEATER. Fully automatic storage type, anode equipped. Has cast iron ribbon type burner which burns all gases... correctly baffled center flue for quick recovery. Heavy insulation between galvanized steel tank and outer jacket prevents heat loss. Three sizes: 20, 30 and 40 gallon capacities.

CONVERTIBLE KITCHEN CABINETS. American-Standard all-steel cabinets are the only kitchen cabinets with interchangeable drawers and shelves. You can install an economical package kitchen in the homes you build. By adding extra shelves and drawers to the cabinets at any time, buyers can create deluxe kitchens to fit their particular needs.

American-Standard
Dept. AB-73, Pittsburgh 30, Pa.

Without obligation on my part, please send me your free literature on:

- Midway Sink
- Empire Gas Boiler
- Budget Water Heater
- Kitchen Cabinets

Name
Address
City, State


Serving home and industry: AMERICAN STANDARD - AMERICAN BLOWER - CHURCH SEATS & WALL TILE - DETROIT CONTROLS - RENAISSANCE BOILERS - ROSS EXCHANGERS

JULY 1953
What is a recommended method for raising wood-framing and siding above grade or protecting from moisture in the event framing is carried below grade?

E. L. B., Springfield, Ill.

Since the extreme slope of grade is not more than 12 inches in the length of garage, transite material can be applied to face of studs as shown in sketch. Transite to extend below wood sill and under face siding.

proper size is important

I am planning an exposed beam ceiling in the room shown in sketch which is 18 feet 6 inches x 27 feet. I had considered using two 2x12’s together spaced on 24-inch centers, using one-inch roof sheathing with rigid insulation, and built up roofing above sheathing. The alternate method considered is two 2x12’s (or 4x12’s) on 32-inch centers using 2x6 roof sheathing, insulated in the same manner. I am not certain if the two methods I described are satisfactory for snow loads. What would you recommend for beam size, spacing of beams and roof sheathing to assure a satisfactory roof?

H. E. L., Chicago, Ill.
No longer is the two-bathroom home the mark of wealth. Forward-looking builders today realize that a second bathroom is the most powerful selling feature they can put in any home—even in the medium and low price class. And when both bathrooms are equipped with Briggs Beautyware plumbing fixtures in gorgeous non-fading color—the house is as good as sold!

There are no finer plumbing fixtures anywhere than Briggs Beautyware—both non-porous vitreous china and acid-resistant, porcelain enameled formed steel. Built to last—and look new through years of dependable service—they are rapidly becoming the first choice of discriminating home owners everywhere.

When home buyers learn how little a second Briggs Beautyware bathroom increases their monthly payments, they're delighted. Sell more homes faster by including two Briggs bathrooms in all your specifications! ©1953
And I can see plenty of savings in those Insulating Sidings.

"Oh, those Asbestos-Cement Sidings are wonderful!"

Flintkote Roman Brick
... the modern aristocrat of brick design. Smart, Distinctive. COLORful.

Flintkote Stri-Color
with embossed striated surface texture. Available in gray, green and brown.

Flintkote Shake Design
... Colonial beauty of cedar shake design, available in cream, red, brown, green, gray and white.

Flintkote Weathered White
... a new Stri-Color siding that's much in demand for both monochrome and two-tone effects.

Flintkote Weathered Coral
... a beautiful new pastel Stri-Color Siding. New Weathered Green and Brown sidings are also available.

Flintkote Narro-Lap
... in a variety of rich new colors for jobs calling for a handsome narrow siding.

Flintkote Venetian Stone
... makes sidewalks look like stone walls. Handsome gray-colored mortar joints.

Choose any FLINTKOTE siding and be right in Style and in COLOR

Cash in on today's demand for COLOR in sidings.

Probably your customers, too, are insisting on more color for their new and re-modeled homes. Flintkote has everything you'll need to satisfy them... in sidings, and in COLOR!

Look over these very popular Flintkote asbestos-cement and insulating sidings. They are representative of the famous Flintkote line of colorful siding materials. And ask us to rush you our complete, colorful, descriptive literature.

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

FLINTKOTE
...Style and Color Leader since 1901
Construction company uses 21 B&D Saws “because they're fast and safe and require very little maintenance!”

Complete safety is built-into every Black & Decker Saw!

- Instant-release trigger switch
- Perfect balance
- Telescoping guard

For speedy, accurate, safe sawing on your jobs, follow the lead of construction men everywhere who're switching to Black & Decker power. At the Harris Construction Company, for example, 21 B&D saws have been in use for the past year, working 8 hours a day, day after day. Foreman and superintendent agree: “Black & Decker saws can't be beat!”


New B&D Utility No. 44 Sander ($46.95) is a real finish sander that requires no final hand sanding! Gives satin-smooth finish ten times faster than by hand. Light weight, easy to use, many exclusive features!

Cutting wood with an 8” Black & Decker Saw on the job site at Yosemite Junior High School, Fresno, Calif. In addition, B&D Drills and Hammers help speed the job for Harris Construction Company.
WET HEATING SYSTEMS — how to select and plan them

**Gravity System:**
Gravity hot water systems are confined almost entirely to small structures such as residences, stores, etc. The advantage of this type of system is that it is simple to operate and maintain.

Disadvantages are: (1) Large pipe sizes are necessary since flow depends entirely upon gravity; the friction should be balanced by the difference in weight of the two columns (supply and return), (2) It is difficult to balance the flow of water to various radiators (unless the system is very accurately designed), (3) There is a slow response to changes in temperature. (4) There is the serious danger of freezing if the system is unattended, (5) Danger of damage in the event of leaks.

**Forced Circulation System:**
In this system a pump forces the flow of water through the piping. Circulation is assisted by the tendency of the water to flow because of the difference in water temperature. Advantages are: (1) Smaller pipe sizes. (2) Quicker response to temperature changes. (3) Easier to balance water flow to various convectors. (4) Less danger of water freeze-up.

Disadvantages are: (1) Danger of serious damage in the event of leaks. (2) The need for automatic or frequent manual air venting of all high points.

**One-Pipe System:**
A one-pipe forced-circulation system is used almost exclusively for modern residential heating, and for moderately sized jobs. It comprises a single main with the return from each convector connected back into the main at a point downstream from the supply connection. A portion of the water from the main is circulated through more than one convector or radiator. Thus the water in the first convector is the hottest, the water in the second and succeeding convectors somewhat cooler.

So if the mains are of appreciable length, the capacity of the convectors, radiators or unit heaters toward the ends of the mains must be increased to compensate for the temperature drop. Special flow-diverting tees are available for this type of system to assist the flow of the water to the convectors or radiators and to cause the cooler return water from each convector to flow along the bottom of the supply main.

**Two-Pipe System:**
In a two-pipe system the piping is arranged so that the (Continued on page 110)
The Barrier That Keeps Out Elephants Will Let In Flies

Vapor and condensation insulation is needed in buildings as well as thermal insulation. Inadequate thermal insulation means loss of comfort, larger fuel bills, unnecessarily costly heating or air-conditioning plants. Condensation promoted by faulty vapor insulation can cause structural damage—rotting timbers, peeling paint, crumbling plaster, deteriorating masonry.

Water at 32°F has 205,000 times the density of water vapor, which is a gas. Many non-metallic "vapor barriers" are good waterproofing materials, but water vapor can flow through. The thick aluminum sheets used in multiple accordion aluminum are impervious to vapor.

Multiple accordion aluminum creates an “insulating blanket” of layers of air, fiber and aluminum. Of all heat transferred through structural spaces, 50% to 80% is by Radiation; all but 5% to 7% of the rest is Convection. Multiple accordion aluminum has a reflectivity of 97% for Radiation or radiant heat, and blocks outer and inner Convection. Its slight mass, with alternating layers of entrapped air, minimizes Conduction.

It is practically non-condensation forming. It does not sustain nor retain fortuitous moisture, which gradually flows out in the form of vapor through the usual exterior walls and roofs, which are much more permeable than this insulation.

There is now a new standard Infra Insulation (the commercial form of multiple accordion aluminum) improved to form a “blanket” of uniform depth between studs and joists which completely covers the spaces between.

Samples of the new Infra Insulation and a copy of Schwartz’s "Simplified Physics of Vapor and Thermal Insulation" sent on request.

COST OF INFRA INSULATION INSTALLED
in new construction between wood joists, material with labor,

Type 6-Si under 9½¢ sq. ft.
Type 4-Si under 7½¢ sq. ft.
Type 4-S Jr. under 7½¢ sq. ft.

INFRA INSULATION, INC.
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MATICO PARQUETRY surprises a lot of people... in a way they like to be surprised. For now... at the low, low price of asphalt tile... they can have the luxurious beauty of expensive, parquetry flooring!

Parquetry is available in four desirable shades—walnut, mahogany, maple and oak. Use them individually or together in a striking random pattern that is truly distinctive.

Low initial cost... low cost of upkeep... excellent resilience underfoot... outstanding resistance to stains, scratches and water... MATICO PARQUETRY adds "SELL" to any home.

MATICO PARQUETRY can be installed on, above or below grade... and it goes down easily and quickly, tile by tile. Fits in with all types of decor, too!

It will pay you to look into MATICO PARQUETRY when you plan your next homes. Send for full data and specifications today.

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LOCKWOOD'S NEW 'C' SERIES...

Attractive . . . Efficient . . . Complete Line

Functional styling keynotes the beauty of Lockwood's new 'C' Series. The one-piece, hydraulically formed knobs reflect quality and durability.

SMOOTH PERFORMANCE ASSURED . . . all parts are made of solid brass or steel, engineered in a design that has been field-tested and proved under the most severe conditions. Cylinder locks have full-size, solid brass 5-pin cylinders and can be securely master-keyed. The series includes functions for all doors.

REVOLUTIONARY NEW JIG AND BORING TOOL CUTS INSTALLATION COSTS
- Reduces boring time as much as 75% below previous hand methods.
- Guarantees smooth holes in perfect alignment.
- Ensures rapid assembly of lock to door without rasping or whittling.
- All Lockwood 'C' Series sets are ready for installation on right or left-hand doors without any mechanical change.

LOCKWOOD HARDWARE MANUFACTURING COMPANY
Fitchburg, Mass.

JULY 1953
wet heating systems

(Continued from page 106)

water flows through only one convector or radiator in a circuit, thus supplying all units with water at nearly the same temperature.

The two-pipe system is applicable to either the small or large job. The piping layout may be either direct or reversed return. In the direct return system, the first convector supplied is the first convector to return the water that has passed through it to the boiler and, correspondingly, the last convector supplied has the longest return piping. Consequently, due to the unequal length of the circuits to the convector, it is difficult to balance heat distribution. The “reversed” return is more advantageous for a two-pipe system. With this arrangement of the piping, the first convector to be supplied is the last to return; hence, the total lengths of the circuits are more nearly equalized. Therefore, the problem of balancing is a simple matter on the average job. In many cases the reversed return system requires no more piping than the direct return.

Determining Heat Loss

The first essential step in determining the size of a heating plant is to calculate accurately the heat loss of the building. Heat is lost to the outdoors in two ways—it is transmitted directly through building materials, or is lost by infiltration around doors and windows.

In order to calculate heat loss through a given structure, it is necessary to work with a specific value known as a coefficient of heat transmission. This value is designated as the “U” factor and stands for the time rate of heat flow (expressed in B.T.U.’s per hour) for one square foot of surface for a temperature difference of one degree between the air on the inside and outside.

In order to determine the heat loss of the building, the desired inside air temperature must be determined and the coldest outside temperature must be selected. Seventy degrees F. is usually considered adequate for the inside temperature, but the outside temperature depends upon the geographical location.

This is the difference in degrees Fahrenheit between the outside design temperature and the desired inside air temperature. For example, if the outside design temperature selected is minus 10 degrees F. and the rooms are to be heated to 70 degrees F., the design temperature difference is 80 degrees.

Determine heat loss per square foot (HL) by multiplying “U” factor by design temperature difference.

Area Calculations

It is necessary to calculate the total area of each surface. List rooms, windows and doors and give their sizes. Determine net wall area by subtracting window and door areas. The heating capacity of radiation installed in a room is usually the same as the heat loss.

Establish Average Water Temperature

The choice of average water temperature in the system is governed by local practice and, in some instances, is based on the spaces available for convectors, radiators, and other heat exchange units. Average water temperatures between 180 degrees F. to 200 degrees F. are generally accepted in many localities. These temperatures permit installation of convectors or radiators that are not excessive in size and they reduce the noise due to rapid mixing of hot and cold water.
Extra-rugged, lightweight Bundyweld Tubing saves installation costs. Expanded end (if specified) of one coil slips over next coil, permits fast, leakproof soldering union. Tubing doesn't dent or split under accidental hammer blows.

Make competitors' prospects your customers . . . with Bundyweld Ceiling Radiant Heating

Field reports from architects and builders in communities all over the country stress one point: Bundyweld Ceiling Radiant Heating has helped bring them more and more "bonus" customers.

The addition of this dramatically new heating system has done much to open local markets long dominated by competitors. New sales, builders say, swung their way because of buyer conviction that Bundyweld Ceiling Radiant Heating is now a "must".

No accident. Thousands of near-ready home buyers and builders weigh Bundy ads in Better Homes & Gardens, American Home, Small Homes Guide, and House Beautiful. They talk with friends and neighbors, already living with the system, who praise its advantages: new freedom from drafts and soot, even-temperatures comfort, dirt-free walls, no awkward radiators or registers, redecorating postponed for years.

Many of these local sales were aided by our replies to nearly a ton of requests for literature, names of architects and builders offering what's so enthusiastically wanted: the first big heating advance in years; the system that makes all others obsolete. Why not share in these new profits by sending coupon now.

Radiant Heating Division
BUNDY TUBING COMPANY
Detroit 14, Michigan

SEND FOR FREE LITERATURE!

Bundyweld Ceiling Radiant Heating

JULY 1953
Don't worry about competition from this pretty, pint-size plasterer. She's here to point up the lightness of Gold Bond Gypsolite®—lighter than 1:3 sanded plaster by a whopping 50%!

And here's another reason Gypsolite is easier to work with—it's Mill-Mixed. Gold Bond Plaster and high quality perlite are accurately proportioned at the mill according to American Standards Specifications. You don't have to order any other material...handle any other material...mix any other material.

Just add water to Gypsolite, and you get the right mix every time. Lighter in the hod, on the hawk and under the trowel. Mill-mixing gives you a stabilized set for a uniform result and moderate suction for easier finish application. Architects and builders also like the superior strength and extra fire resistance of Gypsolite.

On your next job, remember...everything goes right with Gold Bond Gypsolite!

Write for complete technical information.

NATIONAL GYPSUM COMPANY • BUFFALO 2, N.Y.

You'll lath and plaster better with

Gold Bond®

It's Gold Bond Mill-Mixed

GYPSOLITE®

THE LIGHTWEIGHT GYPSUM BASECOAT PLASTER

AMERICAN BUILDER
forming sloping garage apron

Tack a 1x2 to garage door frame and let the other end rest on the grade. Another 1x2 is fastened to the end of the 1x2 at the grade level and runs to the foundation wall. Using a fairly dry mix fill sides and screed. Then fill the apron and screed. Next remove the sloping 1x2's and fill the groove.—A. B. Forward, Ottawa, Ont.

a lightweight straightedgedge

This unit is used in the application of cedar sidewall shingles. Straightedgedge can be made by ripping two inches from the butt edge of a piece of eight inch bevelled cedar siding and nailing or stapling the strip that is cut off, one-half inch from the top of the siding. A few fine brads will hold it in position on the wall. The thin edge of the straightedgedge will not become wedged under the finished row of shakes.—Wm. Antonen, Lake Norden, So. Dak.

use two glue clamps when work is too long

When you are gluing up units that are too large for a single clamp you can put two together and hold the work.—Werner Kraatz, Santa Cruz, Calif.
more than
400 SHAPES
to choose from
IF YOU ARE A DISTRIBUTOR—and you want to consider the Superior Moulding line, write to Youngstown Manufacturing, Inc., for information.

IF YOU ARE A DEALER—and you don’t stock Superior Mouldings, ask your distributor for information or write direct to Youngstown Manufacturing, Inc.

IF YOU ARE A CONTRACTOR—and you cannot buy Superior Mouldings direct from local sources, write to Youngstown Manufacturing, Inc.

IF YOU ARE A BUILDER—check your local sources for Superior Mouldings or write direct to Youngstown Manufacturing, Inc.

IF YOU ARE A USER—you will find most local dealers do stock Superior Mouldings. If not, send inquiry direct to Youngstown Manufacturing, Inc.

In addition to all types of Metal Mouldings, Youngstown Manufacturing, Inc., offers the home “Best Seller”—Tub-A-Dor (Bathtub Enclosure) as well as Curtain Rods and Seam and Edge Binding.

YOUNGSTOWN MANUFACTURING, INC.
66-76 S. Prospect St. • Youngstown 6, Ohio

JULY 1953
Catalogs —

and Manufacturers Literature

378 — PREFABRICATED HOMES — Sixteen page brochure presents step by step planning for potential buyers in selection of an appropriate home. Use of dealer services and financing are discussed. Picture-text treatment shows construction of a typical home. Manufacture of Douglas fir plywood used in these homes is shown. Standard exterior and interior features including luxury kitchen, bathroom and utility room equipment are described. Gunnison Homes, Inc., Dept. AB, New Albany, Ind.

379 — WOOD FINISHES — For Redwood, cedar, mahogany, cypress, pine, etc., are described in this four page folder which gives information on “Liquid Raw Hide”-resin-free finishes composed of processed natural oils, rendering them tough, weatherproof and elastic. Five types are available, enhancing the color and grain of the natural wood. Maintenance, coverage and drying information are included. Linseed Oil Products Co., Dept. AB, 359 Del Monte St., Pasadena 3, Calif.

380 — GLASS INSULATION — Twelve page bulletin presents residential applications of Foamglas, including use with concrete floor slab, masonry walls, roofs, sidewalks and driveways. Picture-text treatment gives specifications for each type of installation with line drawings and on-the-spot photographs showing individual applications. Durability, economy and resistance to vapor and water explained. Pittsburgh-Gorning Corp., Dept. AB, 307 Fourth Ave., Pittsburgh 22, Pa.

381 — FABRIC WALL COVERING — Nine reasons why use of “Sanitas” adds to a house’s value, and the savings which accrue with either dry wall or plaster construction are contained in this 12 page brochure. Illustrations show the simplicity of the product’s application system, using 48 or 24 inch widths. Testimonial letters reporting satisfactory use of the product included. Interchemical Corporation, Coated Products Division, Dept. AB, 67 W. 44th St., New York 36, N.Y.

Sterling: Catalogs save HARDWARE and Manufacturers Literature cuts down on costs and callbacks.

SAVES TIME... MONEY THROUGH SIMPLE INSTALLATION AND ADJUSTMENT

No expensive callbacks for adjustments when you use Sterling Sliding Door Hardware. Sterling design-perfection makes every installation easier. Sterling keeps more profit in the sale... less cost in the upkeep. Complete packaged sets of Sterling Hardware are available for most door openings.

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Sterling means Quality

NATIONALLY ADVERTISED in Leading Magazines
SEE OUR CATALOG IN SWEET'S: Architectural File • Light Construction File
VISIT OUR DISPLAYS: Architects Samples Corporation, N.Y.C.
Chicagoland Home Building Center

For More Information Use Coupon, Page 139
There's more than meets the eye in kitchen quality. I learned from a trip through the plant of GENEVA MODERN KITCHENS. I saw how GENEVA doors and drawer fronts are sound deadened and painted both inside and out to prevent rust. Drawers glide smoothly, quietly. Cabinet shelves are wire and adjustable. Finish is chip proof. And GENEVA manufactures the largest variety of stock size wall and base cabinets in the industry. Special cabinets on request. Learn how you can profit by selling GENEVA quality. For complete information write Dept. BG, GENEVA MODERN KITCHENS, Geneva, Illinois.

KENNAFRAME, the revolutionary new prefabricated sliding door frame is sweeping the country. One builder is telling another that the rigid steel construction makes it WARP PROOF, while the three-way adjustments make it easy, sure, and quick for anyone to install. Builders praise its versatility too. KENNAFRAME will take any type wall construction with ease. Two models in all standard 1 1/2", 3 1/4" door widths offer the price and size selection builders want. Builders recognize KENNAFRAME as a needed addition to the building field. Trouble free pocket installations cost no more with KENNAFRAME. Ask your jobber for prices and details or write KENNATRACK CORPORATION, Elkhart, Indiana.

This is good news for all builders, SAFWAY'S new time-saving end frame with built-in ladder eliminates separate climbing ladders when erecting SAFWAY CONVENIENT heavy duty tubular steel scaffolding to any size with standard end frames and cross braces. These built-in ladder type frame units measure 5' wide... in heights of 3', 4', 5' and 6'-4". Frames rated 8000 lbs. ultimate uniform loading... 42,000 lbs. ultimate leg loading. Now you can provide the scaffolding ladders each job needs at an actual saving. Write for FREE bulletin on how to do it. SAFWAY STEEL PRODUCTS, INC., 6200 W. State, Milwaukee, Wis.

QUALITY PRODUCTS
BEST AID TO PROFITS

BUILDING BUY-WORDS will be a regular every month feature in American Builder offering product "buys" and product applications. My 30 years' experience in light construction and building product merchandising has convinced me that... sound construction 'know-how' plus quality building products and equipment is the surest guarantee of good reputation and profit. You can rely on the manufacturers, and their products, represented in BUILDING BUY-WORDS. Learn MORE about these products. You should be fully informed about nationally advertised products. Write the manufacturers for information offered to build better and sell quickly. BUILDING BUY-WORDS by Herb Willson, 5510 Cornelia Avenue, Chicago 41, Illinois.

Recently I saw an installation of Cermak's new Carra-Plas plastic wall tile and am sure you will agree that this new giant size (8 1/2" x 8 1/4") tile is the ideal solution for added saleability in your new homes. No available clay or metal tile approaches the modern decorative design of these distinctive tiles. Carra-Plas tiles closely resemble expensive glass tiles in every respect. Available in ten plain pastel colors, these tiles will not chip nor craze. Easy to clean, they retain their fresh sparkle for a lifetime. Installation can be made on any smooth, sound wall or ceiling. For complete information, write to Cermark Tile Company, Inc., 4901 Brookpark Rd., Cleveland 29, Ohio.

THE "COMPLETE KITCHEN" BUSINESS is a highly profitable operation for the builder and supplier... new home construction and remodeling. The operation, however, can be an inventory headache for those who try to stock an "ordinary cabinetry line," or try to do the millwork themselves. Here's good news: MUTSCHLER BROTHERS COMPANY of Nappanee 13, Indiana, manufactures a complete line of hardwood cabinetry that's sold to order for each kitchen. There's no inventory problem at all! And they have a complete factory training course to teach your employees all the details of custom kitchen planning, installation... and selling. Write to them for particulars.

I saw a sensational new finish for vinyl tile and counter top by Fremont Rubber that every builder should know about. It's called SOFT-GLO and is used on both their Vinatile and Vinatop. Needs no waxing, yet it wears like iron and retains its glowing finish. Nine brilliant matching colors for kitchen, bath, den and other rooms at a price that is RIGHT. Soft-Glo is a natural to add the "touch that sells" prospective home owners. Vinatile comes in 6" x 6" and 9" x 9" Tru-Cut squares. Vinatop comes in rolls, 30", 36" and 42" wide. Write for your samples. Fremont Rubber Company, 330 McPherson Highway, Fremont, Ohio.
RAYNOR Catalogs

Wood sectional overhead doors make all of your door installations...

Attractive
Raynor’s complete line offers standard panel construction for general use or flush panel construction for the modern effect—when individuality is desired, the exclusive carved panel with carved design.

Weather proof
Raynor patented universal Graduated Hinge (can be used in any section of the door) combines with a tapered track to provide a perfect weather-tight seal on all Raynor doors, eliminating the common practice of using a special set of hinges.

Operate with finger-tip control
The same efficient combination of the Raynor universal Graduated Hinge and tapered track equips every Raynor door with finger-tip control by breaking the seal the instant the door is started toward the open position. These quality features found in every residential, commercial and industrial Raynor door are the products of the alert and progressive door building know-how found in the Raynor Engineering Dept.

Co-ordinated construction (woodwork and hardware built complete in the Raynor plant) is combined with top quality material and leading door engineering ability to make the Raynor line the dependable source of a complete line of wood sectional overhead doors you have been looking for!

Consult your telephone directory for the nearest Raynor representative.

Write for free full-color literature on the Carved Raised Panel Door.

RAYNOR MFG. CO., Dixon, Ill.
Builders of a Complete Line of Wood Sectional Overhead Doors.

Catalogs

382—ALUMINUM CASEMENTS—Four page folder describes residential windows, including new range of modular widths which offer builders the advantages of co-ordinated modular construction; all windows in 2-, 3- and 4-light widths are dimensioned in multiples of 16 inches. Construction, hardware, screens and storm sash also detailed. Types, sizes and sections of standard casements and picture window units are illustrated with drawings and specifications, Truscon Steel Division, Republic Steel Corp., Dept. AB, 6100 Truscon Ave., Youngstown 1, Ohio.

383—ELECTRIC HOME APPLIANCES—Predicting the trend toward the “package home”—a house sold equipped with appliances ready to use the day the buyer moves in, this 24 page brochure presents a cross section of American homes equipped with modern electric kitchens and home laundries. Interior layouts are shown, with arrangements of modern electric home appliances and kitchen cabinets, suggested by competent engineering and technical staffs. Hotpoint Co., Dept. AB, 5600 W. Taylor St., Chicago 44, Ill.

384—AIR DIFFUSERS—New 64 page selection manual contains comprehensive technical data for simplifying choice of proper air diffusers in air conditioning systems. Illustrated with photographs, tables on performance data and examples of typical installations. How proper locations and correct number of required units are determined is covered. Diffuser accessories, including equalizing and radial deflectors, splitter dampers, air meters also listed. Anemostat Corporation of America, Dept. AB, 10 E. 39th St., New York 16, N.Y.

385—PREFABRICATED HOMES—Eighteen floor plans of new P & H “Capitaline” homes with interior color photographs, standard construction details, design and color schemes. Harnischfeger Corp., Dept. AB, Port Washington, Wis.

For More Information Use Coupon, Page 139

AMERICAN BUILDER
**386—PRINTING CALCULATOR**—“Figure-fact efficiency for Contractors and Builders” is the subject of this folder. It presents the use of the Printing Calculator in assuring top figuring speed for estimating, determining costs, payroll computations, extension of bills, tax computations, etc. The machine combines short cut multiplication and automatic division with high speed listing, addition and subtraction, giving printed proof of every factor on tape. Remington Rand, Inc., Dept. AB, 315 Fourth Ave., New York 10, N.Y.

**387—POWER CRANES AND SHOVELS**—Use and application of this equipment, compiled in a series of eight articles, is available for general distribution. Articles were written by E. O. Martinson, vice president in charge of engineering, Koehring Co. Booklet contains detailed discussion on basic principles of operation, with photographs, drawings, graphs and tables, giving capabilities of equipment for most efficient operation. Koehring Co., Dept. AB, 3026 W. Concordia Ave., Milwaukee 16, Wis.

**388—CLAY TILE**—This 24 page A.I.A. Bulletin, entitled “Thin Setting Bed Methods and Materials” is a complement to the Tile Handbook. It presents the advantages and disadvantages of thin setting, lists base surfaces, including those which have been used. Three types of beds with full scale drawings are illustrated. Detailed basic specifications of bed methods and materials for glazed or unglazed tile work are presented. Tile Council of America, Dept. AB, 10 E. 40th St., New York 16, N.Y.

**389—WATER CIRCULATORS**—Performance charts, capacity tables, dimensions and typical installations of these units are shown in this six page circular. Drawings illustrate various applications of circulators on hot water heating systems and domestic hot water supply systems. Special heating applications and unusual installations are also discussed. Engineering service on problems of circulating liquids is available. H. A. Thrush & Co., Dept. AB, Peru, Ind.

Crossett pine timbers of dense structural are engineered to specified stress values for timbered mill construction or laminated truss and arch units.

Timber construction costs less. It is flexible, expedites erection, resists combustion. In small timbers and dimension, augmented with Teco Ring Connectors and Grids, it provides excess load bearing strength for light commercial and residential roof truss construction.

Prompt deliveries in untreated, WOLMANIZED and Creosoted stock, conforming to SPIB standards, full qualifications for Federal Specifications MM-L-75 lb.

For data and information, address:

**CROSSETT LUMBER COMPANY**

**CROSSETT, ARKANSAS**
One-piece paletae
No sleeves or covers necessary

Cross member Installation
Double hung Equipment "T"

JAMB BALANCE STRIP
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 con-
cealed 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
Institute, show that double-hung wood
windows, when weatherstripped show an infil-
tration ratio 6 TIMES LESS than non-weather-
stripped windows.

ALLWEATHER
FULL JAMB BALANCE STRIP
Weatherstrip and Sash Balance Combination
for quick, efficient
Sash Mill INSTALLATIONS

YOU SAVE TIME and money because new G-E Table-top
Water Heaters are top-connecting. They install in min-
utes . . . an easy top installation that eliminates hours of
high-cost labor.

They install anywhere in your house!
Upstairs, downstairs, basement or attic. A flue-less G-E
Water Heater installs easily, economically. For under-
counter installation, G-E Table-top Water Heaters are
available without tops . . . (and at lower cost).

Why General Electric?
Because a recent survey shows that 53 out of every 100
people interviewed are pre-sold on G.E.' They can depend
on G-E Water Heaters to deliver constant, plentiful hot
water! Install a water heater that will help sell your house
. . . a reliable, well-known General Electric Water Heater.

For the best in water heaters . . . call your
G-E wholesale distributor or your plumbing jobber.

You can put your confidence in—

GENERAL ELECTRIC
AMERICAN BUILDER
The "Laundray" by RICHMOND—gleaming vitreous glaze "Perma-Gloss." 40" x 23", two compartments, raised shelf back. Integral overflow and cast iron twin waste connection. Brass plugs and rubber stoppers.

NOW—a new, modern laundry tray to replace old concrete or soapstone tubs that are still around—fill a real need in the new home, or the laundry where the old tubs have long since disappeared.

Recent surveys show that a laundry tray is needed badly in the home laundry, particularly for handling the sheer stockings, lingerie and fine woolens, which are seldom entrusted to the automatic washer and must otherwise be laundered in the sink or lavatory. The RICHMOND "Laundray" is the answer—a beautiful tray in vitreous glaze "Perma-Gloss" that any housewife will be proud to have installed in her home.

Check your RICHMOND wholesaler today.

Richmond Radiator Co.
Affiliate of Reynolds Metals Co.
MURRAY has the style that pulls the crowds!

Murray’s distinctive contour styling wins instant feminine approval. And, as you know, women usually have the deciding vote on homes. So give yourself a big competitive edge in your display homes. Choose Murray for the steel-kitchen quality and appeal that add saleability to your homes.

Style is only the beginning of the story. Murray units are packed with sales features. Look, for example, at the adjustable refrigerator-type shelves (with 9 adjustments on a 30” wall cabinet!), the genuine brass drawer runners, the titanium porcelain-enamel sink tops. A prospective buyer just can’t miss Murray quality—and that means fast, profitable sales for you.
MURRAY gives you in kitchens!

CUT JOB COSTS ... REDUCE INSTALLATION TIME ... END SERVICE PROBLEMS!

There's no better time than right now—when you are getting ready for National Home Week—to look into the important competitive advantage possible with Murray kitchens. No finer line of steel kitchen units is available.

The new Murray Builder Department is dedicated to the idea that you want sales appeal and savings. And that's exactly what you get!

Delivery to your job site can be timed to eliminate costly warehousing. Murray units are easily installed, even by an inexperienced crew. And, of course, there's no painting expense. No slow fitting or finish work on the job. Best of all, you can count on satisfied buyers. You won't be called back to correct a warped door or a sticking drawer.

Send the coupon now for complete details. In every way you'll find Murray best for the homes you plan for National Home Week—and every other week of the year!

A complete, steel kitchen line... with features that help to sell your homes

Cabinet sinks in 12 models—single and twin bowl.

Wall cabinets in both 18" and 30" heights, 15" to 36" widths. Also new 54"-width cluster wall cabinet.

Many specialty units—condiment cabinets, end shelves, broom cabinet, Lazy Susan corner cabinets.

Base cabinets in 15" to 36" widths. Vinyl tops in eight colors. Also maple cutting-board top.

New Murray Food Waste Disposer. Super-quiet, continuous feed.

SATISFIED CUSTOMERS —no service calls

The Murray Corporation of America
Home Appliance Division, Sales Offices 7700 Russell, Detroit 11, Michigan

Send me further information on advantages Murray kitchens offer a builder.

Name ____________________________

Firm _____________________________

Street ____________________________

City________ Zone____ State _______
REMODELING WITHOUT RE-PLASTERING

...an important key

to more profitable jobs

UPSON
Kuver-Krak
PANELS

A reluctant prospect is often turned into a ready customer when you point out that he can remodel without the messy ordeal of replastering. Show him how easily and inexpensively Upson Kuver-Krak Panels are applied over cracked plaster and a profitable job is yours. Especially profitable— because Upson Kuver-Krak Panels are especially easy to handle and apply. For example, there are no nailholes to chalk because Upson Kuver-Krak Panels are anchored from the back with invisible "floating fasteners." You never get kickbacks, either, for Upson Kuver-Krak Panels are permanently crackproof. What's more, you'll find that the beauty of a finished Upson job will advertise you to everyone who sees it.

Refresher Meetings for Salesmen Pay Off

Periodic meetings of dealer and wholesaler sales organizations at which manufacturers representatives review product features and report latest product developments, have proved an important sales help. The Upson Company reports participation in many meetings of this kind. Four are shown below.

Nicholas Wire and Aluminum Co., Davenport, Iowa. Standing left to right, A. C. Snyder, R. D. Eastridge, Upson representatives. Seated left to right, George E. Schulz, Nicholas Branch Manager; Herb Saunders, Donald Stevens, M. C. Smalley, George Denovian, Tom Cosgrove, John Lindorfer, Nicholas salesmen.


Huttig Sash and Door Company, Dallas, Texas. Seated left to right, Floyd Salmon, Ash P. Huse, Byron Butler, Ron Bliven, Joe B. Montgomery, Max T. Witmer, Huttig salesmen. Standing left to right, R. E. Nugent, Huttig Manager; G. A. Engle, Upson representative; T. J. Smith, Jack Fruean, Curt Williamson, Fred Goudy, Huttig salesmen; Jack Dillion, Upson representative.

As fundamental as built-in cupboards...

Home buyers respond to details that add to their convenience in living, whether these details are built-in cupboards and closets, or built-in telephone raceways.

It's an easy job to install telephone outlets and raceways while a house is under construction. And the cost is low.

Concealed telephone wiring adds much to the convenience, the beauty and the salability of the homes you build.

Your Bell Telephone Company will be glad to help in planning economical raceway installations. Just call your nearest Business Office.
new products

offered by manufacturers

BASEMENT ENTRY

Installation of the new “Service-Way” makes homes easier to sell as prospective buyers recognize its advantages in saving steps, simplifying household jobs and making basement space more accessible, the manufacturers say. Built of heavy gauge sheet steel, electrically welded for strength and durability, the basement entry is equipped with spring suspension which counterbalances the weight of the door in any position, permitting fingertip operation. Overlapping flanges on the frame and door assure a snug fit, keeping out rain and wind.

The door automatically locks in full open position to prevent accidental closing or blowing shut. Two slide bolts lock the door from the inside. Heatilator, Inc., Dept. AB, 582 E. Brighton Ave., Syracuse 5, N.Y.

WOOD PROTECTIVE COATING

A synthetic resin compound called Hian dri for natural exterior wood finishing provides a transparent coating, while retaining the natural wood color. It offers maximum resistance to water, weather, fungus and acids. The coating provides good penetrating qualities, and also seals the surface. It is manufactured in three grades: for new wood and interior use; for standard exterior and interior applications; and for finishes which are exposed to severe weather conditions. Coatings can be dipped, brushed or sprayed. Hia ndri Coatings, Dept. AB, P.O. Box 831, Chalfont, Pa.

50 YEARS OF FLOOR MAINTENANCE MACHINES

Eighteen of the standard floor sanding and polishing units which comprise the complete line of the American Floor Surfacing Machine Company are shown above. This year the company marks its fiftieth anniversary as the manufacturer of one of the principal lines of floor maintenance machines.

The front row in the picture consists of floor edgers, portable sanders, planers and an 8½ inch portable saw. The second row shows the large capacity, heavy duty floor sanders used by floor surfacing contractors, builders and dealers. In the back row, are the various floor maintenance machines for polishing, waxing, steel wooling and disc sanding floors. The tank-like units are industrial vacuum cleaners and water pick-up machines for cleaning large areas of water covered wood or concrete floors. Missing in the picture are the company’s line of maintenance materials, abrasive papers and floor finishers. The American Floor Surfacing Machine Co., Dept. AB, 518 S. St. Clair St., Toledo 3, Ohio.

STAPLING TACKER

A special model tacker makes it possible to drive and clinch staples in hard to reach places where a blade cannot be inserted to clinch the staple. The device automatically drives staples and turns the legs outward to clinch under or inside the work. As no clinching blade is required, the machine can be used anywhere, no matter how far in from an edge.

For fastening insulation around pipes and air conditioning ducts where a clinching blade cannot reach, the tacker is particularly useful. Stapling seams of flexible corrugated board, attaching brackets and shock pads for shipping of fragile items and stapling shipping tags are among its uses. Bostitch, Inc., Dept. AB, 1007 Mechanic St., Westerville, 0.

CIRCULAR SAW SHARPENER

Precision filing of circular saw blades six to twelve inches in diameter is stated to be accomplished quickly and easily by this new saw sharpener which clamps to the workbench. The saw blade is placed in the device, using one of the four mandrels supplied.

The sharpening file is secured in the file holder with a set screw. The holder slides on a guide arm and is shaped to fit comfortably in the hand. The guide arm is fastened at the correct angle and held in place with a wing nut. Calibrations give the correct and uniform angle. Four interchangeable mandrels enable the unit to take saw blades with ½, ⅞, 5/8 and ¾ inch centers. The Speed Corporation, Dept. AB, 3420 S. Macadam Ave., Portland, Ore.
Sturdy

Ready Hung Doors

are Packaged for Delivery
in good condition with
JOINTS SQUARE AND TIGHT

Tension in the steel band exerts equalized pressure (indicated by the arrows) at the corners to draw the frame in tight contact with the rigid door. Frame joints and mitres are therefore rigidly held square and tight by the door itself.

Spacer blocks between the door and frame serve a dual purpose: (1) They block the frame around the door during shipment, and (2) Are used to maintain proper door clearances while the door is being installed. Faces are protected by cardboard when shipped by common carrier.

SOLD THROUGH LUMBER DEALERS
For further information write the mill nearest you.

BIRMINGHAM, ALA.
National Woodworks, Inc.
2201 29th Ave. North

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Ready Hung Door Mfg. Co.
200 South Victory Blvd.

CHARLOTTE, N. CARO.
National Door Unit Corp.
123 E. Griffith Street

DALLAS, TEXAS
Ready Hung Door Mfg. Corp.
1113 Dragon

DENVER, COLORADO
Prefabricators, Incorporated
P. O. Box 1223

GRAND RAPIDS, MICH.
Hassellie 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

SIOUTH FALLS, S. DAK.
Jordan Millwork Co.

TORONTO, CANADA
C. Lloyd & Son Limited
1216 Lawrence St., N. Park P. D., Ont.

READY HUNG DOOR CORP., Fort Worth 2, Texas

JULY 1953
American Kitchens features that help sell homes faster:

1. Easy to clean—smooth surfaces with no dirt-catching handles. Today women are looking for homes with convenience work-saving features!
2. One-piece tops of lifetime vinyl—no seams to catch dirt. Choice of 4 colors: red, blue, green or black to add sales appeal to your houses.
3. Sink bowl 15% larger—no dirt-catching ledge. An exclusive American Kitchens feature that is a selling plus!
4. American Kitchens Roto-Tray Dishwasher—really work-free dishwasher. Proved the one appliance that sells homes fastest.
5. Giant storage space at fingertip level. Solves sales stumbling-block of insufficient kitchen storage room.
6. Rounded one-piece drawers clean as easily as wiping out a bowl. An American Kitchens sales-maker that demonstrates superior die-formed steel construction.
7. Convenience feature—step-saving exclusive Serv-Cart... the kind of feature that helps turn "lookers" into buyers.
HERE'S WHY...
“4 OUT OF 5”
BUY CLIPPER

- CUT FASTER
- LAST LONGER
- AT LOWER COST

Clipper Superior Blades
are guaranteed to...
“Provide the Fastest Cut...
at the Lowest Cost!”

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Every Make and Model
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a Wet Abrasive — Dry Abrasive —
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guarantee of satisfaction is backed by nearly 20
years of world-wide experience, the ability to select
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IN CANADA – P.O. BOX 476, WINDSOR, ONTARIO

JULY 1953
How to divide space without cutting off light

When you divide space, why not let light come through to brighten your rooms? Especially when you can do it with a material that decorates both rooms.

Blue Ridge Patterned Glass makes a home different, appealing. It's a hit... helps you sell. Ask your L-O-F Glass Distributor or Dealer to show you the many attractive patterns and surface finishes of Blue Ridge Patterned Glass. And mail the coupon for our book on decorating with patterned glass.

BOOK OF 42 DECORATING IDEAS. "New Adventures in Decorating" shows how leading architects and decorators have used this lovely glass to add light and distinction to home interiors. Send coupon for free copy.

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Please send me my free copy of "New Adventures in Decorating."

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NEW PRODUCTS

JIG SAW

The new 18 inch Power-King jig saw is equipped with an overarm which swings out of the way when cutting large boards and panels. It takes only a few seconds and can be swung back into normal position just as quickly for conventional type sawing. This feature eliminates the tedious work formerly required to prepare a jig saw for handling large stock, the manufacturers say. The unit's chucks hold all blades and sabers up to 3/8 inch wide.

CAULKING GUNS

The almost universally satisfactory results being obtained by pressure extrusion of caulking and sealing compounds, mastics, and liquid petroleum materials has produced a need for more modern application methods. This need has been met by a line of air and screw pressured Flo Guns for operation on standard air line pressures. Three sizes, 1/2 pint, 1 pint and 1 quart, are offered. The largest gun weighs less than four pounds. The two larger sizes are available with either steel or stainless steel barrels, while disposable barrels are available with the small gun for use with extra sticky or fast-setting compounds, thereby eliminating time-consuming cleaning jobs. Two nozzle types are furnished with each gun. Salsbury Corporation, Pneumatic Tool Division, Dept. AB, 1161 E. Florence Ave., Los Angeles 1, Calif.

FOR MORE INFORMATION

USE COUPON, PAGE 139

AMERICAN BUILDER
SECTIONAL GARAGE DOOR  AB75319

A sectional garage door designed for lower building budgets is available in two sizes and will fit standard 8x7-, 9x7- and 10x7-foot openings. A third section of the four-section door is left open for installing glass or solid panels as desired.

A safety catch prevents door rebound and holds the door completely open for 100 per cent clearance. Power springs do all the lifting; just a touch starts the door upward. The doors are factory pre-fitted for easy installation and delivered complete with hardware. Frantz Mfg. Co., Dept. AB, Sterling, Ill.

SHOWER CABINET  AB75317

The "Pilot" shower includes a receptor made of heavy gauge steel with a vitreous-enamel finish. It has weatherized, galvanized steel walls and is of rust-proofed construction throughout. The finish is baked-on, synthetic enamel; valves, shower head and soap dish are chrome-plated, and the unit is delivered with a plastic shower curtain.

Both 30- and 32-inch models are 75 inches high, and have a reversible panel feature that allows installation of valves at left or right without drilling. Unit is intended for low cost housing projects, tourist cabins, summer camps, motels, etc. Fiat Metal Mfg. Co., Dept. AB, 9301 W. Belmont Ave., Franklin Park, Ill.

* FOR MORE INFORMATION  USE COUPON, PAGE 139

JULY 1953

FREE TO BUILDERS

6 WAY COST STUDY

Designed for Insulation Contractors, this pamphlet provides inside facts on how you can Slash Insulation Costs!

Here's what this vital pamphlet contains:

- Actual time-cost figures on every insulation handling operation from factory shipment through installation. Includes (for both bulk and reflective type materials):
  - Unloading operations (2)
  - Storage
  - Loading and delivery
  - On-job application
- 12 on-the-job photos
- How to Install ALFOL
- Heat-loss, Condensation: how to block both at once
- ALFOL's five types, four widths

Whether you put in your own insulation or buy it applied from a contractor, you'll want this vital pamphlet.

For it gives you the "inside story" on insulation costs, especially those connected with handling, storage and application. These are "overhead" costs. They're often hidden, but you pay them just the same . . . directly, if you put in your own insulation; indirectly, if you buy your material applied.

This Cost-Study reveals what these costs are, how much they amount to . . . in dollars and cents! And it gives the figures behind the lower prices usually quoted by your ALFOL distributor-applicator.

Offered to builders for the first time, this 6-page folder is free. To get your copy write the words "Cost Study" on your letterhead today and send it to our Dept. AB-2.
new products

GLASS JALOUSIES AB75327

These glass jalousies used for windows, doors, or walls of rooms provide compact, full-area ventilation. They can be left partly open for ventilation, while keeping out rain. Units are available with four-inch wide louvers of 7/32-inch crystal or other types of glass. A casement type operator opens and closes the louvers and automatically locks them in all positions.

Sizes are in 3½-inch increments, from 15¾ to 105¾ inches high, and any width up to 40 inches. Wider openings are fitted with additional units as required. The jalousie shown is shipped knocked down but is easily assembled with screwdriver and pliers. Air-o-Blind Metal Awning Co., Dept. AB, 1940 Linwood Av., Oklahoma City, Okla.

FIR CEILING BEAMS AB75308

Constructed of 2-inch material in 5-, 7-, 9- and 11-inch widths, "Ameribeams" are entirely glue-laminated. They are made of seasoned structural fir, kiln-dried to a low moisture content to insure a firm bond and to prevent shrinkage. After gluing, planing and sanding operations render a smooth surface to each beam, that will sell your new homes faster and preserve a further protection against moisture and to check fungus growth and termites.

Because of their appearance, the beams are generally left exposed, using paint, clear varnish or hot wax as final finishes. American Roof Truss, Dept. AB, 1030 E. 87th St., Chicago, Ill.

For More Information Use Coupon, Page 139
Experienced builders, architects, contractors are continually placing more emphasis on sales features in the new homes they design and build. They know that homes must be attractive—both to live in and to live with.

Much of the attractiveness of living with a home depends on its finish—inside and outside. Here is where Rez adds a lot of "sell"—as many a builder will testify.

CLEAR REZ is a resin sealer and primer. Applied to new wood, it penetrates the pores—protects and preserves the natural beauty of wood grain—forms an equalized base that prevents streaking and blotching if stain is later applied. Controls warping, swelling and twisting because it resists moisture entry—checks grain raise ... Available also is WHITE REZ, for one-coat bleached effects.

COLOR-TONED REZ is supplied in 5 beautiful tones taken from Nature: REDWOOD REZ—the rugged, ruddy color of the California redwoods ... SAGE REZ—a soft, dry green that captures the color of desert sagebrush ... DRIFTWOOD REZ—smoky gray, with the color of bleached driftwood ... CEDAR REZ—warm cedar brown, colored like sherry aged in the cask ... MAHOGANY REZ—a rich wine red, with the deep tone of saddle leather. These color tones are not to be confused with ordinary stains.

All Rez products are easily and quickly applied—do not crack or craze—add beauty and protection as well as greater salability.

Get literature and color samples from paint, hardware or lumber dealers. Or write, MONSANTO CHEMICAL COMPANY, Merchandising Division, 1700 So. Second St., St. Louis 4, Missouri. In Canada, Monsanto Canada Limited, Montreal, Toronto, Vancouver.

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Here, at last, is an exact working guide on every detail of house construction from foundation to finish. Tells you dimensions, materials, processes, step-by-step working methods. Hundreds of scale drawings and photographs make every step easy to follow. Can be used for alterations in a set of stock plans, for making additions or changes in a building, or for complete construction of a dwelling. Conforms with modern practice and building regulations in all parts of the country. A book you will refer to for years! The professional guidance you get on even a single house construction detail can repay you a hundred times the small cost of this wonderful volume! Send for free-examination copy today. Mail coupon below.

Every Step in House Construction
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- Siding and shingling
- Cornices
- Porches
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- Exterior walls of brick
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- Mouldings for interior trim
- Stair construction
- Windows
- Sash details
- Window framing details
- Doors and door trim
- Hardware used in dwellings
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- Breakfast alcove
- Sewing room
- Flooring
- Chimneys and fireplaces
- Mantels and mantles
- Outdoor fireplaces
- Scaffolds
- Garages
- Electric wiring
- Insulation
- Arches and gates
- Lattice porch, lattice trellis
- Garden benches, tables
- Swings and other garden furniture
- Picket fences
- Log cabins, camps, cottages
- Barns
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Quick reference index enables you to find instantly any Construction detail of which you want Modern, Authoritative Guidance.

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Send me for 10 DAYS' FREE EXAMINATION, "House Construction Details." I will either return it in 10 days and owe nothing, or send only $4.95 (plus shipping charges) in full payment.

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SAVE! Send $4.95 with this coupon and we will pay postage. Same return and refund privileges.

AMERICAN BUILDER
NEW...COMPETITIVELY PRICED FOR FAST SALES!

series “440”

NATIONAL LOCK set

Budget-priced Lock... for every home in the block

No. 441 and No. 441D KEY LOCK ... with turnbutton on inside knob
No. 443 and No. 443D KEY CONTROL LOCK ... with plain inside knob
No. 446 and No. 446D KEY LOCK ... with pushbutton on inside knob
No. 442 and No. 442D TURNBUTTON LOCK ... for porch and patio
No. 445 and No. 445D PUSHBUTTON LOCK ... for porch and patio
No. 444 PRIVACY LOCK ... for bathroom and bedroom
No. 448 KNOB LATCH ... for interior passage

A complete line for all Exterior and Interior Doors

You can boost sales volume and profits with this complete NEW Series “440” NATIONAL LOCK set. Designed for the volume market, it features quality design and construction at a price that’s sure to appeal. A wide selection of finishes and split finishes presents a variety to meet every requirement. All working parts are of rust-proofed cold rolled steel. There are no zinc die cast materials. Exposed parts, including bolt, are of solid brass. Wear-resistant lacquer baked on at high temperature assures long-term finish. Sell the new Series “440” as a supplement to your handsome NATIONAL LOCK set Series “410”. In this way you will profit from NATIONAL LOCK acceptance in both the discriminating and mass volume markets.

WRITE US FOR CATALOG OR ASK YOUR SUPPLIER

NATIONAL LOCK COMPANY

ROCKFORD, ILLINOIS • MERCHANT SALES DIVISION

JULY 1953
The above figures* show the amount of air infiltration expressed in cu. ft. per min. per ft. of window crack at 25 miles per hour wind velocity. This comparison is proof that Zegers Dura-Seal Combination Metal Weatherstrip & Sash Balance provides more than 4½ times the protection against air infiltration than both the American Wood Window Institute's and the U. S. Dept. of Commerce commercial Standards.

So use the best... it means satisfied customers and greater profits for you. Send now for new folder "Facts on Weatherstripping." It tells why weatherstripping is essential in today's home construction.

*The figure for Dura-seal is the result of tests made by Robert W. Hunt laboratories, an impartial, nationwide research organization.

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**new products**

**FOOD WASTE DISPOSER AB75321**
A continuous feed-type electric food waste disposer, 14 inches high, features simplified installation, quieter operation and an automatic self-reversing switch. Because the drain opening is only six and one-half inches below the bottom of the sink, it permits easier installation to existing drain lines that go through the wall instead of the floor, eliminating much need for plumbing alterations.

**RADIANT HEATING CABLES AB75312**
Ceil Heat is a home heating process produced by an electric filament. It is available in five forms: cables for plaster; cables for concrete; panels for homes (new or conversion); cables for dry wall; and panels for offices. Standard installation process, illustrated, is to staple the heating cables to the ceiling and cover them with a plaster coating.

Cables occupy little space and require no flue, heater space or fuel storage. Recommended insulation controls the action and direction of the radiant rays for maximum efficiency. This heating process is also used in driveways and walks, gutters and drains, to melt snow and ice. Ceil Heat Division, Homes, Inc., Dept. AB, Knoxville, Tenn.

† FOR MORE INFORMATION USE COUPON, PAGE 139
PLYWOOD-STEEL FORM AB75306
The Atlas Compo Form is a plywood and steel unit that eliminates handling of excessive weight. Consisting of plastic coated plywood panels fastened to all steel frames, it averages only five pounds per square foot of contact area. Single 2x8 foot panels weigh only 72 pounds. The plywood is fastened to the steel frame with split rivets and can be reversed for additional uses. Walers are eliminated and a single row of double 2x4's is used on one side for alignment purposes.

Two men can erect 100 lineal feet of six or eight foot high walls, including pilasters, in one eight-hour day, using the forms. Individual forms lock together with fast action wedge clips. Irvington Form & Tank Corp., Dept. AB, 20 Vesey St., New York 7, N.Y.

ELECTRIC FLOOR FURNACE AB75309
The Cavalier floor furnace is a self-contained unit with two built-in thermostats protected by baffles which assure accurate temperature control so responsive that it operates on a two degree change in temperature. Careful engineering of the air flow gives the unit high efficiency, its manufacturers state. The furnace is sturdily constructed with a bronze finish grill.

The depth of the heater is 13½ inches, which helps in cleaning and makes it useful to install in houses with low foundations. The five kilowatt size will fit between 16-inch joists; the eight kilowatt size can be easily framed in. Cavalier Corp., Electric Heater Div., Dept. AB, Chattanooga 2, Tenn.

For complete information see COUPON

Prominent Builder Uses Roly-Doors Exclusively
Here is proof that successful builders everywhere . . . like G. S. Shipp and Son, Ltd., developers and builders of Toronto's popular Applewood Acres . . . are increasing the "buyer appeal" of their new homes by installing Roly-Doors.

Why not make your selling easier . . . let Roly-Doors give your homes the extra value that turns quality-conscious prospects into enthusiastic buyers.

ONLY ROLY-DOORS GIVE YOU ALL OF THESE ADVANTAGES

- Four Sectional, Overhead Steel Garage Doors.
- Will not rot, warp or absorb moisture.
- Quiet, free rolling, ball-bearing operation.
- Rugged, welded steel construction.
- Low installation cost.
- Conforms to any style of architecture.
- Meets all Building Codes.
- Three sizes—8, 9 and 16 foot.

For more information see your Roly-Door Distributor or MAIL THIS COUPON TODAY!
You get the Exact Saw you want when you ask for Mall.

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 1/2", Has 6" blade, Weighs 8 1/2 lbs. $64.95

Model 70—Capacity: 2 1/2", Has 7 1/2" blade, Weighs 16 lbs. $115.00

Model 72—Capacity: 2 1/2", Has 7" blade, Weighs 9 lbs. $64.50

Model 86—Capacity: 3 1/2", Has 8 1/4" 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 1/2", Has 12" blade, Weighs 36 lbs. $215.00

Mall Tool Company
7732 S. Chicago Ave., Chicago 19, Ill.

Send me more information about Mall.

- Saws
- Drills
- Other Tools for Builders

Name

Company

Address

Mall Tool Company
40 Factory-Owned Service Warehouses, Coast to Coast, To Serve Our Customers and Thousands of Dealers.

New Products

Scaffold Hardware AB75329

Wood and steel scaffolding is now available. A typical unit, the Shack Jack, is so light in weight that ten standard ridge-back trestles made with the hardware occupy the space of five ordinary wooden horses. Since the lumber used is completely salvageable, considerable savings on scaffolding a tract job or large building can be realized.

The Jiffy Jack (illustrated) is another example of this steel and wood scaffolding. It is stated to do the work of five sizes of other trestles at one-tenth the cost of comparative items. Easily erected and requiring no nails, the Jiffy Jack uses finished 2 x 4's to form adjustable legs that set up to any height from two to 12 feet. Superior Scaffolding Co., Dept. AB, Culver City Calif.

Tile Cutter, Beveler AB75310

This device cuts and bevels metal wall tile in a single operation, eliminating time wasted in bending tile edges with wall pliers or in filing the corners. Chair rails and border strip tiles can be made when necessary. New bevels made with the tool are identical to original bevels; the possibility of turning out expanded or flared corners is prevented through a special clamping method.

Two identical triangular pieces, each bevelled on all sides can be cut from a single ceiling tile. Plastic tile can also be cut with this device by changing the lower blade and the scale. J. M. J. Products Co., Dept. AB, 226 Centerville Ave., Belleville, Ill.

For More Information Use Coupon, Page 139

House Beautiful's Pace Setter House for 1953

House Beautiful is cooled with Hunter Package Attic Fans

- When clients want cool comfort at low cost, tell them about the Hunter Package Attic Fan... one of the many modern features in House Beautiful's 1953 Pace Setter House. This compact, easily installed unit cools every room in the house. Sizes from 5500 CFM to 15500 CFM. Write for 32-page booklet, "How to Cool for Comfort." See our catalog in Sweet's.

HUNTER FAN AND VENTILATING COMPANY
381 S. Front St., Memphis 2, Tenn.
new products

FAN BLADE AND BAFFLE KIT AB75330
This knocked-down outfit is stated by its maker to be a fast-moving dealer item which aids in selling other hardware items and motors at the same time. The kit consists of one 30 inch baffle, quartered for packing; when assembled, it measures 36 inches square; four 3/16 inch tempered Masonite blades, which, when bolted to the spider, make a 30 inch diameter fan; one eight inch steel pulley with a 3/8 inch bore; one 5/8 inch diameter steel shaft, 9 3/4 inches long, with keyways.

Other necessary equipment includes porous bronze bearings, the correct bolts, collars and washers, a vee belt, steel pulley for motor attachment, cast aluminum spider, hexagon wrench and assembly instructions. S. J. Stewart (Electric), Dept. AB, 527 St. Joseph St., New Orleans, La.

ELECTRIC HEATING SYSTEM AB75333
A forced-air home heating system using electricity as its heat source was recently put on the market. The system is comprised of a metal duct approximately seven feet high, eight inches wide and three and one-half inches deep, with top and bottom openings covered by grilles. The duct is installed behind the wall, between the studs, with only the grilles and a thermostat control visible. A fan mounted inside the upper grille draws off the warm air just under the ceiling and sends it down over a heating element located just above the lower grille. This element adds heat to the air which is forced out the lower grille. One or more units are installed in a room, depending upon its size. Average wattage required to maintain one unit is between 1,000 and 1,600. Either 110 or 220 volt outlets may be used. Electrend Products, Dept. AB, Box 110, St. Joseph, Mich.

BAMBOO DOORS, ROOM DIVIDERS AB75322
Room and closet doors and room dividers made from strong, inner core bamboo are equipped with self-lubricating nylon slides and heavy, rustproof enameled track. They occupy minimum space and permit constant air circulation, since they are free-hanging, with a 3/8 inch floor clearance. In new construction, no furring, trim or additional hardware is needed.

The units are laboratory tested and FHA approved in all states where they have been used. They are stated to have a 25 to 30 year service life. Doors and dividers are available in natural unpainted finish or in eleven standard colors. American Bamboo Corporation of New York and Pennsylvania, Dept. AB, 17104 Jamaica Ave., Jamaica 32, N. Y.

ROOF EDGING AB75313
A new gable roof strip called "Steel Seal" roof edging is designed to prevent rotting of the barge board on roof gables and prevent wind from getting under the edge of roofing.

The builder nails the edging to the decking along the gable edge and slides the roofing into place. Roofing is nailed as usual. The product is made of 28 gauge galvanized steel in ten foot lengths. Builders Mfg. Co., Dept. AB, 1514 Brown-Marx Bldg., Birmingham, Ala.

TILE WALL PANELS AB75334
Available in ten colors and white, in three surface patterns, Afeo hardboard wall panels have a baked-in plastic finish. Patterns consist of cross-hatched, beveled scored lines, four inches apart, horizontal scored lines, eight inches apart, or smooth (unscored). The glazed surface sheds water and protects inner wall construction from moisture. Panels are recommended for bathroom, kitchen or game room installations, as well as for commercial use. The baked-in plastic surface needs no repainting, as it is a permanent finish. It is stated not to chip, crack, or peel over long usage. Builders will find the tile is easily installed over plaster, wood or gypsum board walls. A & F Tileboard Co., Inc., Dept. AB, Alexandria, La.

NAIL HOLDER AB75302
A useful finger-saving tool called the "Nu-Nailer" is made of plated steel. It even holds finishing and roofing nails while they are being started in such inaccessible places as outlet boxes, in corners, under shelves, etc. It can also be used as a punch to finish setting nails after they have been started. Pollock Engineering Co., Dept. AB, 10342 So. Church St., Chicago 43, Ill.

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

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American Builder, 79 W. Monroe Street, Chicago 3, Illinois

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New

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ENGINEERED FOR PAINTING

IT'S EXCLUSIVE! GPX GREEN

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.

IN CABINETS AND BUILT-INS—GPX GREEN 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.
MODULAR PRINCIPLES

can cut costs and increase value

chapter 18 — review of basic concepts, examples of savings

By Griffith S. Clark

During the past year, these articles have touched on the basic concepts of modular control in house construction from foundation to roof. Many more details of modular construction are still to be described in this series. However, because of numerous requests for further explanation of fundamental modular theories and practices, this chapter will review some previously discussed conditions and show how they can cut both material and labor costs as well as increase the value of the house.

Maximum Use of Materials

Modular control is a procedure whereby design, material sizes and labor operations can be coordinated. They can be analyzed separately and joined together to a contractor’s best advantage. Let’s digest this with the following example:

One of the most substantial builders in the Midwest builds over 1,000 houses a year using a crawl space with box sill construction and a center-bearing first-story wall. The exterior over-all dimension is 24 feet. In a discussion of modular control, an analysis of the floor and ceiling framing members revealed that either 12-foot members were lapped over the bearing girder or 10-foot and 14-foot members were similarly treated. It was suggested that if these members were butted instead of lapped, and scabbed, four inches additional width could be obtained at no additional cost.

Consider what this means financially to the builder. An increase of four inches in width for every three linear feet of house means an additional square foot of floor area. These houses varied from 30 to 36 feet in length, the average being 33 feet. It was thus evidently that 11 square feet could be added to each house without increasing the cost noticeably.

Suppose a value of $10 per square foot was placed on these homes. Space thus gained amounts to $110 per house or $110,000 for the year’s operation. That’s quite a sum to be made available by a simple modular analysis of design and stock sizes of materials.

Roofs are another source of looseness in design and material sizes. In
the modular control application, walls are constructed with sufficient accuracy that precut members which were designed as the house was planned can be successfully used. By the use of the Wilson Rafter Table (see American Builder, Jan., 1953, pages 208-209), it is a simple matter to increase the pitch of the roof to utilize fully stock lengths of the rafters. This done, the maximum cubage possible is obtained for evaluation.

Changing Techniques

Much more could be written concerning the module and its application to conventional construction. However, we are concerned here with essentials only. There is an increasing demand for modern mass production in house building technique. Existing systems require patterns, dies, jigs, etc., so that each part needed to make up the finished product will fit properly. Fabrication of houses has not gone beyond the jig per section stage. This is due in part to the size of the house parts and the varieties of materials concerned. Until the public is more concerned with values, this condition will continue to exist.

As competition for sales becomes keener, methods must be devised to benefit the customer in maximum uses of stock material sizes, elimination of unnecessary waste of labor and reduction of completion time or overhead. This can be accomplished if production of a house is transferred in the main from the field to the shop and if some definite procedure for fabrication is devised to give flexibility in design and yet allow repetitive operations in the shop and field.

For the most part, drawings will take the place of patterns and dies. Working drawings must be executed in an accurate and distinct manner so they can be interpreted readily and to eliminate any possible error. Automatic checks must be set up.

It has now been established that such a technique for fabrication and erection is in existence. It operates around this simple unit of dimension, the module. Size of the module will depend upon the size of the wall stud. Since most houses have 2x4 studs, we talk of the 4-inch module. When 2x3 studs are used the 3-inch module is used. When they are combined, both are used. Plans and details of such an operation will be features in a forthcoming article.

(Continued on page 144)
In fabricating a wall section on the site platform, place sole plate on edge, line up its outside face 3½ inches from edge of platform and toenail as shown. When completed, section is tipped up. Toed nails will pull out and frame will stand in correct position.

MODULAR PRINCIPLES

(Continued from page 143)

Labor Cost Saver

Largest single item on the contractor’s cost sheet is labor. Never lose sight of this fact. All labor must be charged for at cost, plus necessary charges for compensation, insurance, etc., plus a percentage for overhead, plus a percentage for profit.

If your local skilled wage rate is $2 per hour, the average charges for insurance, etc., are about 12.5 per cent, depending on the state in which you operate. This now becomes $2.25 per hour. Add to this 15 per cent overhead and 10 per cent profit, or whatever markup you use. The original $2 now becomes $2.81 per hour. We are no longer talking about $2 wages but $2.81 wages. The necessity for making every hour count is obvious.

How can modular design affect this figure?

1. It furnishes a system which becomes a procedure. Therefore, repetitive operations occur which become more economical to perform. Practice approaches perfection in layout. If all room dimensions are in nominal 4-inch increments, fractional conditions reoccur at the same place every time.

Suppose we are fabricating walls on the site platform, using the tip-up method. The procedure described previously tells us that the masonry would be laid up in actual dimensions of 4-inch increments. The mud sill and all succeeding wood members will be restricted 3 16-inch external 4-inch modular line. The first floor will be modular less 3½-inch in each direction.

Disregarding the thickness of the sheathing, strike a line 3½ inches in from the outside edge of the platform on the subfloor (see accompanying sketch). Line up the plates on edge so that the outside face of the wall plate coincides with this line. Toenail the plate from the inside to the subfloor so that it is held stationary for nailing. Use a 1x4 tick strip marked every 4 inches with various colored stripes 1½ inches wide, the same color reappearing every 16 inches, as described in chapter 9 (American Builder, Sept., 1952). This will assist in quick placement of studs and rough openings without marking the plates. Nail studs with two 16d common nails through the plate. Apply sheathing, cut out window openings and tilt up in place.

If this method is used, siding can be applied, windows installed, and the work is in horizontal position. Scaffolds are eliminated and tremendous savings in labor result.

When we coordinated the design with the field, we could then utilize a saw bench which would make cuts in modular lengths accurately and quickly. When we introduced the subassembly with the raised intersecting block, we made it possible to utilize modular lengths of lumber as an actuality. By proper coordination, we can save from 10 to 15 per cent of the sawyer’s and helper’s time. If we utilize the floor-wall substitution for the mud sills and headers, we should save an equal amount in field placement. All this means that a fair amount has been taken off every $2.81 worth of labor bought for the platform construction.

Other Savings

2. It allows for better utilization of labor in that subassemblies and rough openings can and should be made up off-site. This eliminates transportation to the job site of a multitude of small parts and substitutes delivery of a few items which include this multitude of small parts. The closer to the cut-off saw that miscellaneous parts can be utilized, the greater the saving.

3. It makes possible a system of scheduling precut materials and a delivery as the job progresses.

4. It encourages off-site work and reduces supervision costs. Control between shop and field is automatic. Sections are in 4-inch increments and may include wall areas of two or more rooms. With interior covering being precut in increments of room length less 3½-inch, check the intersecting partition subassembly locations and prevent errors.

5. It makes use of wall units (for storage, vanity, desk, linen and music types), as well as appliances, practicable, in that they can be installed quickly, without unnecessary trimming problems in the field.

The entire procedure presents an orderly approach to a difficult problem. These are all actual savings which the average contractor cannot fail to consider.

It should be borne in mind that these design and labor economies have not limited the architect except to observe 4-inch multiples. We have not asked either mechanic or laborer to perform any more work.
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"TROUBLE SAVERS"
save time, too!

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- ONE-MAN Ladder Jacks (left) adjust to any pitch on either side of the ladder.
- Weight distributed on three rungs.
- New, rail-type jack (right) uses side rails of ladder for extra safety.

SCAFFOLD BRACKETS
- Erected and dismantled faster than you can build a make-shift wooden scaffold.
- 3 and 3½ ft. lengths—rail carbon steel.
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The Steel Scaffolding Company, Inc.
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NEXT MONTH'S ARTICLE
will explain how to work out some fabrication problems by use of modular methods.

JULY 1953
Cash in on the growing interest in dishwashers.
Dishmaster does the job faster and better than the costly "automatc.""}

Dishmaster uses any detergent. Tank holds supply for full day's dishes for average family. Big savings for the user!

Automatic diverter valve (down) lets water flow through spout. When raised, clear water (or aerated suds) pours from spray.

Here's your answer to the dishwasher problem! Amazing invention

"finish-washes" dishes in scraping time!  * Requires no floor space!  * Installed in minutes!  * Priced for even the lowest-cost home!  * Adds kitchen sales appeal!

Now you can offer your prospects push-button dishwashing that's easy, fast and completely practical.

It does a perfect job on dishes, glasses, pots and pans, silverware in the time it takes to get dishes ready for the high-priced "automatc." It gives you, as a builder, all the appeal you could ask for in a dishwasher of any kind—at a fraction of the cost, and with none of the problems!

Dishmaster fits any sink; takes up no floor space. You install instead of sink faucets—with no increase in installation time. No special wiring or piping. And along with all these savings, the cost is so low that it would never be noticed in the sales price of even the lowest cost homes you build.

Get the facts now. Dishmaster is a selling feature you'll want in all your homes!
Wall-type and table models are available. Dishmaster fits any sink or type of installation. You save on sink brass!

National advertising support will tell your customers about Dishmaster. Be first with its great sales appeal.

Talk about success! Over 200,000 Dishmasters are now in use in California. Most areas still a wide-open market.

**DISHMASTER REPLACES SINK FAUCETS**

*to give push-button dishwashing*  
*at amazing low cost*

Dishmaster is a complete, permanent sink fixture. Finish is beautiful, high-polish chrome. Serves as both dishwasher and swing-spout mixing faucet. Integrated tank holds detergent solution. Aerated suds flow through spray at press of a button to float dirt away. Change from suds to clear water is instantaneous.

Spray equipped with nylon brush—wire brush available at small extra cost.

No product can be more easily or dramatically demonstrated than Dishmaster. It fascinates both men and women. Best of all, you can offer this feature with practically no increase in your expense.

**DISHMASTER The Push-Button Dishwasher**

Send Coupon for Details of the Dishmaster Deal for Builders!
TWO SALES PROMOTERS WITH A WALLOP!

1. Big Windows...
   They're popular. They make rooms feel bigger. They brighten homes. They add appeal and pack a real sales punch. In fact, a home with small windows is out of date today.

2. Thermopane*
   insulating glass. What a sales feature this is! It's practically expected for picture windows. And when you use it throughout the house, you really have a sales pusher. How prospects like the idea of always having insulated windows without buying and hanging storm sash! Many builders are using low-cost glazing methods to give buyers Thermopane in every window of moderately priced houses. Want to know how they do it? Mail the coupon for information and detail drawings.

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Please send me complete information on low-cost windows of
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...has a simple, sound assembly for maximum strength and durability yet is made to meet the price market.

This adaptation of the hollow-core principle meets the demand for high quality and low cost. This is another engineering achievement by HASKO for the builder who needs better flush doors. It is truly an economy door of outstanding quality.

**LOW COST** The HASKO "MOBILE" FLUSH DOOR is priced competitively, and is made and backed by a responsible manufacturer.

**QUALITY GUARANTEED** The HASKO "MOBILE" FLUSH DOOR carries the same guarantee and responsibility as the famous Hasko Arch-Kor Flush Door. It features "balanced" construction, and the warp-resistant, sound deadening and proper ventilation characteristics engineered into all Hasko Flush Doors. Its frame is constructed of selected kiln dried lumber and allows a generous amount of stock for trimming, plus sturdy 3/16" thick face panels.

**8-WAY HANGING SPEEDS INSTALLATION** Large 3x25 (5x25 including frame) double lock-blocks provide for fast, easy 8-way hanging of the HASKO "MOBILE" FLUSH DOOR.

**FLEX-CORE INCREASES LIFE, ASSURES PERMANENT BEAUTY** The entire core construction provides complete support of the sturdy (3/16" thick) face panels. An additional feature of the door is in the use of the "Flex Core" core ribs. These provide a resiliency and flexibility that give the face panels an unusually high degree of resistance to denting from heavy impacts, or damage from warping, and assure great durability.

**TESTED** Thorough tests prove durability. The HASKO "MOBILE" FLUSH DOOR has withstood kiln tests of as high as 48 hours at 170 degrees. The Hasko name means sound construction, high quality, expert design and craftsmanship.

WRITE today for the special HASKO "MOBILE" FLUSH DOOR Bulletin. Orders will be filled in the sequence in which they are received.
The building includes foyer, two school rooms, storage area, and furnace room.

**back to the TWO-ROOM**

The two-room school house is back in Elkhart, Indiana. But in a new form. The two-room structure has reduced the per-room cost 25 per cent over the larger school buildings the town previously built.

The budget-minded school board came up with the idea as an answer to a new residential area's need for school facilities. For the 1952-53 school term they needed only a kindergarten and first grade. The nearby schools were able to handle the older children. Rather than build a large school that would not be fully occupied they built only the facilities that were needed.

This summer another two-room unit will be constructed. The entire layout will be completed when the educational requirements of the area warrant. When completed, the 8-acre tract will have four two-room units and a combination gymnasium and assembly area.

The proposed buildings basically will be alike. Variation of the exteriors is planned for the units.

School officials in Elkhart believe the plan will be a big boon to those school districts having a difficult time financing needed educational facilities. This plan can be financed on a pay-as-you-go basis.

The school board president, V. M. Ball, and a board member and local builder, C. A. Huffman, were the originators of the campus idea. Wiley and Alexander, Elkhart architectural firm, designed the building.
Typical class room is well lighted and has ample storage facilities. Panel window arrangement has storage units built beneath. Lower pane opens for ventilation.

**SCHOOL HOUSE**

Plan of the two-room school radiates from a center core which provides for entrance vestibule, lobby and facilities for boys, girls and staff. Access to tool and boiler room is from the outside, approximately 3 feet 6 inches below class room floor. Section at right shows relation of class room and boiler floor.

_July 1953_
A new house becomes a Delta saw-shop for cutting all material. An 8-foot roller conveyor section solidly mounted at each side of the saw makes work handling easy.
$200 PER HOUSE?

DELTA Radial Saw—

says JACK CARUANA

Buffalo builder saves at least that in "mill time" alone

One man operating a Delta radial saw cuts all the rough material for a house—everything from foundation to trim—in about 24 hours, saving at least $200 per house in "mill time" alone, says Jack Caruana, veteran home and subdivision builder of Buffalo, New York. Saw output includes studding, joists, hip-rafters, door and window frames, cabinet members and the like. All other sawing is practically nil.

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 accuracy saves time, too. Caruana points to clean, close fit of hip-rafters pre-cut on the job by the Delta saw. No time wasted in "fitting."

Accuracy saves time, too. Caruana points to clean, close fit of hip-rafters pre-cut on the job by the Delta saw. No time wasted in "fitting."

DELTA QUALITY POWER TOOLS
Another Product of Rockwell

The only completely new radial saw on the market. The saw blade stays above the work table on full 360° swing. Available in 8", 10", 12", 14" and 16" sizes, 1 1/4 to 7 1/2 hp.

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Mr. N. V. Bussmann, prominent midwestern builder now erecting modern homes in suburban St. Louis.

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Mr. B. Stromberg, leading Chicago builder and creator of the completely air conditioned “Tribune House”.

Mr. Robert Gerholz of Community Homes, builders of fine modern homes in the Flint, Michigan, area.

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Mr. F. C. Walters of Modern Builders, Inc., developers of Brentwood Village, Cincinnati.

Mr. Albert Saucier, Jr., partner, Saucier & Gillin, developers of “Home of the Future” in New Orleans.

Mr. F. A. Parker, now erecting 550 modern homes at “Birchwood” and “Ashford Park” in Atlanta.

Mr. W. G. Underwood, leading Dallas builder now developing the “Preston Hollow” area of Dallas.

Mr. Emil Keen, noted Long Island builder now engaged in a 52-home development in Huntington, New York.

Mr. Marcel Robins, builder of luxurious homes in White Plains and Scarsdale, New York.

Mr. F. T. Ferrigno, now erecting 210 modern homes near Hartford (Tom-Lin Heights).

Mr. C. DiFelice, leading Pennsylvania builder now erecting 200 homes at King of Prussia, Pennsylvania.

Mr. John Larson of John E. Larson & Son, builders of modern homes in Pittsburgh and Mt. Lebanon, Pennsylvania.
The way Bryant’s “Command-Aire” Twins are helping to sell homes for many of the nation’s leading builders offers an opportunity for you. Specifically, it’s year ’round conditioning that’s...

20 to 35 per cent lower in cost!—to let you offer this one-time luxury feature in moderately priced homes—to mass market buyers. Moreover, you can offer...

Cooling initially, or later!—The “Twins” are independent heating and cooling units of matched design. Homeowners can install the furnace first (gas or oil) and add the twin cooling unit at their convenience. And you needn’t worry about space because the “Twins” offer...

Unusually compact design! Using as little as 7¾ square feet of floor space, you can tuck them away in a closet, alcove, utility room or basement.

Some of the many prominent builders already enjoying faster, more profitable sales with “Command-Aire” equipped homes are listed on the opposite page. Why not investigate “Command-Aire” advantages yourself. And ask about Bryant’s supporting program to help you sell your homes. Contact your Bryant Distributor, or write: Bryant Heater Division, 17825 St. Clair Avenue, Cleveland 10, Ohio.

Bryant’s “Command-Aire” Twins include either a gas or oil furnace in any one of a complete range of sizes matched with a 2, 3 or 5-ton cooling unit.
A HOUSE PLUS **Leigh MAKES A HOME**

LESS THAN $50.00 ADDS THE WIFE-APPEAL THAT MAKES SALES ZOOM!

**ARISTOCRAT AWNINGS**
 Built to last. Designed to please. Adds comfort and protection to the home. For perfect answer to the busies desires.

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 Ladies love 'em for the beauty they give. You'll find them right for cost, construction and color.

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 Protection for letters and a special spot for magazines and papers. Moderately priced. Available in bronze or black.

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 An appealing "Step-Saver" that ladies want. A plus feature on any buyer's list . . . and so easy to install.

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 Built into baseboard or toe-cover, they get dirt out of the house, save countless steps. A refinement to set your house apart.

**GARbage CONTAINERS**
 Finger-tip convenience and it swings away, out of sight. Lid opens automatically when door swings out. Has tight seal when closed.

**PACKAGING RECEIVERS**
 A sturdy, sanitary receiver for milk and other packages. Engineered for standard wall construction with no fitting.

**SLIDING DOOR HARDWARE**
 Smooth, quiet, easily installed from the front in minutes. Life-time rollers hold on track by exclusive Lok-Tab.

**DUST CHUTES**
 Built into baseboard or toe-cover, they get dirt out of the house, save countless steps. A refinement to set your house apart.

**DURABLE METAL SHUTTERS**
 Add the right touch of beauty to all size windows. No cutting or fitting. Panedled or levered designs.

**BUILDING PRODUCTS**
 Division
 Air Control Products, Inc.
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 Leigh Avenue
Architect Walter T. Anicka's "ranch" house is ideal for small-lot, built-up urban areas. It is one of seven plans chosen by the 1953 American Builder Catalog Directory to provide builders with typical construction problems.

Today, the "one-floor" home is America's most popular design. But no matter what design your clients or customers prefer, copper piping has definite advantages. Its longer lengths, lighter weight and fewer fittings mean lower installation costs. Its rustproof quality means longer service life.

The schematic drawing above shows the plumbing layout for a ranch-type house designed by Walter T. Anicka. Hot and cold water lines are Type "L" ANACONDA Copper Tubes. Easily joined fittings are solder type. For the soil, waste and vent lines, Type "M" ANACONDA Copper Tubes and solder type drainage fittings are used. Where code permits a 3-in. stack, it will fit into a 4-in. stud partition, saving space and construction costs. All other drainage lines and back venting are 1 1/4 in., 1 3/8 in. and 2 in.

Submit your piping bids in copper. It's easier to work with...often costs less to install. For highest quality, always use ANACONDA Copper Tubes. Descriptive booklets on copper tubes for plumbing and heating lines are yours for the asking. Write: The American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.

Easily installed copper adds long life to this "typical" ranch house

ask your plumbing jobber for ANACONDA® copper tubes
Modern Kitchens
sell Modern Homes...

and there's no kitchen more modern
than a New Thor-Equipped kitchen!

From Thor, leader in home appliances for almost half a century, comes a brand-new answer to the home builder's question “What's the best deal in kitchen and laundry equipment for the homes I build?”

Today Thor offers an unsurpassed line of kitchen and home laundry appliances for modern homes — unsurpassed in beauty of design, in flexibility of installation, and in the variety of practical features that appeal strongest to the women who influence your sales.

In addition, Thor offers you and your clients a new, but tested and approved Kitchen Planning Service. This new service includes all phases of kitchen planning — from floor plans to color schemes. There's a Thor-planned kitchen to suit every taste, every budget!
MATCHING BEAUTIES!
New Thor Automatic Washer and New Thor Automatic Clothes Dryer offer the utmost in clothes washing and drying efficiency. Quality assured by famous Thor 5-Year Guarantee available to cover both parts and labor on sealed mechanism — and backed up by dependable Thor Factory Service. Matching New Thor Spinner Washer also available, if desired.

THOR BUILT-IN ELECTRIC RANGE
No longer is there any need to compromise size or layout when locating the range in your modern kitchen designs. Here is unlimited flexibility. You can install the huge oven — or ovens — just where wanted, with top-range cooking units adjacent or in any other location desired. New Thor Built-In Electric Ranges are the mark of a truly modern kitchen. They are sure to make your homes the most talked about new homes in town. And the most-wanted new homes in town.

MATCHLESS VALUE IN MATCHING APPLIANCES
When it comes to modern beauty plus features that more women want — all America goes for the brilliant new Thor Refrigerator, the Thor Thrifty Freezer and the new Thor Gladiron! And never a servicing headache with famous Thor Quality and Thor Factory Service!

BEST DEAL YET
for Builders, Contractors and Architects!
Now you can take care of the major appliance needs of your customers by dealing with one dependable central source of supply — Thor! Whatever your requirements call for, Thor can supply it! Thor offers a combination that will fit practically any requirement or budget with famous THOR quality plus unbeatable prices under special "package" deals! Ask about the deals — now!

THOR CORPORATION Chicago 50, Illinois
Built-in Electric Ranges • Dryers • Automatic • Spinner Wringer Washers • Freezers • Refrigerators • Gladirons

Builder-Contractor Division
Leeson Steel Products, Inc., Dept. AB
Subsidiary of THOR CORPORATION
Chicago 50, Illinois

I'd like to see your deal — no obligation, of course.

Name
Firm
Title
Street
City
State

I'm a Builder of New Homes. Kitchen Remodeler
Low-cost lighted valances add extra sales appeal to rooms for National Home Week

See the difference General Electric light conditioning with a lighted wall-to-wall valance makes in the room above. It looks bigger, brighter, more modern. Dark corners are gone. There's more and better diffused light to see by.

Simple, inexpensive to build

It takes just a few dollars and minutes to install, yet a lighted valance adds a practical design-touch that makes any room a very special attraction to home buyers. All you need are a few pieces of lumber cut to simple specifications, an inexpensive strip fixture to hold the fluorescent tubes, and the tubes themselves (General Electric De Luxe Warm White lamps are recommended). It's an easy way to add extra value to your rooms at low cost, extra value that prospects can see and admire.

For more information about lighted valances and the rest of General Electric's light conditioning recommendations, 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-7, Nela Park, Cleveland 12, Ohio.
ALUMINUM SIDING HELPS YOU BUILD BETTER, SELL QUICKER!

More and more aluminum siding is being used in modern homes thanks to the "two-way" advantage it offers builders and buyers. The builder benefits because aluminum siding is light, easily handled, can be worked with standard carpenter tools and its ease of installation cuts construction costs. The buyer profits because aluminum siding stays attractive—won't rust, rot, warp, shrink or swell. It also provides natural insulation and is fire, rodent and termite resistant.

You can choose aluminum siding from a number of types—lap siding in panels or individual strips and special ribbed designs for a board and batten effect... some with baked on finish, others plain or stipple embossed for finishing as desired.

Take advantage of aluminum's advantages in both special designs and standard products. Remember—for help on your building material problems, call your near-by Reynolds Architectural Distributor listed under "Aluminum" in the classified telephone directory. For more information on the many uses and advantages of architectural aluminum in home construction, write Reynolds Metals Company, 2530 South Third Street, Louisville 1, Kentucky.

Send for free Architectural Aluminum catalog. For quick reference, see catalog SE in Sweet's Architectural File.

REYNOLDS ALUMINUM

MODERN DESIGN HAS ALUMINUM IN MIND

JULY 1953
WOOD DOORS
are BEST for
home garages!

Wood blends with wood, brick or stone, fitting harmoniously into the house design. It belongs! A wood door operates quietly and easily; helps insulate the garage, will not rust, twist or dent. The "OVERHEAD DOOR" for home garages is stronger than steel of the same weight!

FOR INDUSTRY—Wood or Steel
Doors for commercial and industrial buildings are built of wood, flush steel or extruded tubular aluminum, in any size to fit any opening. Take full advantage of our complete door engineering service.
MANUFACTURERS OF THE REMOVABLE, FAST SELLING "400" WINDOW

Find out today how you can start handling this profitable window by contacting the concern, listed below, that is nearest you.

IDAHO
Utah Sash & Door Factory
2341 South State Street
Salt Lake City, Utah
Lumbermen's Supply Corp.
3002 Mission Avenue East
Spokane, Washington

MAINE
Malta Mfg. Co.
Malta, Ohio

MASSACHUSETTS
Malta Mfg. Co.
Malta, Ohio

MONTANA
Lumbermen's Supply Corp.
3002 Mission Avenue East
Spokane, Washington

MINNESOTA
Vetter Mfg. Co.
Stevens Point, Wisconsin
Presto-Matic, Inc.
24th and Spring Streets
Omaha, Nebraska
Marvin Lumber & Cedar Co.
Warroad, Minnesota

MICHIGAN
Royal Oak Wholesale Co.
2125 S. Michigan Ave.
Saginaw, Michigan
Rus Curtis Company
631 Oxbow Lake Road
Milford, Michigan
West Mich. Sash & Door Co.
New Haven, Michigan

NEBRASKA
Presto-Matic, Inc.
24th and Spring Streets
Omaha, Nebraska

NEW HAMPSHIRE
Malta Mfg. Co.
Malta, Ohio

NEW YORK
General Millwork Corp.
529 Main Street
Utica, New York
Malta Mfg. Co.
Malta, Ohio

NEW JERSEY
Malta Mfg. Co.
Malta, Ohio

OHIO
Malta Mfg. Co.
Malta, Ohio
Toledo Door & Sash Co.
901 Hoag Avenue
Toledo, Ohio

OREGON
271 W. 7th Avenue
Eugene, Oregon

PENNSYLVANIA
Malta Mfg. Co.
Malta, Ohio
Whipple Bros., Inc.
Lancashire, Pennsylvania

RHODE ISLAND
Malta Mfg. Co.
Malta, Ohio

TENNESSEE
Malta Mfg. Co.
Malta, Ohio

UTAH
Utah Sash & Door Factory
3002 Mission Avenue East
Salt Lake City, Utah

VIRGINIA
Malta Mfg. Co.
Malta, Ohio

WASHINGTOINO
Dealers Millwork Supply Inc.
1441 West Elliott Street
Seattle, Washington
Lumbermen's Supply Corp.
3002 Mission Avenue East
Spokane, Washington

WISCONSIN
Vetter Mfg. Co.
Stevens Point, Wisconsin
Wilbur Lumber Co.
Waukesha, Wisconsin

METALS BY A.R.B. WINDOW SALES CO.
306 E. State Fair Ave.
Detroit 3, Mich.

FULLY WEATHERSTRIPPED EASILY REMOVED QUICKLY ADJUSTED

July 1953
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.

THE CALIFORNIA WIRE CLOTH CORPORATION, Oakland, California
THE COLORADO FUEL AND IRON CORPORATION, Denver, Colorado
WICKWIRE SPENCER STEEL DIVISION, New York, New York

CLINTON WELDED WIRE FABRIC

THE COLORADO FUEL AND IRON CORPORATION

AMERICAN BUILDER
Maxwell Dorne, custom builder and designer, is responsible for this $42,500 ranch-type house on a plot of about three acres in Phoenix, Arizona. Dorne's design strives in a sophisticated way for an all-out rustic effect and gets it by combining used brick, 1x12-inch board and battens, cedar shakes, band-sawed trim and wood louver shutters. The countrified effect of the house is further strengthened by treating the garage as a barn-like annex. It faces the rear and is joined to the house by roof and a barnyard gate. Its cupola with weathervane is a final touch completing the rural effect.

Front entrance is through a Dutch door. Knotty pine and exposed brick in range space (from wall between kitchen and living room) bring the rustic effect into the kitchen.

**looking for a RUSTIC EFFECT? here it is**

Notice how low brick-edged planting space helps to bring out the down-to-earth lines of the house. Eave treatment does the same thing.

**TRANSPLANTING?**

Keep

**Clinton Welded Wire Fabric**

in mind

Build your plant to last... specify concrete reinforced with Clinton Welded Wire Fabric. For industrial buildings, commercial and residential construction, builders everywhere prefer this superior reinforcing fabric... here's why:

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

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

If you would like detailed information on Clinton Welded Wire Fabric and its many applications, write the office nearest you.

The California Wire Cloth Corporation, Oakland, Cal.
The Colorado Fuel and Iron Corporation, Denver, Colo.
Wickwire Spencer Steel Division, New York, New York
HERB BRAMMEIER, Jr.

"Her act is really clicking now that everything hinges on Hager!"

FREE! If you enjoyed laughing at Herb Brammeier's mirth-making cartoon this month, send for Hager's new book containing 28 full-size popular "Everything Hinges on Hager" cartoons! It's FREE! Just address

C. Hager & Sons Hinge Mfg. Co. • 139 Victor Street • St. Louis 4, Mo.
Founded 1849 — Every Hager Hinge Swings on 100 Years of Experience

HAGER HINGES

AMERICAN BUILDER
Barcol®
Electric Operators

for only $230*

...the new model L

for doors up to 12' high

F.H.A. terms available—no down payment—up to 36 months to pay.

Needed everywhere... by garages, trucking lines, wholesalers, laundries—all sorts of commercial and light industrial applications. In the factory the Model L saves heat and speeds plant traffic. The new Barcol door opener's quality features include adjustable slip clutch, thermal overload, positive-reversing 3/4 hp motor, and manual release in case of power failure. Engineered for rugged service and easily applied to either new or existing installations, the Model L saves money every time it's used. Your "Barcol" distributor will install, guarantee and service. To avoid the cold-weather rush, phone or write today.

Call your "Barcol" distributor
(listed under "Doors" in telephone directory)
or send coupon today.

BARBER-COLMAN COMPANY, ROCKFORD, ILLINOIS

Please send Model L specification and installation sheet; also name of nearest "Barcol" distributor.

Name

Address

City & State

BARBER-COLMAN COMPANY, DEPT. Q37, ROCKFORD, ILLINOIS

JULY 1953
"We put a placard on the Electric Range in each model house to show that it's included in all our new houses," says Mr. Michael Campanelli of the Natick Building Company, Natick, Mass. "We consider the electric range an important selling feature. It always attracts the ladies. We always have house sales 'cooking' with the help of this appliance."

"We're an old-time building firm," says Mr. L. E. Breuninger, Jr., builder, of Landon Village, Maryland — "but we've discovered a lot of new 'wrinkles' in home building. One of them is to include an Electric Range in every kitchen, regardless of the type of house or its size. Not all home buyers look for the same construction features—but they all want the advantages of cooking with an Electric Range."

**MARYLAND AND MASSACHUSETTS—**

*they agree on electric ranges!*

Here are two builders in different parts of the country, but they're unanimous on one home feature—Electric Ranges! That's because home buyers in all parts of the country agree that cooking with an Electric Range is both economical and easy, and assures a clean, cool kitchen. Are you taking advantage of this preference in the homes you build? No matter what their location or price bracket, the modern Electric Range can help you sell them!

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 · CROSLEY · DEEPFREEZE
FRIGIDAIRE · GENERAL ELECTRIC · GIBSON · HOTPOINT · KELVINATOR
MAGIC CHEF · MONARCH · NORGE · PHILCO · WESTINGHOUSE

**AMERICAN BUILDER**
Snapshots from the National Homes Album of Progress

1940 — an early National home, very livable today.

1946 — one of first postwar Nationals, a "Longfellow."

1949 — the revolutionary new National "Thrift Home."

1951 — The "Sapota" by National; house of the year.

1953 — newest National, the "Monterey" with Carport.

— more houses than have ever been produced by any other firm, anywhere, say leading magazines

50,000 Nationals constitute a record — and give convincing proof of America's preference for these luxury-styled, functionally designed, precision-made, reasonably priced homes.

National Homes builders buy all quality "brand-name" products and structural parts in one cost-saving package . . . no inventory . . . no warehousing. This reduces overhead and operating cost, and provides faster turnover, greater volume, more profit per dollar of working capital . . . Investigate! Write today!

QUALITY AND STYLE IN ALL PRICE CLASSES

FRED P. TOSCH, Inc., Buffalo, N. Y.

"In the past 2½ years we have built 300 National homes in a fully diversified housing program. We have found buyers of our $6,900 National home as enthusiastic and well satisfied as those who purchased the $14,500 Monterey. This we consider one of the most important-benefits of building Nationals: we can offer quality, livability and good appearance in all price classes, and thereby meet and beat all competition."

— FRED P. TOSCH, President

Best Seller of '53 — the National "CORONET"
Concentrate your advertising

IN SEPTEMBER

It's National Home Month, and the eyes of the American public will be on
New Homes
New Furnishings
New Equipment for Old
It's a great time for RESULTS in new home advertising—Make the most of it!

September is National Home Month—the time for the nation's No. 1 new homes festival. It goes without saying that as an individual builder, lumber dealer or manufacturer you will want to get in on this nationwide demonstration of progress and improvements in the building, equipping and furnishing of the American home.

You may be doing this through participation in the National Association of Home Builders' special National Home program to be staged in your community during the week of September 20-27; or you may be planning a shorter or even longer National Home observance for your own lumber yard or building business. In Chicago, four consecutive weekends have been set aside traditionally as the Chicagoland Home and Home Furnishings Festival, operated jointly by the Chicago Tribune and the Home and Home Furnishings Council of which the Chicago Metropolitan Home Builders Association is a member.

Whatever your plans, the key question is, of course, "What's the best way for me to capitalize on National Home Month?" The very heart of the answer for everyone is simply this: advertise consistently in your local newspaper throughout September, featuring your houses or products under the banner of National Home Month.

Why is this so? Because this year, for the first time, the National Home Week idea is being carried beyond the usual channels of industry promotion, and whether your community has a NAHB-sponsored National Home program or not, there will exist a potential National Home Month market waiting to be tapped.

This year for the first time, a great consumer magazine, Better Homes & Gardens, is taking the National Home observance to untold thousands of prospective buyers who may never even have heard of National Home Week. The impact of National Home Week has not really touched them, simply because they live in communities not reached by those industry channels that have been the vehicle for promoting National Home Week thus far.

But now the extending of the National Home Week idea in time from a week to a month has freed tremendous promotional forces outside the industry. These are forces which can operate effectively on a national scale to blanket the country with the message of National Home Month. Thus will National Home Week's full popular appeal be realized in a way which the home building industry alone could never hope to accomplish.

Other consumer media of stature comparable to Better Homes & Gardens are expected to join the home building industry in promoting National Home Month in 1954.
Get Together With Your Newspaper Publisher

All this adds up to the very obvious fact that September should be the foundation for building your advertising program for the summer and fall, wherever you are located. It means that you will be missing the best home merchandising bet of the year if you do not tie in your houses or products as features of National Home Month.

Everything else you do by way of promotion this season should lead up to that concentration of advertising which will bring big results in September.

Study the situation carefully, and approach the publisher, business manager and/or editor of one or more of your local newspapers. Get them to realize the editorial feature possibilities of the National Home Month idea, as well as the opportunities for increased advertising revenue through a special section of the newspaper based on National Home Month offerings in the community.

A good idea might be to arrange for someone to work with the newspaper editor in securing good editorial build-up material for publication in advance of National Home Month. Quantities of such material are available from NAHB, manufacturers of building materials, home equipment and appliances, from the pages of the American Builder, and from American Builder's booklet, "How to Plan a Successful National Home Month." This booklet will be sent free on request.

In any case, offer to help the newspaper plan a series of editorial features on National Home Month. Offer to cooperate with the paper in helping to convince subcontractors, furniture houses, household appliance dealers, financing agencies and others who have a strong tie-in position in the National Home Month picture. Advertisements from these sources, if arranged in a special way for publication as part of National Home Month, will be as influential as those of the builder or dealer himself in stimulating sales and boosting business.

On the following pages, American Builder has collected good examples of the various kinds of ads which can be used during National Home Month. There may be certain approaches here which will help you to jell your own particular advertising plans as together we all look forward to the Big Month that lies just ahead.
builders' display ads from a special National Home Week newspaper supplement. All follow more or less the same pattern, which is a foolproof one. The important elements are headline, one illustration big enough to be significant, fact-packed copy, directions on how to find the house. The return coupon in the Epson ad is good.

Live in Tomorrow's House

RIVER FOREST'S
NEWEST RESTRICTED DEVELOPMENT

BY

MARTIN H. BRAUN

ZONED FOR RANCH HOUSES EXCLUSIVELY

'Push Button Living'

Two Homes for Sale—Also a Few Choice Ranch Sites Available. Modern exterior of Lannon stone with tile roof. Beautiful living room and dining room overlooking Forest Preserve. 3 large bedrooms. All electric kitchen and breakfast room. 2 ½ bathrooms, fireplace. Gas heat, twenty closets, radio control on garage door. Numerous other features that make this one of the outstanding houses of the year.

CALL OR WRITE

E. T. MARQUARDT & CO.

Inclusive Agent

7500 MADISON ST., Forest Park

F0rest 6-2800

ESiebrook 6-0681

WON'T YOU LIKE

WITH CITY

CONVENIENCES?

MARVIRAY MANOR

Custom Built Homes Montgomery Road and N. Milwaukee

172  AMERICAN BUILDER
HIGHEST QUALITY — LOWEST PRICES BECAUSE WE BUILD SO MANY!

Concrete Products...
- Suppliers to FLORIDA BUILDERS of:
  - Brick building material
  - Concrete blocks

Building Materials...
- Suppliers to FLORIDA BUILDERS of:
  - Concrete building blocks
  - Brick building material
  - Wood building material

Casement Windows...
- Suppliers to FLORIDA BUILDERS of:
  - Casement windows
  - Exterior doors

General Supplies...
- Suppliers to FLORIDA BUILDERS of:
  - Paint and paint supplies
  - Roofing materials

Electrical Work...
- Suppliers to FLORIDA BUILDERS of:
  - Electrical supplies

Fill Dirt...
- Suppliers to FLORIDA BUILDERS of:
  - Fill dirt

Practical design coupled with high quality construction, means economy and ease of maintenance. Florida Builders homes feature the latest in high-quality building materials and workmanship, yet are designed for economy and ease of maintenance. Florida Builders homes have earned national recognition for design, for cost and long term value.

NATIONAL HOME WEEK—SEPT. 14-21!
VISIT FLORIDA BUILDERS
MODEL HOMES 5200 CENTRAL AVE.
OPEN EVERY WEEKDAY 9 a.m. to 9 p.m.
SUNDAY — 9 a.m. to 6 p.m.
FLOODLIGHTED AT NIGHT

28 MODELS! Wide Choice of Floor Plans!
Single — two and three bedroom homes...
Frame, frame or modern-concrete structure.
Florida Builders offers you the largest selection and greatest home values in Florida.
The demand for Florida Builders homes grows steadily day after day. And no wonder! Florida Builders homes incorporate beauty and economy into the kind of home that will give you enjoyment every day and for years to come.

Best of All — Florida Builders homes are pre-engineered to give you high quality, economy and assurance of fine materials and workmanship.

For Investment or Retirement With An Income... Ask about the New Florida Builders Duplex!

GUARANTEED!
Every Florida Builders Home comes complete with a Cuts Of Cost guarantee on materials and workmanship.

FLORIDA BUILDERS INC.
5200 Central Avenue - Phone 1-2665, 1-2666

FLORIDA'S LARGEST BUILDER OF
HIGH QUALITY - LOW COST HOMES

BE SURE TO SEE FLORIDA BUILDERS MODEL HOMES TODAY!

a cooperative full-page
organized by the builder, and for which the builder and his suppliers share the cost
Youngstown Kitchens
IN
3 OUT OF 5
EXHIBITION
HOMES
FEATURE
THE
Sensational New
YOUNGSTOWN Jet-Tower DISHWASHER
New Revolutionary Principle
* Completely Modernizes Dishwashing

Washer dishes automatically
in just 9½ minutes!

See Youngstown Steel Kitchens with the Unique Jet-Tower Dishwasher in Any of These Exhibition Homes!

Let Hotpoint Plan Your New Kitchen, Too!
Scientifically-Planned Work-Saving Centers for Both Kitchen and Laundry Will Save You Work, Steps, and Time Year After Year!

See Famous Hotpoint Quality Appliances Installed In These Model Homes!

AMERICAN BUILDER
can be one of the most fruitful forms of National Home Month activity. Manufacturers aren’t the only partners for the tie-in, as this group shows. The Cincinnati ad (right) lists 14 builders as tied into the local electric company’s light conditioning program as a National Home Week feature.

If you’ve heard, or even the phrase, Light Conditioning, and wondered what it was all about, here’s the answer. It is really very simple. It means putting the right kind of light in the proper places in your home to accomplish a specific purpose.

Two kinds of lighting are involved in Light Conditioning: specific light for seeing, and general room lighting to prevent brightness contrast and as a background for decorating with light. Usually, the general lighting is accomplished with the use of permanent fixtures, while specific lighting is done with either fixtures or portable lamps.

See how Light Conditioning is planned for actual homes in greater Cincinnati.

Sixteen New Homes

LIGHT CONDITIONED

OPEN FOR INSPECTION

The 1950 Home for Better Living

The Union Light, Heat and Power Company
The message of the mortgage-loan institution, too, can be given display value in the National Home Month advertising picture.
If you want more sales volume, the way to get it is to cash in on Chicagoland's huge home spending to be activated by this market-wide promotion, which annually attracts more than 1,000,000 visitors in the mood to buy.

Again for the seventh straight year, the Festival is expected to be a major factor in making Chicago the nation's most intensively pre-sold market for homes and home merchandise.

Get set for the payoff in the Tribune's Festival Supplement

Now is the time to start planning your advertising for the Chicago Tribune's Festival Supplement of Sunday, September 20. This is the special issue which announces the Festival attractions to more than 1,000,000 Chicago and suburban families.

And as Chicago's leading sales producer for your industry, the Chicago Tribune reaches the huge audience that will account for the bulk of the home spending during this event. Your advertising concentrated in the Tribune is the strongest assurance that you will get your full share of the extra sales volume available here.

Plan early for greater sales!

Forms for the Festival supplement will close Friday, September 11. Early planning will mean more sales for you during this event. Consult with your advertising counsel today, or get full details from your nearest Chicago Tribune advertising representative.

More than all others combined!

The following 16 groups representing more than 11,000 members of your industry sponsor the Chicagoland Home and Home Furnishings Festival, in cooperation with the Chicago Tribune:

- The American Furniture Mart
- Chicago Floor Covering Association
- Chicago Furniture Manufacturers Association
- Chicago Metropolitan Home Builders Association
- Chicago Retail Furniture Association
- Chicago Retail Merchants Association
- Electric Association
- Furniture Fabric Men's Association
- Lamp Manufacturers Association
- Manufacturers Agents Club
- The Merchandise Mart
- National Association of Bedding Manufacturers
- National Association of Music Merchants
- National Retail Furniture Association
- Peoples Gas Light & Coke Company
- The State Street Council

Chicago Paper Tribune 86.2% 22.3% 11.8%

Retail and general advertisers of home merchandise in 1952 placed in the Chicago Tribune 86.2% of their total promotion funds in Chicago newspapers. This was 13.9% more than they placed in any other Chicago newspaper—and 13.0% more than they placed in all other Chicago newspapers combined.
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

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
Never before has any oil-fired, forced warm air furnace been so perfectly designed for today's special building demands!

New DELCO-HEAT horizontal furnace solves builder space problem

As homes get more and more compact... as basements, garages, extra rooms are cut out of plans to save money... the problem of where to put the heating plant gets more and more troublesome. Here's one answer with this new, compact, horizontal Delco-Heat unit. Engineered for perfect comfort with Delco-built coordinated controls, high pressure oil burner and stainless steel Quik-Action Heat Transmitter for better combustion, cleaner flame and real operating economy. Shipped assembled for easy installation. Capacity 75,000 btu per hour output. Dimensions only 72\(\frac{1}{2}\)" long by 25" square. For your answers to every kind of heating problem contact your Delco-Heat Distributor. Or write Delco Appliance Division, General Motors Corp., Dept. ABH, Rochester 1, N. Y. In Canada, Delco-Heat, Toronto 13, Ontario.

For a good deal... DEAL WITH DELCO

JULY 1953

General Motors Engineering
Delco Production Skill
...your keys to Sales Success
Erecting structural steel, pile driving, placing and removing forms, loading and unloading construction materials and equipment — these are just a few of the many construction applications of a Bucyrus-Erie 22-B crawler crane. And it can do each job for you at considerable savings in time and money. Here's why:

**High Maneuverability** lets the 22-B work anywhere you want it, whenever you want it.

**Independent Boom Hoist** permits boom angle to be changed while machine is swinging or propelling, while load is being hoisted or lowered.

**Accurate Reliable Boom Control** with both raising and lowering full power-controlled by one lever makes it easy to maintain fast operation. A friction clutch on front drum shaft controls hoisting with speed governed by engine throttle. And, an automatic silent ratchet pawl prevents boom from lowering faster than front drum shaft is turning with consequent light service on brake.

**Open-Throated Boom** makes it easy to rig for 2, 3, or 4 parts of line without taking off sheave guards.

A series of concrete flue blocks laid side by side and on top of each other forms the west wall of the patio, which is the decorative part of a small medical building located in Tucson, Arizona.

This wall indicates an ingenious use of standard structural elements to form the architectural feature. It also provides an effective screen for the large glass area of the waiting room, and still permits a view of the street through the circular areas of the blocks.

These blocks are laid up in cement mortar with joints raked to accentuate the pattern created by the open areas of the blocks. The stained wood beams forming a trellis effect over the patio effectively tie this feature into the main portion of the building which is constructed of plain masonry walls.

A series of planters are placed on each side of the entrance to the waiting room; one extending the full length of the large glass area, the other providing an accent for the name plate, which is secured to the extended rear wall of the planter. Both planters are faced with split adobe soldiers. These adobe brick are used to face the north wall of the waiting room and patio. Quarry tile is used as flooring material for the waiting room and entrance passage. Patio is covered with grass.
NO. D-103 CHIMNEY BLOCK SCREEN

Elevation...

Plan...

Framing Detail...

Elevation...
NOW! Keynote opens the door to real push button value. Excellent in design. Low in price. Enduring and dependable . . . with the outstanding, famous quality of all Edwards products.

GOOD DESIGN! Smart classic simplicity that complements all types of architecture. Slim and streamlined for narrow door trims.

PIANO ACTION! Instant positive contact at feather touch.

NEVER TARNISHES OR CORRODES! Lifetime finish needs no polishing. All exposed parts heavy plastic . . . always in working order . . . never rusts or stains outside of house.

EASY MOUNTING! Convenient surface mounting . . . with just two screws. Covers old doorbell opening. Not necessary to drill or ream special hole for wires.

SMART COLORS! Brown, ivory, chrome*, brass*, with contrasting push-key. Blends with all exterior finishes.

FINE QUALITY . . LOW COST! Outstanding push button in the economy class. Exceptional good looks. Finest performance. Just 26¢ to 52¢ each, depending on color.

*Edwards special "Vaculized" finish gives the lustrous beauty of polished brass or chrome.

ASK YOUR ELECTRICAL SUPPLIER ABOUT KEYNOTE!
NO. G-45 STORE FRONT DETAILS...

Section Thru Entry...

Section Thru Front Wall
"Our #1 sales feature was the complete G-E DISPOSALL® AUTOMATIC G-E DISHWASHER 40-INCH "SPEED-COOKING" G-E RANGE

RESULT: "We sold

MR. D. M. CAPPS SAYS: "Before signing the contract with General Electric, we contacted many other appliance manufacturers and finally decided to go all General Electric because we realized that we would have much better customer acceptance with General Electric Appliances.

"The decision was a wise one then, and is still paying dividends in continuing sales through satisfied homeowners—owners who don’t hesitate to tell their friends how much they enjoy their new home, and their G-E Kitchen-Laundry."

Shown above, Mrs. Hazel J. Spoerlein, a “Golden Glades Estates” homeowner, demonstrates to Mr. Capps how pleased she is with her G-E Kitchen-Laundry equipment.
NO QUESTION ABOUT IT. The General Electric Kitchen-Laundry helps to sell houses faster.

Houses have much greater acceptance when women see all the wonderful, timesaving General Electric Kitchen-Laundry equipment, and learn that it adds as little as $5.82 a month extra to regular monthly mortgage payments.

WE WILL WORK WITH YOU
Your G-E distributor builder specialist will work with you, and place before you all the builder sales experience of the General Electric Home Bureau.

He has complete promotion plans for the opening of your model house—plans that have helped other builders merchandise their homes so successfully. Take advantage of this merchandising program to sell your houses faster in today's competitive market.

See your G-E distributor, or write to: Home Bureau, General Electric Company, Louisville 2, Kentucky.
SAVE LABOR . . . INCREASE PROFITS!
Working side by side on a job—this great American Super 8 walks right away from standard sanders! It cuts nearly twice as fast—and that means nearly double your production!
Figure your savings in time and labor when you switch to the American Super 8. One Super 8 instead of two standard machines. One worker instead of two. More speed . . . more profit on every job for you! Compare the many “plus” features of American Super 8. You’ll find it “tops” for high production . . . low upkeep . . . and long-life dependability.

NATION-WIDE SERVICE
Your nearby American Distributor—in principal cities—has factory-trained men to make repairs pronto when needed! This keeps your sanders producing maximum profits for you. R. E. Shuler, Memphis area distributor, serves floormen from this modern headquarters.

AMERICAN FLOOR MACHINES • PORTABLE TOOLS
The American Floor Surfacing Machine Co. 511 So. St. Clair St., Toledo 3, Ohio.
Please send latest catalog on the following, without obligation:
\[\square\] Floor Sanders
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SEND COUPON TODAY!

35 YEARS OF PROGRESS
Famous American Machines are all engineered, manufactured, sold and serviced by American!
NO LIVING AREA FLOOR SPACE OR WATER REQUIRED . . .
WITH NEW CHRYSLER AIRTEMP AIR CONDITIONERS

This is exactly what Chrysler Airtemp Air Conditioning does for you. You have an installation choice of utility room-attic, crawl space, attic or basement. And the new compressors are air-cooled . . . they don't need water, so there's no plumbing required.

This flexibility means that Chrysler Airtemp Air Conditioning is easier to install . . . easier to sell . . . costs less to operate. And your selling job is far easier because:

- The Chrysler Airtemp name is known through consistent national advertising.
- 15 years of residential experience means a time-tested package.
- Chrysler Airtemp compressors carry a five-year warranty at no extra cost.
- Chrysler Airtemp stands behind its product.

A nationwide authorized dealer network assures prompt service should it ever be required.

Write now for all the facts on the complete line of air-cooled or water-cooled air conditioning for homes . . . Chrysler Airtemp!
Knowing daily what is coming up and who to see to land the business is vital information Dodge Reports will provide for businesses having a stake in building.

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Building business on Dodge Reports is the simple, low-cost, positive way that the leading firms in construction have used for over 60 years . . . among them your competitors.

You insure your business against every other type of loss. Why not insure against the loss of business . . . the loss of the business you might have had is a factor of importance in the growth or prosperity of your business.

For details about Dodge Reports and how you can insure that you will have the opportunity to get the business you want—write today for the free booklet . . . “Dodge Reports—How to Use Them Effectively.”

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Timely, accurate, comprehensive construction news service
THE FIRST STEP IN EVERY SALE

building business
means
DODGE REPORTS!
"You have to get sales started fast in a 650-home subdivision," says Mr. Langford Keith of Roswell, New Mexico, "so we include an Electric Water Heater along with the other electric appliances. It not only helps to sell the houses, but makes for enthusiastic, completely satisfied owners."

Here's why: 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 the modern water heater for the modern house!
IDEA of the month

built-ins for a den

The desk unit is about 9 feet 5\(\frac{3}{4}\) inches long, 3 feet high. Open end of desk top is curved to a radius of 1 foot 6 inches.

Book shelves are cantilevered out from the wall, which in this case is masonry; but the principle could be used as well with wood wall construction. Cut from 2\times 12-inch redwood, shelves have curved ends cut to a radius equal to the depth of the shelves, which in this case worked out to about nine inches.

Shelves are set one foot apart.

The bed is a 3\times 6-foot box built of 1\times 8's, with top boarded over. Top boards are set flush with the 1\times 8 sides. The bed is set on casters to allow a \(\frac{1}{4}\)-inch clearance from the floor.

Lighting for the room is unusual.

Artificial lighting is set behind obscure glass immediately above the clerestory windows in a panel which takes its key dimension from the width of the beam.

—From a house designed by Foster Rhodes Jackson, Chino, California

---

### Detail of Book Shelves

![Diagram showing detailed shelf design and positioning.](image)
SELL THE HOUSEWIVES
DURING NATIONAL HOME WEEK
WITH THE
IN-SWINGING Etling WINDOW

It's the woman who buys! And, the Etling Window is styled specifically for the modern housewife.

Capitalize on Etling Window sales appeal — and its National Home Week consumer promotion, too — by featuring it in your model home or exhibit. Mail coupon below for details.

"Clean-Easy"
PICTURE WINDOWS

The Etling Picture Window features stationary center section, flanked by in-swinging sash. Entire outside glass area can be reached easily from inside.

Cuts BUILDING COSTS

The Etling Window is a complete packaged unit. That means big savings in time and labor for the builder. No planing, fitting or priming. Simply place in opening, square and nail. Factory primed and tested to reduce painting costs, assure trouble-free operation for life.

THE DOUBLE-HUNG WINDOW
THAT SWINGS IN FOR EASY CLEANING

The Etling Window combines the best features of double-hung and casement units. Just press a tab and both sash swing in for easy cleaning. A unique continuous hinge permits sash to slide up and down, open or closed. Single, twin or triple units available.

ETLING WINDOW
BARBERTON, OHIO

Rush details about the Etling Window and its National Home Week promotion plans.

NAME
ADDRESS
STATE

PUT THE ETLING WINDOW TO WORK FOR YOU

* TM Prop. Weather-Seal, Inc.
He said "TIN... BUT HE MEANT "TERNE"

"Have a tin roof put on it," Andrew Jackson once wrote in a letter to his adopted son. He was referring to the historic Hermitage to which he later retired when he left the White House.

Andy Jackson specified a "tin" roof because the word "terne" was not applied to this roofing material until about 1850. Nonetheless, the roof was Terne—a base plate of iron or steel coated with lead-tin alloy. So you see, no matter whether you call it "Valley Tin," "Roofing Tin," or just plain "Tin," you mean Terne Metal, and Follansbee Terne Metal is the one you should ask for by name, to be sure that you are given no substitute.

Follansbee Terne Metal is easy to apply, readily painted in any color, offers endless design possibilities, and is available in a choice of 40 lb., 20 lb., and 8 lb. coating, in widths from 4" to 28". It is the perfect material for weathersealing on any type of roof, for Terne Metal's low coefficient of expansion eliminates the need for expansion joints, regardless of the length of the run.

The roof on The Hermitage was finished in 1835—and is still in service more than a century later. In durability, Follansbee Seamless Terne Metal can't be matched; in tensile strength, dimensional precision and ease of application it is unsurpassed. Investigate this trouble-free, lifetime roofing and weathersealing material for your homes today!

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 & Montreal, Canada.

Mills—Follansbee, W. Va.

FOLLANSBEE METAL WAREHOUSES
Pittsburgh, Pa.; Rochester, N.Y.; Fairfield, Conn.

informality for the doorway

This front door treatment seems just right for the small house which features informality through the use of roof-pitched beamed ceilings with natural wood finish. Such a doorway also complements the picture window and does its bit toward bringing the outside inside the house.

The Semke Construction Co. in Seattle uses this treatment for entries to the three-bedroom houses which it is building on large wooded lots. Variation can be achieved by omitting the muntins, using a single piece of plate glass for the right section up to the extended transom bar. The door itself is gumwood.

TODAY'S "MOST-WANTED" HOMES

ELECTROMODE HEATERS

MODEL WJA BATHROOM HEATER

For BEAUTIFUL BATHROOMS—that add sales-appeal to your homes—install Electromode Automatic Wall Heaters. Choice of gleaming chrome or baked-on white enamel finish to harmonize with other fixtures. Also ideal for nursery or any small room.

Approved by Underwriters' Laboratories

ELECTROMODE CORPORATION
45 Crouch St., Dept. AB-153 Rochester 3, N.Y.
Any carpenter can mortise 75 doors and jambs a day using a hinge router* and template—six times faster than by hand. Stanley Round Cornered Hinges snugly fit this machine-made mortise.

* A Builder’s Kit, made by the Stanley Electric Tool Division, can easily pay for itself on the first job. Its versatile router and plane will speed practically every building finish job.

and don’t forget these other built-in bonus features in all Stanley Hinges:

- Patented, self-seating, non-rising pin always stays securely in place.
- Hole in bottom tip permits easy pin removal.
- Ball or button tip at no extra cost.
- Available prime coated over bonderized base for painting or any standard hardware finish.
- With or without ball bearings.

Get the details on Stanley’s Round Cornered Hinge money-making plan. It costs surprisingly little to put this plan to work for you. Just mail the coupon. The answer will be in your hands in a few days.
no income tax benefits derived from TRADE-INS

By John F. McCarthy
Attorney at Law

From all sides home builders hear that the serious housing shortage which developed during World War II and continued after its termination has been alleviated. The acute demand for houses and apartments has subsided. Home builders are told that sales may become an increasing problem, and that they must be not only builders but merchandisers of their product. They are advised to take a page from the sales techniques of the automobile industry.

Thus the idea of the "trade-in," which is not new, has been expanding in different sections of the country during the past few months. Here the home builder adopts a practice of the automobile dealer. He sells a new house to an existing home owner and takes the owner's existing home "in trade" as part of the purchase price. Then he sells the used home, with or without remodeling or renovation as the circumstances require. This, it is thought, will broaden the home builder's market by more readily making available to him as customers those home owners who need larger, smaller or better quarters. It also will diversify the home builder's inventory of accommodations for sale.

The other day at the Chicago Metropolitan Home Builders Association some builders were discussing the pros and cons of this plan. Some one mentioned that a "trade-in" might result in a tax free exchange of property to the extent of the value of the older house that the builder takes back. Unfortunately an income tax advantage is not among the benefits of the plan.

It is true that the Internal Revenue Code does not recognize a gain or loss on a transaction involving an exchange of property for like property. However, the Code provides that the taxpayer must hold both properties for a productive use in a trade or business, or as an investment. Now, it is true that a builder may own properties for productive use in his business or as an investment. This is the case with his office and material yard on the one hand and his rental housing and shopping centers on the other. An exchange involving such properties for similar properties will not give rise to a taxable gain or loss. However, this is not true with respect to his houses built for sale and his "trade-ins" taken for resale. As to such properties, a builder is a dealer and the houses are his stock in trade, not something held for productive use in his business or as an investment. Thus, the "trade-in" to the extent of its value will give rise to ordinary income just as will cash.

Builders who adopt the "trade-in" plan should carefully keep accurate and complete records of their transactions. They undoubtedly are mindful of the necessity for this and have been doing this insofar as their new houses are concerned. However, their records must show the value of the trade-in, amounts spent in remodeling and renovating and all other costs and expenses. Only in that way will they have readily available the true cost of the "trade-in" and the true net profit realized on its resale.
USE "MIDGET" LOUVERS
For Easy
Inexpensive Ventilation
ONLY THE "MIDGET" LOUVER HAS
THESE PATENTED FEATURES
Slots for Tension and Sure-Grip Swedge Fasteners for tight fit and firm, permanent anchorage.
For efficient ventilation, you can rely on "Midget" Louvers—all aluminum—last forever. 2 styles—indoor or outdoor. 6 sizes—1" to 4" diameter.
Midget Louver Company
8 Wall St. Norwalk, Connecticut

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B O N D S

Save Time and Money... Avoid Mistakes... Use
SIMPLIFIED CARPENTRY ESTIMATING

HERE IS EVERYTHING YOU NEED to know to "take off" a bill of materials from set of plans and specifications for a frame house. Saves you time figuring jobs, protects you against oversights or mistakes that waste materials and cost money. Nothing complicated—just use simple arithmetic to do house carpentry estimating with this easy-to-use ready reference handbook.


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Please send me a copy of Simplified Carpentry Estimating. If after 5 days trial I am not fully satisfied, I'll return it and owe nothing. Otherwise I'll keep the book and send $3.75 plus a few cents for postage and handling in full payment.

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SAVE. Send $3.75 with your order. We pay postage. Handling. Some trial terms.

JULY 1953

Striated Homasote PANELS

The most beautiful decorative insulation ever created! All the advantages of Homasote Insulating-Building Board...plus rich, highlighted texture. For indoors or out. May be stained, painted, cross-wiped. Limitless charming effects. May we send you illustrated literature?

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Importantly different! Satin-finish aluminum sashes glide on nylon shoes over fiberglass tracks...panes lock automatically, can be removed in seconds. No balances, cranks or projecting hinges. And no puttying, ever! These features mean lifetime beauty and saving. Send coupon for complete information.

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My lumber dealer is

JULY 1953
OPEN PLANNING . . . . . .

. . . . . . . . can have privacy too

An assembly of well-placed details which include a low sweeping roof, large glass areas, and an interesting grouping of exterior materials makes a pleasing design package.

A three bedroom 1,100 square-foot house exclusive of garage

The open planning principle is used with excellent results in the living and service portion of these three houses. In one of the houses the principle is applied to the bedrooms which can be consolidated as a playroom during the day.

This dual use of areas is made possible by flexible separations obtained through accordion-type doors that are exposed in the rooms at one or both ends of the opening, or by a double wall with a recessed pocket to receive the door.

This arrangement makes possible the establishment of smaller, more intimate units when occasion demands.

(Continued on page 200)

ARCHITECTS:
Palmquist & Wright, Detroit, Michigan

DESIGNER:
Richard B. Pollman, Detroit, Michigan

View in dining-kitchen showing two-way action of the accordion-type folding door.
FACTS about CAPITOL steel kitchen cabinets

COMPLETE LINE FOR COMPLETE KITCHENS
More than 40 sizes and types—ready to install for new construction or modernization.

SELLING FEATURES THAT MEAN PROFITS
This Capitol Roto-Base corner cabinet adds utility, convenience and smartness to any kitchen.

EASY TO INSTALL
Recessed back on wall cabinets fits onto wood strip nailed to studs in wall. Base cabinets slide into place—held secure by continuous countertop that bring color to kitchen.

PLUS
1. Standardized line
2. Flexibility to meet any kitchen requirement
3. Competitively priced
4. Heavy gauge bonderized steel
5. Two coats of baked on white enamel
6. Quality built

ADJUSTO does the same thing for the modern bath that the swinging spout faucet does for the kitchen sink—one fixture mixes hot and cold water for full stream or fine spray. Saves time and money in installation! Adds finger-tip convenience!

ADJUSTO can be installed after tiling and decorating is completed—eliminating danger of theft or damage.

Only one set of valves—no danger of back siphonage.

ADJUSTO gives a modern look to bathrooms—definitely helps sell houses.

SWING DOWN FOR:

ADJUSTO Model K1460
It’s easy to modernize existing fixtures into tub and shower with NORMANDY
ADJUSTO. Designed to fit most standard over-rim tub fillers.

see your plumber or jobber, or write direct

MILWAUKEE FLUSH VALVE CO.
323 E. RESERVOIR AVENUE • MILWAUKEE 12, WIS.

Please send full details on the ADJUSTO line of fixtures.
Here's a brand new, low-cost plus feature to help new home sales. Easy to install. Gives modern, uncluttered look. Plan for Tel-in-Wall locations when you lay out wiring for lighting fixtures. No extra sawing or drilling required. Also a profitable item for remodeling jobs, motels, apartments, resort cottages. Order through your electrical supply or hardware house. Special introductory offer. Telechron Department, General Electric Co., 17 Union St., Ashland, Mass.

Installs easy as A-B-C

A Attach adaptor plate to 4" outlet box. Fits GE model SP52151 or equivalent.

B Connect wires. Operates on 110 v., 60 cy. house current. Outlets rated at 15A.

C Mount clock. Only four screws to fasten. Movement recesses into wall.
WHEN PROSPECTS LOOK AT NEW HOMES
the Preference is for OAK FLOORING
...SAY CONTRACTORS

88% of America's home builders prefer Oak Flooring in the houses they both build and sell. There are many reasons for this overwhelming preference, most important is the fact that 83% of all prospective homeowners want Oak in their new homes. This means that contractors can sell homes that have Oak floors quicker and easier. It just goes without saying that nothing sells a house faster than a good Oak floor.

From a more practical standpoint the contractor prefers durable Oak because he knows an Oak floor will fit into every building budget—from low-cost home to the elaborate custom-built home. In fact, using only the FHA-approved method* of laying Oak over concrete, even the lowest cost homes can now boast an Oak floor.

A contractor's reputation is built with every home he builds. And when he builds his homes with Oak Flooring he can be sure that his customers will be happy ones—the kind that help create new prospects for him.

"Send for FHA-approved instructions for laying Oak over concrete to National Oak Flooring Manufacturers' Association, Sterick Building, Memphis 3, Tennessee.

Overwhelming Preference...OAK'S 4th Dimension

* ARCHITECTS 80% * REAL ESTATE AGENTS 96%
* CONTRACTORS 88% * FUTURE HOME OWNERS 83%
NEW BASEMENT CONVENIENCE!

SERVICE-WAY gives direct access from outdoors!

Extra-wide opening, with lots of clearance for bulky equipment.
Ample headroom for tall people.

The new Heatilator Service-way makes a basement handy for quick, easy storage of lawnmowers, garden tools, bicycles and storm windows. The extra-wide Service-way opening gives plenty of clearance for freezers, ping-pong tables, and hobby shop equipment. Save steps with heavy laundry on washday.

Adds value to home — worth many times its moderate cost. The Service-way is one of the most desirable features you can add to a modern home. It simplifies dozens of household jobs. Repairmen, meter readers and children with muddy feet can go direct to the basement from outdoors.

Rugged! The Service-way is made of heavy-gauge steel, yet the door can be opened with one finger. Overlapping flanges assure snug fit, keep out rain, snow and wind. Slide bolts lock door securely from inside. Comes fully assembled, ready to install. Made by the makers of the famous Heatilator Fireplace. Mail coupon today for full information.

OPEN PLANNING
(Continued from page 396)

mands. Of extreme interest is the double position folding partition placed in the fireplace corner of the dining-kitchen in one of the houses. By means of a quarter circle turn on the ceiling track, the door can close off the kitchen or living room from the dining room.

In these contemporary-styled houses, the designer has provided accordion-type doors for all, except exterior openings. This eliminates the area required to swing a hinged door. Shelving and divisions in wardrobe closets can be arranged independent of the door unit.

This rambling type house covers an area of 1,706 square feet exclusive of garage and storage. It has three bedrooms, one of them serving as a combination study. The principal unit is a large activity room separated from living portion by an accordion-type folding door. Exterior treatment of house follows along simplified contemporary lines with walls of brick and horizontal siding. Interior view shows possibility of third bedroom arranged as a study.
Heatilator unit assures correct operation, no smoking!

The Heatilator Fireplace unit is sure protection against guesswork, rule-of-thumb construction, and all the mistakes that result in faulty fireplaces and client dissatisfaction. When you specify the Heatilator unit, you can be sure your client's fireplace will be built exactly as you plan it—smokeless and trouble-free.

Assures correct construction. The Heatilator unit is engineered according to established and proved principles of fireplace design. In one compact unit, it provides all vital parts from floor to chimney flue. It standardizes and simplifies construction, and saves time ordinarily needed for detailing the masonry and for close supervision during construction. And the Heatilator unit puts no limit on mantel design.

Puts heat to work. The Heatilator unit draws in air from floor level, heats it, and circulates it to warm every corner of the room. It provides quick comfort in cool weather, and is especially desirable in southern homes, summer camps and basement recreation rooms.

Specified and recommended by leading architects and builders for over 26 years. Sold by building material dealers everywhere.

Rear yard exposure for principal rooms is a feature of this house which contains 1,394 square feet exclusive of garage. Plan is arranged as a potential three bedroom setup with two bedrooms separated by an accordion-type partition. Interior views show the possibility of using folding curtains as separators in bedrooms, kitchen and dining room.

Courtesy New Castle Products
With the nation's finest to choose from, Gunnison Homes, Inc. uses Har-Vey as the best all-around hardware for rolling door installations.

Har-Vey's rust-free aluminum track, self-lubricating bearings, and other quality features offer home-owners a lifetime of smooth rolling without maintenance.

Also, its practical design simplifies construction work and saves builders time and trouble on the site.

Compare Har-Vey's quality features and its amazingly Low Cost! - Completely packaged set of hardware, track and accessories for 2' pocket door only $2.70 List - Fob Destination!

Owners enjoy extra space and convenience and a lifetime of smooth rolling.

A complete line for all your needs

- CHALLENGER SERIES
  for doors to 70 lbs.
- CHAMPION SERIES
  for doors to 100 lbs.
- HAR-VEY HEAVYWEIGHT
  for doors to 200 lbs.

A Famous
Gunnison Homes use
HAR-VEY ROLLING DOOR HARDWARE
for - smoothness - durability - practicality

NOW AVAILABLE

New!

BERMICO FITTINGS
For use with Bermico Sewer Pipe and Perforated Pipe

- Do a complete job with one top-quality pipe.
- Make any necessary direction changes in line easier, faster.
- Meet any installation problem.

After intensive research, Brown Company offers you a new line of Bermico Fittings that insure tight, accurate fits. Manufactured with scientific and technical skill, Bermico Fittings are root-proof, water-tight, resistant to acids and alkalis.

Like Bermico Pipe, Bermico Fittings are made from sturdy wood fibre, impregnated with pitch, and rigidly inspected. They easily meet all requirements of the National Bureau of Standards.

For detailed information and prices write Department BH-7, our Boston office.

*Still in the development stage and not available at this time.
an installation expert looks at year-round home air conditioning

By Lawrence H. Hirschbach

There has been a great deal of misleading advertising in some of the home magazines about cost of systems. The buying public reading some of these ads is led to believe that the price indicated is the total price, whereas in some cases it represents equipment cost only: not even including ductwork, electric wiring, plumbing, etc. In other cases a given price is stated as being the total installed cost, which it is—but it is the builder’s cost, to which he then finds it difficult to add his normal profit.

One advertisement that I saw two weeks ago stated: “in a home priced at $16,500 the cost of a zoned system of air conditioning according to engineers of X Company would be about 2 per cent of the cost of the home.” Air conditioning for $330 in a $16,500 house! Who are they trying to fool? That’s just about the cost of a one-room unit. and all the engineering in the world won’t convince you, or me, that a one-room unit can do a whole house! And where is your profit? As for zoning, I’ll discuss that later.

Guarantees—

Guarantees by the manufacturer require some clarification too. Some offer a five-year warranty on the compressor only—your customer doesn’t realize that the other parts of the refrigeration system are not covered by this guarantee. Some offer an optional five-year warranty. If the contractor doing your work doesn’t buy that warranty for each individual job, there is no warranty. And if he does buy it, he has to pay for it and so do you.

I don’t believe in a five-year warranty on this type of equipment. It isn’t required on a furnace; you don’t get it on your automobile, or the dishwasher, or a television set. If one major manufacturer gives it, all the rest are forced to fall in line, and the cost is passed on to you builders. You don’t guarantee anything else in the house for five years: why should you have to pay for an air conditioning guarantee? And believe me, you pay for it—anywhere from $25 to $50 per unit.

Automatic Change-over—

Some manufacturers are stressing automatic change-over from heating to cooling—you don’t even have to turn a handle, just push a button. Sure, it’s a great convenience, but it costs money for that kind of control, and it’s a refinement that is necessary only in rare cases. The automatic gear shift is clearly stated as an optional extra in all but the highest-priced automobiles, and “hydromatic” air conditioning should be clearly stated as an extra too.

The man who buys your house doesn’t expect the storm windows to change to screens when he waves a wand. And if he has to go downstairs to perform some simple operation on his heating and air con—

(Continued on page 204)
HOW TO BUILD FOR LESS

- Free yourself from high mill charges.
- Avoid long waits for specials.
- Keep your men busy on off days.
- Save hours spent in trips to the mill.

MAKE YOUR OWN

- Commercial sash—double hung and casement
- Trim—including base, shoe, crown and cove mold
- Matching old style millwork
- Raised panel doors
- Storm windows and screens
- Interior paneling
- Interior paneling
- Nosed stair treads
- Lipped cupboard doors
- Special windows
- Drawer fronts

Boice-Crane Large Capacity Precision Shaper

Bigger. Rugged. Low priced. Copes and rabbets at the same time without a stub shaft. Makes longer tenons...up to 2 3/4". Tenons pass under the long swing cope and tenon cutter.

AMPLE POWERING

Top speed is sustained for free, steady cutting. 7200 r.p.m. models, powered with 1750 r.p.m. high torque motors up to 1 1/2 h.p., which out-pull and out-perform any others. 10,000 r.p.m. models, powered with 3600 r.p.m. motors. Opposite hand models in pairs, priced far under average double-spindle shapers.

SAFER TWO WAYS

The only shaper having 1" and 3/8" cutting arbors formed on a solid precision-ground, one-piece spindle. Safer than any two-piece type. Arbor size changed by merely inverting quill. Cutter capacity up to 6 1/4" dia. x 3" wide. The strong 1" dia. spindle and large table opening, which provides for nested table rings, permits "under-cutting" setups, with any cutters up to 6 1/8" dia. lowered below the table and under the stock for greater safety. Vertical spindle travel: 1 1/2".

Boice-Crane

Boice-Crane Large Capacity Precision Shaper

AMERICAN BUILDER

(Continued from page 203)

CONDITIONING

1953 Equipment Better

But everything the manufacturers are doing isn't bad. The new equipment offered this year is better mechanically, is more adaptable, takes less floor space and is priced lower.

Almost every manufacturer now offers hermetically sealed refrigeration systems. No pumping down is required in the fall. No yearly charging with freon is necessary. More trouble-free operation can be expected, since the manufacturer has complete control of fabrication in his own plant and is not dependent on the ability, or lack of it, of his dealer. Hermetic units are generally quieter than open types, take less floor space for the same amount of refrigeration, are lighter in weight and can be manufactured at lower cost.

This year, we see units offering complete flexibility in selection of varying heating-cooling capacity ranges. With some manufacturers' products, it is no longer necessary to oversize the cooling equipment in order to get large enough heating capacity. Economics will force all manufacturers to provide this flexibility for, as you builders become more familiar with year-round air conditioning, you will object to paying for oversize cooling in order to get large enough heating.

Equipment Sizing

Since one B.T.U. of cooling costs you about ten times as much as one B.T.U. of heating, equipment sizing is a very important consideration. As little as one year ago, residential cooling loads were generally being computed by the same method as used in commercial air conditioning. This resulted in oversized, over-priced installations.

Our previous experience at Controlaire with custom-built residences led us to a new basis for figuring loads. On the first multiple development installation we did, using this...
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ADJUSTO-SEAL SALES FOR YOU!

ADJUSTO-SEAL is the world's best weatherstrip...whether it's with metal for door bottom use; or with plastic, for around doors and windows. Wool Pile fabric is self-adjusting to uneven surfaces. It forms a snug, draft-tight seal, yet slides smooth and friction-free over any surface...even rugs and carpets. Won't freeze shut in cold, damp weather. Won't swell and stick when wet. Will not form a set.

CLENCH YOUR FIST...YOU'LL CLINCH THE SALE!

This simple test demonstrates graphically how the thousands of vertical fibers in ADJUSTO-SEAL's wool pile hug the most uneven surfaces to form a tight, draft-free seal.

Customers will be quick to recognize the superiority that this unique method of manufacture gives ADJUSTO-SEAL. No other weatherstrip can pass the "clenched-fist" test.

Get full details on this sure-to-sell product from your jobber, or write:
SCHLEGEL MFG. CO., Dept. AR, Rochester, N.Y. • Oakville, Ontario, Canada

Since 1925

ADJUSTO-SEAL DOOR BOTTOM

JULY 1953

Send for free, illustrated book, "Making Quality Concrete for Farm Improvements." Distributed only in U.S. and Canada.

PORTLAND CEMENT ASSOCIATION
Dept. A7-3, 33 W. Grand Ave., Chicago 10, Ill.

A national organization to improve and extend the uses of portland cement and concrete...through scientific research and engineering field work.
Continued from page 204

new basis, criticism was rampant. We were accused of ruining the industry and the builder was told the system wouldn’t work. The job, however, in actual operation, reduced temperatures 20 per cent more than we had expected. Now we find the pendulum swinging in the other direction. Some of the then noisiest objectors have since come up with “new” methods of calculation that go much too far in cutting down equipment size.

The accepted method of sizing cooling equipment today is based on a 24-hour calculation of heat gain. Since residential cooling loads are predominantly external to the house, and since temperature extremes outdoors are delayed in making their presence felt indoors—delayed by the time it takes to heat up the mass of the building—peak loads tend to be flattened out. This permits smaller equipment, operating for a longer time, to do the best job. If full advantage is to be taken of this time lag and storage effect, it is necessary to leave the air conditioning equipment on for 24 hours a day, controlled by a thermostat.

### Approximate Installed Prices

A comparison of costs per B.T.U. output for heating and air conditioning equipment, exclusive of ducts and registers:

- **GAS FURNACE**
  - 100,000 B.T.U. output: $350
  - Per B.T.U.: $0.0035

- **2-TON AIR CONDITIONER**
  - 24,000 B.T.U. output: $850
  - Per B.T.U.: $0.035

### Zone Control Limitations

As soon as you zone, the 24-hour load basis no longer exists. Zoning is fine where the requirement for cooling is simultaneous with increased load, as in commercial installations, but it is bad practice residentially.

The adverse effect of zoning on humidity is never mentioned. If one half the house is being cooled, what happens to the humidity that is building up in the other half? It spreads, raising the humidity level.

(Continued on page 208)
Handles paper, up to 11 inches wide... writes full 10-3/10 inch line... longest of any 11-inch carriage typewriter made.

This new typewriter has the sharp printwork, the fast action that is characteristic of a fine office typewriter. See the performance of the new Remington Office-riter... you'll be convinced that here at last is a compact, low cost typewriter for the professional and small business office that can handle normal business typing requirements. The new Remington Office-riter has every needed, practical typing feature for general correspondence, invoicing, carbon copies and stencil cutting. Accurate columnar typing is easy with the exclusive Miracle Tab that sets and clears tabulator stops right from the keyboard.

So, if you have been thinking of getting a new typewriter for your office—go to your dealer or to your Remington Rand Business Equipment Center today for a complete demonstration. Be sure to ask about convenient payment terms.

Office-riter makes 10 good carbons, cuts sharp stencils.

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The Homes You BUILD!

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PATENT PENDING
TUB ENCLOSURE

GLAMOROUS! Bathroom Beauty that fits any recessed tub!
PRE-PACKAGED! It's EASY to install in less than half an hour!
INEXPENSIVE! Costs less than half usual custom enclosure price!

SHOWER MAID will make the bathroom in your speculative homes more glamorous... will make the homes more saleable. In SHOWER MAID for the first time the luxury of a tub enclosure is now available at a low price. Installation time is almost nil. SHOWER MAID fits any recessed tub that goes from wall to wall. Frame is mirror-smooth extruded aluminum. Translucent, shatterproof Dow Styron plastic panels.

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GO WELL WITH ANY BATHROOM DECOR

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HERE'S WHY PELLA WOOD CASEMENTS ARE EASY TO INSTALL . . . When received on the job, they are simply set into rough wall openings, caulked and secured in place by steel interlocking fins. Pella Wood Casements are completely assembled and prefitted at the factory — cut installation costs to a minimum. Stock-size units can be combined into hundreds of custom-like effects.

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Please send me without obligation "PELLA CASEMENT Installation Instructions in Full Size Casement Details No. 1050M."

NAME
FIRM
ADDRESS
CITY
STATE

(Continued from page 206)

air conditioning

throughout, and increasing the load on the equipment.

The advisability of zoning in cases where there is a large eastern sun exposure in the morning and a large western sun exposure in the afternoon is granted, but the zoning method mentioned previously is not exposure zoning, it is usage zoning — living quarters in daytime, bedrooms at night. If the equipment is actually of sufficient size to handle one zone on an instantaneous basis, it will in almost every instance take care of both zones on a 24-hour basis.

Case Against Oversizing

Cooling equipment must be sized right. If oversized, not only is it costly to install, it does a poor job. An oversized unit will cause draftiness and stratification of air. It has the ability to bring the temperature down quickly and then remain off for long periods. During these off periods, two things happen. The air stratifies — the cooler air sinks to the floor, the warmer air rises. Discomfort results.

Also, in the off periods, no humidity is being removed. Actually, the moisture condensed on the cooling coil starts to evaporate and tends to raise the relative humidity. You will understand why humidity rises when the system is not operating: if you will think of the humidity in the air as water vapor pressure. This is a real pressure, even though of small magnitude, and is pushing against the walls of the house, trying to go from the high pressure area outdoors to the low pressure areas indoors. This rise in humidity results in further discomfort.

If the equipment is undersized, it just won't give results. Temperature and humidity will not be reduced, operating costs will rise, and you'll have your customers after your scalp.

The Right System

How then, are you to be assured of the right system? The best way at present is to deal only with a contractor with a good reputation,
air conditioning

and preferably with previous residential air conditioning experience. Insist that he handle all the phases of the installation with his own organization so that there can be no buck-passing. Get a guarantee on the temperature and humidity conditions to be maintained. Be sure that he is installing standard equipment of a recognized manufacturer.

If you have any doubts about any part of the proposal, get the manufacturer's representative to look it over. He is interested in selling the equipment and also interested in knowing the job will work.

Good jobs installed this year will set the pattern for a company's success in the future. Operating troubles are trouble for the manufacturer, and cost him money. Don't expect the manufacturer to guarantee anything beyond his own equipment, however. In the final analysis, the over-all system guarantee is the installing contractor's baby.

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", 1 1/4", 1 1/2", 1 3/4" lengths. Advise quantities. Prompt shipment.

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of the shape and design to suit your particular plant layout and steel columns, to support them—bracing and roof purlins, perhaps even crane runways, monorail and hoists supports.

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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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MASONRY FINISHES... that protect and beautify

STA-DRI Mineral Paint
Capable of holding a wall of water nine feet high without leakage, even if applied inside a basement. Contains a mildew inhibitor, stays white when wet, will not rub off, flake, organically deteriorate or disintegrate. Just mix with water and apply with brush or spray. Supplied in beautiful colors and white in convenient 5, 25, and 50 pound packages.

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Hydraulic cement compound stops existing running water or pressure leaks in masonry walls immediately. Superb for plugging weep holes, breaks and cracks in basement walls, pools, cisterns and tanks. Fast-setting, dependable.

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For setting door jams and window frames! No other like it. 4 Plumb, 2 LEVELS. Use either end or edge up. Weights only 3 lbs. 1-Beam type—non-warp, stronger than aluminum. Direct from factory. Patented.

NO FACTORY REPAIRS NEEDED
Spirit tube holder (50c) replaced in a minute with ordinary screwdriver. Screw threads into frame, nut holds with double clamping action. 60" $13.85—72" $14.35 Express paid cash with order, or C.O.D.
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squaring cutting edges of wood chisels

The cutting edge of a wood chisel must be square with the side of the tool, especially if it is the cutting element of a bench or block plane. The essential right angle can be checked with a tri-square. If the blade is not square, polish the high corner of the cutting edge by holding the blade vertically on the face of a course, flat sharpening stone, moving it across the long axis of the stone.

The operator should not change the vertical position of the chisel, and should bear down hardest on the side of the blade from which metal must be removed, keeping a liberal amount of oil on the stone. Check the squareness of the chisel from time to time, removing metal as required until the edge is flat and square with the side.
remodeling tip—
use dry ice to remove asphalt tile

It is possible to lift asphalt tile which has been in position for some time by the expedient of dry ice. Frequently whole tiles can be removed without breaking. The dry ice should be crumbled into fine particles, then spread in a half-inch layer over a small section of the floor.

After allowing the dry ice to stand for five or ten minutes, it should be brushed off to another area of the floor. Strike the chilled tile a sharp blow with a wooden mallet, and the tile will usually come loose. It is also sometimes possible to pry the tile up from the floor.

meeting the problem of moisture under subfloor of basementless homes

A Missouri builder recently erected two basementless houses with concrete block foundations and a three-foot crawl space beneath. In the winter, considerable moisture was encountered on the block walls, sills and floor joists. All foundation vents, with the exception of one 8x16 inch vent, were closed, but this proved inadequate to combat the excess moisture.

The problem was met by observing the general rule of allowing no less than two square feet per 100 feet of building perimeter, plus 0.5 per cent of the building area for ventilation. To prevent water pipes in the crawl space from freezing, the pipes must be covered with insulation.

To avoid condensation of moisture, a 55-pound mineral surfaced rolled roofing cover was placed on the ground in the crawl area, with all joints lapped and sealed. Outside grading was sloped away from the house, so that surface water could not collect on the cover, thereby eliminating the necessity of installing drains. For further protection, a good vapor barrier and adequate insulation were placed beneath the floor boards.

With a simple rig one man can switch Hydrocrane and Hydrohoe booms in less than an hour. This exceptional convertibility can save time—open up additional profits for you. For example you can excavate for septic tanks, dig trenches, foundation footings, or manholes with the Hydrohoe in the morning—convert to crane front end—and erect concrete planking, steel beams or unload supplies in the afternoon.

With this quick, simple convertibility the two front ends can work as a team right on the same job.

In addition to this top speed convertibility, the all-hydraulic Hydrocrane offers you:

★ 50 mph travel speed
★ Quick-set, hydraulic outriggers
★ Simple, hand lever control
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★ Safety and exact precision of hydraulic operation

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Detroit builder tells how to build better and...

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"If you're now using wood sheathing, Bildrite can save you $80 to $120 per home. (In the Detroit area, wood sheathing has virtually disappeared). At the same time, Bildrite increases insulation value of sidewalls and provides tremendous structural strength. What's more, it's the ideal wet-weather sheathing because Bildrite is waterproofed throughout with asphalt. We're using


ONE CARPENTER can sheath 1,000 sq. ft. in 8 hours or less with Bildrite. Cuts sheathing time as much as 43%. Eliminates matching loss and costly waste.


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Please send me the Insulite Idea Kit with full information on these 4 ways to build better and save.

1. How to cut sheathing costs with Bildrite
2. How Shingle-Backer cuts under-course time
3. How Primed Graylite cuts soffit costs
4. How to cut porch ceiling costs with Insulite

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Firm

Address
The idea of building greater safety into homes, now being carried forward on an industry-wide basis, will be advanced considerably in the very near future, predicts Leonard L. Frank, chairman of the NAHB Construction and Design Committee.

Specific recommendations of the committee were explained in some detail by Frank, a Long Island, N. Y., builder, at a recent meeting of the New Jersey State Safety Council Women's Division in Newark, N. J. Excerpts of his talk follow:

**Stairs:** Elimination of stairs by placing all rooms on one level—such as in the ranch-style house—has done much toward reducing the hazard of falls, and can do much more. Where stairs are used, we advocate the short, straight flights such as split-level design makes possible. Winding stairs are abolished in our recommendations.

All stairs with more than two steps require firm handrails, should be well-lighted and covered with anti-slip material. Treads today are no less than 9 1/2 inches deep and the ceiling is at no point less than 6 feet 8 inches above any tread.

**Basement and attic stairs are painted a light color for maximum visibility.** The same rules apply to steps outside the house.

**Traffic and room layout:** Room layout is planned with sufficient wall space so that furniture can be grouped without obstructing traffic. Halls are as short and straight as possible, well-lighted and without projections such as shelves.

**Doors:** Doors open inward and against a wall so they will not stand into rooms when open. Sliding door closets are excellent preventers of accidents. Swinging-door closets have inside handles and a one-inch air space between the bottom and the floor as a safety measure in case a child should lock himself in. The same is true of bathroom doors, where we recommend the type of knob which automatically unlocks when turned from inside.

**Bathrooms:** It is universal practice among the better builders today to equip bathrooms with secure grab-bars above the tub and in the shower stall. Anti-slip bathtub bottoms are recommended, together with anti-slip bathroom floors.

**Storage space:** Adequate closet space is being provided for storage of articles that otherwise might obstruct halls, floors and stairs, and cause falls.

**Headroom:** Bumped heads were a common cause of home accidents in prewar houses, but this is a rare occurrence today. Builders are making their basement excavations two or three feet deeper and are placing pipes and ducts against the ceiling or along walls so that plenty of headroom is provided.

**Windows:** It should be possible to open at least 50 per cent of the window area for ventilation. Upper floor windows are at least 30 inches above the floor today. As an added safety factor, we suggest grilles for low windows in the nursery and...
older people's bedrooms. Types of windows which can be cleaned on both sides from within the house are recommended. An exhaust fan in the kitchen is especially desirable for quick removal of poisonous fumes and unpleasant odors.

**Fire-safe construction:** Built-in fire safety is a primary rule. Walls are fire-stopped to prevent rapid spread of flames through walls and under floors. Space between chimneys and wood structural members is filled with fire-resistant material. Chimneys are lined with gas-tight, flameproof flues. Fire-retardant material is recommended on the ceiling above the furnace.

**Heating equipment:** The heating plant today is gas-tight and flame-tight. Oil burners have safety devices which prevent blow-backs and automatic safety valves are part of the equipment on all gas appliances and heating equipment. The domestic hot water supply system requires a pressure relief valve. A cookstove burning solid fuel should be no closer to the walls than 36 inches and the smokepipe should have at least an 18-inch clearance from the ceiling. A gas or electric stove can have 4-inch wall clearance.

**Laundry equipment:** Laundry tubs are located generally so small children cannot fall into them. Washing machines should be properly guarded to prevent persons getting caught in moving parts.

**Electrical safety:** Enough electric circuits of the proper capacity are provided to avoid overloading any circuit and thus prevent the danger of fire from hot wires or short circuits. Special equipment, such as clothes dryers and electric ranges require heavy duty circuits. In the laundry, electric fixtures should be shockproof porcelain or plastic without pull chains. All wiring must be moisture-proof and the mechanical equipment thoroughly grounded.

Shockproof wall plugs are coming (Continued on page 216)
into use. These are especially good safety devices where children are concerned. The face of the plug turns automatically away from contact with the source of electricity the instant the prongs of an appliance cord are pulled out of the socket. This arrangement prevents anyone from carelessly inserting a knife or other object into the plug. Electric contact is established only when the prongs of an appliance cord are inserted and the face of the plug is turned by these prongs.

Warm air heating: Warm air heat is a health and safety factor that is rapidly coming to the fore in home construction. It is much different from the old style hot air equipment. By using oil or gas-fired furnaces, the danger of burns to an individual and a fire hazard to the home is eliminated. The hazard of burns from an exposed radiator is no longer present. Filtered air, usually part of the modern warm air system, improves the health of the family since dust, pollen and other...

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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.

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Produced in three Models:
Model "F" 27" — Complete ........ $25.55
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F. O. B. Belleville, Illinois

For complete information write
SPECIALTY TOOL MANUFACTURERS 732 S. Illinois St. Belleville, Ill.
foreign matter are automatically removed before reaching the living quarters, and a healthful humidity is maintained. Recommendations made by NAHB concerning warm air installations include proper insulation and fire-stopping of spaces around the warm air ducts.

**Floor finishes:** Special attention is given to floor finishes. There are a number of non-slip materials in use today, and recommendations are made that wood floors not be polished to a high gloss.

**Vermin-proofing:** Sealing out of vermin receives more consideration today than in the past. The tightly-built home of today makes it virtually impossible for rodents or any other type of vermin to get inside.

**Outdoor safety:** This is fully as important to a family as that provided inside the house. Structures are designed today to better withstand damage from the elements than ever before. Water supply is better protected from contamination through builder practices and health department requirements. Drainage sumps are protected by substantial fences so that children cannot come to mishap.

During the course of construction, however, the natural curiosity of children becomes a bane to the average builder. Many thousands of dollars are spent each year for salaries of watchmen just to keep children from playing in sandpiles and climbing around on a partly framed house. Children also cause, unthinkingly, an untold amount of damage through vandalism during the course of construction. On this I can only ask you who are mothers: "Please, for the sake of their own safety and to eliminate one of the builders' headaches, please don't let your children run wild around a construction job."

**Rehabilitation and slum clearance:** With regard to safety in existing residential buildings, there has been a growing laxness on the part of public officials toward ignoring health and safety laws for multiple dwellings. Property owners have allowed their buildings inhabited by families to become frightfully overcrowded and to get into unspeakable disrepair. Plaster is loose with the constant hazard of falling and causing injury. Stairs are rickety and the stairwells constitute fire hazards. Handrails are often lacking. Walls and ceilings are not firestopped. Hallways are dimly lighted or not lighted at all. Heating and plumbing equipment is in bad condition. Garbage is dumped in vacant lots and provides a haven for rats and other vermin which invade adjacent living quarters.

There are countless other violations of the health and building laws which are allowed to go uncorrected year after year. Lax officilaldom is largely responsible, but the citizens of any community where these conditions exist must also share some of the blame. They can force officials to correct these hazards to life, property and health by concerted campaigns through the press and by pressure upon the higher-ups in local government. All it takes is strong enforcement of existing local laws.

---

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Patent No. 2,305,825
Other patents pending
how to install glass blocks

1. Cover entire perimeter of opening with heavy coat of asphalt emulsion.
2. Adhere expansion strip to jambs and head, making certain the strip extends to the sill.
3. Place full bed of mortar at the sill; do not furrow mortar.
4. Set the lower course of block. All vertical and horizontal mortar joints must be full and not furrowed. Steel tools should not be used to tap the blocks into their final position.
5. Install wall ties in horizontal joints where required, as follows:
   a. Place lower half of mortar bed. Do not furrow.
   b. Place wall tie centered in joint.
   c. Cover wall tie with upper half of mortar bed and trowel smooth. Do not furrow.
   d. Wall ties must run from end to end of panels, and

For mason's convenience, glass blocks have marking stamped on the top mortar edge of the inside edge.
where used continuously, must lap six inches. Wall ties must not bridge the expansion joint.

6. Place full mortar bed for joints not requiring wall ties; do not furrow.

7. Follow instructions 3, 4 and 6 for setting succeeding courses of blocks.

8. Strike joints smoothly while mortar is still plastic and before the final set. At this time, rake out all spaces requiring caulking to a depth equal to the width of the spaces. Remove surplus mortar from faces of glass blocks and wipe dry.

9. After final mortar set, pack oakum according to manufacturers' specifications tightly into the jamb and head construction.

10. Caulk panels as indicated on details.

11. Final cleaning of glass block faces is not done until after the final mortar set.

Material courtesy of Pittsburgh Corning Corp.

---

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**THE NEW Tu-Vue MEDICINE CABINET with Locking "Poison Shelf"**  
(specially interesting to mothers)

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. . . Complete engineering layout service at no cost to you! Thirty-one years of roof truss experience to solve your roof truss problems efficiently, economically. We design, build, ship all types of roof trusses from coast to coast. Send outline of your new building to us today!

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**RED STAR THOROLOK**  
Intended for asbestos shingles, on roof or exterior walls of your home or other building. THOROLOK is prepared in six beautiful paint colors. Ask for Color Card 32-C.

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Prepared especially for basement floors which need protection and corrects unsightly appearance. Furnished in six beautiful colors. Ask for Color Card 32-C.

**INVISIBLE THOROCLEAR**  
Clear, water-repellent material for porous brick, stone, concrete, stucco, asbestos siding and shingles, interior plaster and concrete surfaces, where texture and color are to be retained.

To comply with requests of our customers, dealers and distributors, we have completed years of research and tests on three new products to add water-repellent materials and coatings to The THORO System, for protection to any type surface.

**HOW TO DO IT**  
—Write for pictorially described literature

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**GRAND HAVEN STAMPED PRODUCTS CO.**  
GRAND HAVEN, MICH.
how to get random spacing of asphalt shingle tabs

Roofs can be given an attractive appearance by random spacing of asphalt shingle tabs, a method which is expected to appeal particularly to owners of the currently popular one-story, and one-and-one-half-story houses. The informal appearance of the roof pattern harmonizes with contemporary design.

The system illustrated is one of several possibilities which can be utilized. Whatever system is used should conform to these principles:

1. Width of any rake tab should be at least three inches.
2. Arrangement should provide for cutout center lines in any course being located at least three inches laterally from cutout center lines, in both the course above and course below.
3. Rake tab widths should not repeat closely enough to cause the eye to follow a cutout alignment.

As with other asphalt shingles, metal drip edges and an eaves flashing strip of roll roofing should be applied before any shingles are laid.

A metal drip edge for eaves or rakes is made of 26 gauge, corrosion resistant sheet metal. It extends from two to four inches back over the deck, and is bent down to protect the edges of the deck sheathing. The eaves flashing strip of 90-pound mineral-surfaced, or 55-pound smooth, asphalt roll roofing, overhangs the lower edge of the drip edge at least 12 inches beyond the inside wall line.

A starter course is also recommended, consisting of strip shingles laid with their tabs pointing up the roof. Course is applied along the eaves.

Michigan leads the nation in home ownership, with Minnesota second and North Dakota third, according to the 1950 Census of Housing. Michigan claims 67.5 per cent of all its occupied dwelling units as owner-occupied, Minnesota has 66.4 per cent, and North Dakota, 66.2 per cent.
use picture window in dining bay

When living and dining areas are combined, some method of providing an optical separation of the two areas is desirable. This problem can be solved by the use of a large picture window and two double-hung flanking windows, to enclose the dining bay.

Use of such a bay not only increases actual living space, but also provides storage in the two built-in bookcases at each side of the bay. When it is not being used for dining, this area makes a well-lighted space for work or study.

Material courtesy of Ponderosa Pine Woodwork

new ideas in wood

Unusual side for a carport—2x4's in diagonal arrangement

2x12 boards have been angled in a row along the stucco wall of this house in Palm Springs, California. The object is to help protect the house from the desert sun. The boards are nailed to 2x12 plates at bottom and to the overhang of the roof. They are placed out from the wall a little to allow air circulation.

HUNDREDS OF THOUSANDS of Glide-All Sliding Doors are being specified and installed in vast building projects and in single custom dwellings throughout the nation. The reason for this outstanding popularity is that Glide-All Sliding Doors offer everything the builder and architect want... beauty, dependable performance, versatility, low initial cost and low installation cost.

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Pylons take the place of the usual steeple

The Flexicore units were waterproofed both before and after installation but were left unpainted, inside as well as out.
with concrete

Designed by Arthur T. Brown, this striking new building for the Faith Lutheran Church in Tucson, Arizona, combines walls and roof into a single construction using the Flexicore precast concrete unit. The imaginative effect is of a broad flight of steps soaring upward.

The Flexicore units are supported on saw-tooth edged steel trusses which extend almost to grade on the south side of the building and on the north side to a steel truss supported by masonry walls and pipe columns filled with concrete.

Builder was James S. Blackmore.
Build one-piece walls with Homasote "Big Sheets", in sizes up to 8' x 14'! Avoid unnecessary joints and battens. Perfect base for paint or wallpaper. Insulation, quiet and mildew protection combined. ¾ stronger than diagonal wood sheathing! And FHA approved! For specification data, just send the coupon. There's no obligation.

At last—the truly scientific way to sheathe and shingle at one time. 14" exposed shingles or shakes—over weatherproof sheathing—give deep "double-coursed" shadows. Cut application costs 33%. No curling, splitting or rusting. Send coupon for complete details.

Channel studs can be eliminated in solid partitions by erecting the metal lath with the long dimension vertical and fastening it to the ceiling and floor. Ordinarily the standard length of lath establishes the height of this partition at eight feet, plus four feet for ceiling runner and floor base.

For greater heights, arrangements can be made with the lath manufacturer. Temporary bracing gives rigidity.
to the lath while it is being plastered on one side. These braces are removed to permit plastering to a total thickness of only two inches. Although diamond mesh lath is often used in studless partitions, rib metal lath is favored because it is more rigid during the plastering operation.

**safety first for drain traps**

Place a small pan under drain traps above the first floor. The pan can fit between the joists. Its size can be about 14x14x2 inches. This idea came to me as I was cleaning a trap on the second floor. In this case the outlet pipe from the trap was blocked. When I took the cover off all the water leading to the trap overflowed and spotted the ceiling below.—J. Weislo, Indian Orchard, Mass.

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**Structural Corrugated Glass**

Partitions Featured in 532-Home Long Island Development

Quick sales of these fine homes show that the buying public approved the use of Mississippi Structural Corrugated Glass partitions. The rhythmic pattern of the glass adds a note of distinctive styling and the rooms are flooded with softened, “borrowed light” that makes them seem more spacious and cheerful.

Yes, eyers become buyers when Mississippi Structural Corrugated glass, the modern material, is used to add sparkle to homes. Structural Corrugated glass is simple to install . . . so bright to behold . . . and it sells on sight.

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WRITE for free booklets, “Modernize Your Home With Decorative Glass” and “Figured Glass by Mississippi.” Many ideas on ways to use this translucent figured glass in homes and commercial buildings.

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**A BRIGHT IDEA TO BOOST SALES**

Living and dining areas in Morton Brothers Estates, Long Island, New York are separated by bookcases used in combination with Structural Corrugated Glass partitions.

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JULY 1953
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BOSTITCH T5 TACKER

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

T5 loads easily with over 80 staples. Powerful action drives staples with leg lengths from 1/4" to 7/8". Can place staples within 1/16" of inside corners.

BOSTITCH H2B STAPLING HAMMER

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

One blow with H2B drives 1/4" or 1/8" staples into hard or gummy wood. H2B3/4 drives 3/8" staples. Use them to put up insulation, metal lath, cornerite, underfelt or sheathing paper.

An accurate way of cutting asbestos fibre board to any desired length is to place a straight edge, such as a 2x4, along the line of the board to be cut. Score it several times with a sharp, hard pointed awl or a carbide tipped blade or knife, using the straight edge as a guide. Then with the scored line along the edge of the
Using a score cutting jig

bench, hold the straight edge firmly on the line, and
snap off the projecting surface intact.

To save time, when many similar pieces are to be
cut, a score cutting jig is easy to make. It consists of
two metal channels placed back to back, to form a
clamp. Upper channel of jig acts as cutting guide.
Many times in remodeling a great amount of useable space can be had in the attic though it might only have a shuttle opening. Long closets can afford the space needed to build a stair making the attic space useable. A three platform winder at the closet door can usually be made. When the stairway is steep, I find that an adequate hand rail and a light at both ends is a very good solution.—E. C. Powell, Bowling Green, Ohio
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where to install

Application of building insulation in the most strategic locations is essential to maximum comfort and fuel economy in a house. The insulation should form an envelope, separating the heated rooms from the unheated garage, porches and attic, avoiding all possible heat losses. Diagrams below show several of the most appropriate spots which require one or another of the various forms of glass fiber insulation, whether loose wool, batts or rolls.

Insulate attic floor, or if attic space is heated, insulate knee walls and header ceiling, leaving space between them and the rafters for ventilation.

Insulate dormers, including exposed wall and ceiling sections and narrow spaces around windows.

Insulate unheated garages from adjacent rooms of the house which are used for living quarters.
Concrete floors laid on the ground have high heat loss at the edges. Insulation installed around the perimeter of the slab cuts heat loss.

Insulate floors over all unheated spaces, such as porches or floors over unexcavated sections.

covering nail holes in knotty pine interiors

To preserve the natural color and texture of interior wood walls made of knotty pine, they may be successfully finished in a clear lacquer. However, before applying the lacquer, it is important to cover up the unsightly nail holes which would be even more conspicuous beneath a lacquer coat.

One method is to use a cork borer or plug cutter, cutting out plugs from extra matching pieces of lumber, fastening the plugs in the holes with cellulose cement, and sanding the ends smooth.

Another method is to fill the holes with plastic wood putty of the color desired, or use a standard paste wood filler. Also recommended is preparation of a small amount of sawdust from the pine, working it into a stiff paste with varnish or glue, inserting it into the holes. In any of these methods, allow the putty, filler or paste to dry thoroughly before applying the lacquer finish.

JULY 1953

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