Here's why NUTONE started a NEW TREND IN HEATING BATHROOMS!

![Image of a woman holding a child in a bathroom setting, with a heat lamp on the ceiling.]

**Safety**

NO DANGER OF SHOCKS — OR BURNS — because NuTone Heat-A-Lite is built into the CEILING ... out of harm's reach — children can't poke fingers or toys into element. No danger of overheating. Underwriters Laboratories listed.

**Economy**

COSTS LESS TO OPERATE ... EXCLUSIVE NuTone Ceiling Re-Circulating Fan prevents heat loss. Warm air, usually wasted near ceiling, is forced downward. No need to overheat entire house in fall or spring — get EXTRA HEAT wherever wanted.

**Comfort**


---

NuTone Heat-A-Lite answers the urgent need for Greater Safety in Bathroom Heating.

**WHY TAKE CHANCES?** Don't let your Bathroom be the most dangerous room in the house.

Any electric heater on a wall — when exposed to the innocent reach of a child — becomes a "danger trap".

PLAY SAFE. Install a NuTone Heat-A-Lite IN THE CEILING ... OLD FASHIONED "body level wall heaters" ... waste valuable wall space ... cause uneven overheating on one side of the body, while the other side is cold.

GET "BALANCED HEAT" all around the body with NuTone Heat-A-Lite ... the only Bathroom Heater that RE-CIRCULATES the warm air which is usually wasted near the ceiling.

Contact your nearest wholesaler for a free Heat-A-Lite demonstration. Ask to see NuTone's complete line of Door Chimes and Ventilating Fans, too. or write for catalogs and installation data to NuTone, Inc., Dept. AB-3, Cincinnati 27, Ohio.
here's why

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wear the kwikset
"400" line

From its first day in business
KWIKSET has offered architect, builder,
dealer, and home owner a top quality lockset
at a competitive price—and backed its product
with an unconditional guarantee.

You get 5 pin-tumbler security...rugged precision
construction that assures years of trouble-free
service...handsome, durable finishes...fast, easy
installation (with cost savings up to 20%)...

these are some of the reasons why the
KWIKSET "400" Line means more actual
profit for builders everywhere.

For beauty, for dependability, for
economy—specify and install the
KWIKSET "400" Line.
An Important Announcement about a new concept in American living

- DESIGNED BY

GEORGE NELSON

- THERE IS A VAST MARKET, virtually untapped, for excellently-designed contemporary houses in the medium price range. American Houses, Inc., realizing this, commissioned famous stylist George Nelson to prepare plans for just such a house.

The "Freedom", with three generous bedrooms, is the result. Its airy, open plan brings a feeling of spaciousness, and simplifies housekeeping. Year-round air-conditioning designed into the house by Carrier assures comfort and helps reduce drudgery still more. A complete Youngstown Kitchen is another work-saving element.

Countless other features add immense popular appeal to this house, making it look like a custom-designed home. Among them are a storage wall with a drop-leaf desk in the living room, a built-in vanity in the master bedroom, twin washbasins in the divided bathroom, ceiling-high closet doors in all the bedrooms, a glass-walled family room, a carport and an outside storage room. The "Freedom" is a truly unusual home value, tailor-made for the thousands of 2-bedroom homeowners who now need larger quarters.

American Houses is backing builders of the "Freedom" with a powerful local promotion program, including large space newspaper advertising plus abundant help in all other phases, tailored to fit individual needs.

For further information on the "Freedom" and its variations, plus local promotion plans, send the coupon today! You will find the American way to greater sales is the profitable way for you!
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PRODUCT NEWS from American-Standard

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

HEATRIM PANELS are the modern way of providing comfortable, even, convected warmth throughout an entire room. They are specifically designed for forced-circulation hot water heating. Taking the place of conventional wood baseboards, Heatrim panels save floor space, leave walls unbroken, permit greater latitude in decorating. They can be installed against existing walls or recessed to the depth of the plaster. They are perfect for use under picture windows ... are also much in demand for premium-space installations.

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


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AMERICAN BUILDER
Is this a

NEW MARKET?

A SUPERHIGHWAY with four-leaf clover intersections is scheduled for projection this spring through an old section of Toledo, Ohio. The project required condemnation of about 200 land parcels, most of them accommodating houses ranging in age from 30 to 60 years. After settlement with the owners, the State offered the houses to the highest bidders. There were purchasers. Among them were Paul Fuller and George Schuster, local builders and realtors. They had purchased about 20 of the houses up to January 30, selecting only those which they deemed restorable.

At the same time they purchased improved lots on a wide street near the edge of the city. Each house was jacked from its old foundation, wires along the path of movement (about two miles) were raised for clearance where necessary, and the houses moved to new concrete block foundations. New heating, plumbing, wiring and porches were installed. Once settled on their new foundations, the old houses were re-sided where and when necessary, painted and reroofed. All have three to four bedrooms, one to one- and one-half baths and new kitchens. They are selling for an average of $11,500. They provide completely refurbished adequate housing with an estimated effective life of another 50 years for large families with low incomes.

Fuller and Schuster, making the natural mistakes of pioneers, netted much less than the time and hazards entitled them to. But they did create what, as far as we know, is the first housing development of used houses. And in doing it they raise a question that builders, the FHA and the VA in countless other parts of the country will have to answer with increasing regularity in the next decade as more of these highways develop, and as slum redevelopment activity increases. The question for the builders is: Can the lessons of Fuller and Schuster be applied profitably toward conservation and sale of similar properties? The question for FHA and VA is how to apply standards for such operations so that young, large and low income families can be given adequate space at a price they can afford, and with the advantages of FHA and VA financing.

We believe that the Fuller and Schuster operation is worth close study by housing authorities from both social and economic viewpoints; and we recommend that FHA and VA examine every detail of the operation.

In Chicago a similar highway development on the far northwest side resulted in making purchase of the house open to the owner after condemnation. Experience to date indicates that the owner can purchase a new lot, move and refurbish the house and come out even, or money ahead. In these cases the old houses are being spotted on scattered lots.

Both the Chicago and Toledo operations open a new field of housing activity worth further investigation.

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MARCH 1954
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MARCH 1954
A survey just completed by American Builder indicates that about 70 per cent of the builders expect to construct more dwelling units in 1954 than they did in 1953. Final results of the survey showed that home building this year is likely to exceed '53 by about 10 per cent.

Besides building new houses, the builders surveyed also are engaged in the construction of commercial, institutional and farm buildings, and in remodeling existing dwellings and non-residential structures. They foresee good business in these categories in '54. The result should be brisk business for lumber dealers and producers of building materials. Sales may well be above those of 1953 when more than one million new dwellings were built, as well as tens of thousands of commercial, institutional and farm buildings, plus a substantial amount of remodeling.

A factor that will facilitate the construction of new homes is an anticipated increase in the supply of mortgage money. During the last half of 1953, a shortage of mortgage money caused housing starts to drop slightly from the high levels of 1952. Even with a tight mortgage market, current expenditures for new housing have been at the remarkable rate of $1 billion monthly.

**New Government Plans**

Although the volume of home construction is running at a satisfactory rate on its own momentum, the housing program recently announced by the housing industry and the federal government carries forward the idea that more Americans should have the opportunity to become home owners.

It is hoped the program will bring home ownership within the reach of the lower income groups by providing 40-year mortgages on low-priced houses. This is proposed as an alternative to public housing. However, the industry agrees that some public housing may be necessary for those who are reluctant to enter into 40-year mortgages.

**Increase in Building Costs**

The year 1953 marked the twentieth year of constantly rising costs in the building industry, and it is difficult to see any prospects of a downturn. The cost of new homes has kept pace with other commodities and services during this period. A series of cost figures maintained by Roy Wenzlick and Company, real estate economists, on a standard six-room frame house built in St. Louis, show the cost to have been $7,300 in 1943. In 1953 the cost was $16,400, considerably more than double the 1943 figure.

A substantial part of this increase occurred between 1950 and 1953. During those three years the costs jumped from $13,800 in 1950 to $16,400 in 1953—an increase of almost 20 per cent.

**Power Equipment Ownership**

Few people realize that the building industry is now highly mechanized, compared with the handcraft methods used thirty years ago. If this were not true, houses would cost as least 30 per cent more than they do, and home ownership would be denied a large segment of the American public.

Queried as to the type and amount of power equipment owned, the builders we surveyed revealed that:

- The portable electric saw was the most popular power tool. The 1,093 builders who replied own a total of 2,654 such saws, and one out of every four plans to buy new ones this year.
- The builders reported owning 605 radial saws with plans to buy 130. They own 19 masonry saws and plans to buy 30 more. And they own 129 chain saws and will add 34 new ones to their stock this year.

**Remodeling Activity High**

Sixty-eight per cent of the builders queried are engaged in remodeling. One builder keeps three men busy on remodeling—another has over two hundred contracts for remodeling apartments.

The United States Chamber of Commerce says that "the enormous size and the even greater potential size of the demand for residential repair, improvement and alteration are now well recognized. The probable current expenditure for this type of work is around $6.6 billion, with the possibility of pushing the total 30 to 50 per cent higher."

Many communities are making intensive efforts to eliminate slum areas. As their plans materialize, the markets for materials and the demands for the services of builders from this quarter will increase. This activity, added to an anticipated increase in home building volume and the expansion of the fix-up market, contribute generally to the good business outlook for all concerned in 1954.
"KEEP 'EM BUYING. Home hunters are hunting values now, and that doesn't mean just a low price, either. You have to put extra value into a house today to sell as many homes as you used to. That's why we use at least 12 Post-advertised materials and appliances in our homes. Their names say 'quality' to a customer better than any other words we can use." (Manufacturers of building materials, equipment and fixtures place more advertising dollars in the Post than in any other consumer magazine.)
NEAR-RECORD HOME PRODUCTION in 1954 is now being predicted freely throughout the North, due to:

1. Big crowds of homeseekers visiting new model homes.
2. Steady improvement in the mortgage money market.
3. Prompt start of legislation in Congress (Feb. 12) to carry out President Eisenhower's housing program urging such incentives as lower down payments and longer terms.

Starts this year will increase 60,000 to 100,000, believes Rodney M. Lockwood of Detroit, member of the President's advisory committee on housing and former NAHB president. Americans have been on a savings spree for three years, he said, and "it is time for them to get on a spending spree." Aggressive selling will loosen up high individual savings, in his opinion.

At the start of the year, another 25,000-plus new homes were foreseen for the Detroit area. By the end of January, applications in the local FHA office were up 147 per cent.

MORE WORK ON DRAFTING BOARDS is the word from architects to Walter H. Stackler, president, Long Island Home Builders Institute, who reports that it looks like another 40,000 units this year in his territory. Last year's output was cut 10 per cent to 36,000 homes by a nine-week teamster's strike.

St. Louis, beset by a similar strike for three months last year, expects to better its 1953 record of 10,000 new units.

The Chicago area, out to better its 40,000 mark of last year, listed 2,638 permits in January, nearly double the comparable 1953 figure.

TREND TO DUPLEX UNITS grew rapidly last year in Milwaukee, is expected to be stronger than ever this season, and aid in assuring another 7,500-home year.

A 10 per cent rise to over 10,000 units looms in Pittsburgh, due to general business conditions and anticipation of broader FHA benefits, according to A. M. Rearick, president, HBA of Metropolitan Pittsburgh.

Rhode Island can look for 3,400 new homes this year, reports Anthony Viola, past president of the state association, particularly if Congress enacts the new housing program.

Rochester, N. Y., sees another banner year of 3,000 new homes. Alvah B. Lawson, president, Rochester Home Builders Association, says: "we have a steady town here, employment is good, no layoffs are in sight and the banks co-operate very well."

STRONG SUBURBAN TREND keeps housing going at its high pace, believes Herman Greenwood, Indianapolis realtor. It will continue for years to come, he said, explaining that families want real suburban life, not rural, with shopping, churches, schools, and other facilities handy.

ONE-YEAR GUARANTEE BOND is now given buyers by members of the New Jersey Home Builders Association. Issued in the amount of $2,000 for each house, the bond protects buyer against defects in roof or basement construction, heating and septic tank installations.

PERMANENT PARADE OF HOMES opposite its Hamilton, Ohio plant pays dividends to Pease Woodwork Company, maker of prefabricated homes. Nine units ranging from 792 to 1,463 square feet are shown, with slab, crawl space or full basement construction. Over 100,000 persons visited the homes last year.
Easier installation ... easier sales
with Lupton Aluminum Casements

Houses in Meadow Lawn are small, neat, attractive and easy to care for. One good reason for reduced upkeep is the use of Lupton Aluminum Casements. Owners — and you — are free from the painting nuisance. Lupton Aluminum Casements will never need paint.

Appearance is appreciated, too. Neutral-tone Lupton Aluminum Casements, with trim, slim frames and muntins will blend with any color scheme. And, unaffected by weather, will keep their beauty.

Here are windows that will always work smoothly, open easily, close snug and tight.

Install Lupton Aluminum Casements in your houses. You’ll gain increased good-will through customer satisfaction. You’ll gain in time and labor costs, too. Precision-engineered, designed and developed with the skills gained through more than 40 years experience offer you one of the best buys on the market. Installation is simple, frames are light — it’s a one-man job. Get full details today. Write for complete catalog.

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NOISELESS, FREE-WHEELING TRACK AND WHEEL

This track and wheel are made for each other! See how the wheel rolls on the sides of the track—not the bottom! This not only centers the wheel, but keeps it riding above dust and lint that may accumulate in the groove. Rustproof aluminum track, plus the lifetime nylon wheel and solid brass wheel bearing, guarantees you quiet, smooth, trouble-free operation.

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At last—sliding door hardware with built-in, positive protection against track jumping! And there's no extra work, nothing for you to do—because this exclusive M-D design stops track jumping with a built-in bumper ridge that makes it impossible for the wheel to lift out of the track once the door is in place over the floor guide. It's simple, sure, foolproof!
ATTENTION DEALERS!

STOCK-DISPLAY
CASE & ACTUAL
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FREE WITH THIS
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10 PIECES - 4' EACH
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10 PIECES - 6' EACH
10 PIECES - 8' EACH
TOTAL TRACK - 230'

40 boxes of complete hardware for
1 1/4" doors.
10 boxes of complete hardware for
1 3/8" doors.

★ ATTRACTIVELY
DISPLAYED
★ INCREASES
IMPULSE
PURCHASES
★ TAKES SMALL
SPACE

COMPLETE HARDWARE FOR
DOORS 3/4" TO 5/8" OR
DOORS 1" TO 1 1/8"

Hardware comes completely packaged for a
pair of 3/4" doors, or for a pair of 1 1/8" doors.
Each package contains 2 front door hangers and
screws, 2 rear door hangers and screws, 2 door
guides and screws, as well as sufficient screws
for mounting track. Cartons are clearly marked
for 3/4" doors or for 1 1/8" doors.

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Look to Macklanburg-Duncan for
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ceived. Macklanburg-Duncan
products are fast sellers, nation-
ally advertised.
Dealer Conventions Stress Added Services to Fit Changing Customer Needs

In the future, retail dealers must give the customer improved service and discard obsolete merchandising and selling practices, D. B. Taylor, president of the Northwestern Lumbermens Association said in keynoting the 64th annual convention of the organization in Minneapolis in January. Contractors should not be given such large discounts, he warned that they make more on a bill than the dealer.

At the same time, Charles LeBlanc, Research Institute of America, warned dealers that they faced an era of tougher selling and must develop a strong sales approach to surmount the obstacles.

"Sell color, not just paint in cans," was the advice of Dr. J. S. Long, chemical director of the Devoe & Raynolds Company, to help increase lumber yard profits.

Federal Housing Commissioner Guy T. O. Hollyday reviewed President Eisenhower’s housing program which was later introduced in Congress.

In New York late last January, J. Harold Stacey, retiring president of the Northeastern Retail Lumbermens Association, urged that dealers apply "the big four for ’54—study, show, sell, serve" to assure another successful year. "We must visualize the needs of our public and take into account changed buying habits," he said.

Nearly 5,000 registrations were taken at Northeastern’s 60th annual convention, which adopted resolutions calling on government to provide

Changing the Guard

Stanley W. Cowherd, 1953 president of the Home Builders Association of Greater Kansas City, hands gavel to Larry Winn Jr., new leader, at installation rites

Chosen by Northwestern Lumbermen


Achievement Award


Long Island Builders, Labor Team To Present Hospital Prize House

Long Island Home Builders Institute joined with 18 building trade unions to build a large three-bedroom ranch house with quarter-acre plot and turn it over completely furnished to the Long Island Industry Hospital free of charge. Designed by Rudolph A. Matern and Herman F. York, it was decorated by Beatrice West with materials from 278 separate sources. Contributions from persons who wished to see the house and perhaps win it helped the builders reach their $100,000 goal for the hospital fund. Winner of the house was picked at the NAHB convention where the proceedings were televised for later transmission in New York over the Tex and Jinx McCrady program.

Another hospital house is being planned for showing next fall.

Exciting sidelight to NAHB convention occurred when Emanuel M. Spiegel picked winner of $60,000 Hospital Prize House for Long Island home builders


courier March 1954
Rochester Fetes Presidents

Prior to his election as NAHB president, R. G. "Dick" Hughes spoke at 20th anniversary meeting of Rochester Home Builders Association. From left to right are incoming president Alvah B. Lawson, Mrs. Lawson, Hughes, Mrs. Arthur M. Windsor, retiring president Windsor, executive secretary William J. Hill, Mrs. Hill.

Woodwork Jobbers Change Name

The Woodwork Jobbers Service Bureau has changed its name to Northern Sash & Door Jobbers Association in an action taken by William C. A. Costello, president, and the board of directors.

Elected Milwaukeeans

Phil Herriges, new president of Milwaukee Builders Association, surrounded by his officers at installation dinner-dance Jan. 13. Others include Frank W. Beverly, first vice president (left) and Charles W. George, second vice president. Standing, Roy F. Healy, executive vice president, and Robert Grillhose, secretary-treasurer.

Detroit Award Winner Was Featured in January Issue

The "Midwest Contemporary," low-cost home of modern design which tied for first place in the Detroit area National Home Week promotion competition co-sponsored by the Minneapolis-Honeywell Regulator Company and the National Association of Home Builders, was selected last fall by American Builder as its featured "blueprint house in the January convention issue.

Built by Edward Rose & Sons and one of Detroit's current "best sellers, the house shared award honors with the "T. V. House" developed by the Fred Garling Company.

Following publication of the Rose story, in full color and with complete blueprints, Don Munro, sales manager, said: "Winning this honor was one of the greatest thrills we have ever had. When you struggle and sweat and plan like we did to produce this home, it is very gratifying to have these efforts honored by such outstanding building authorities as the editors of American Builder."

Efforts Win Praise

Ned A. Cole, Austin, Tex., builder-architect, receiving air conditioning industry's testimonial plaque from A. B. Newton, chief design engineer, Coleman Company, and Don V. Paterson, president, Typhoon Air Conditioning Company.

Mrs. Henny Mollgaard receives Schroedel Traveling Trophy as outstanding builder member of Milwaukee Builders Association from its donor, Francis J. Schroedel, retiring president.

Talking about FAST EASY installation

HARLOC FACTORY PRE-ASSEMBLED

Pacemaker

Saves The Minutes That Save You Time That Saves You Money

Pacemaker is the ultimate in beautiful hardware that is easy to install. Precision-built and free of die-casting. Installed in three easy steps.

Illustrated, the Shelton five pin tumbler key-in-knob lock set with decorative entrance handle.

Write for literature and prices on the Pacemaker line.

HARLOC PRODUCTS CORPORATION
NEW HAVEN, CONNECTICUT

MARCH 1954
Do you have trouble sawing these materials?

Only
"SKIL has the answer" because only SKIL offers you all this!

9 Extra-Heavy Duty SKIL Saws with high-torque worm drive. The favorite type for over 25 years on heavy ripping, tough metal and compositions that no other saw can handle. Absolutely minimum maintenance in heaviest service. Blade diameters from 6" to 12".

3 Heavy Duty SKIL Builders Saws with high blade speed. Low in cost, light weight and easy to handle. The new SKIL Builders Saws are ideal for quick cut-off work and for use with SKIL abrasive cut-off wheels. Blade diameters: 6", 7½", 8½".

98 Specially Designed SKIL Blades and Abrasive Cut-Off Wheels carried in stock by SKIL Branches and distributors. With the proper SKIL Saw you can efficiently cut almost any material encountered in the construction field with substantial savings in time and money.

"SKIL has the answer" for builders everywhere

Housing Project
"With excessive abuse and constant use, SKIL tools require less maintenance..." says Thomas O'Donnell, field superintendent, Construction Company of Maryland, Baltimore, Md. "Our current project is a housing project for low income groups," Superintendent O'Donnell adds, "and I estimate we've cut at least 2,000,000 board feet on this job, using SKIL Saws. In my book, that's performance!"

Commercial Construction
"Cuts anything, gives greatest accuracy. We use SKIL Saws exclusively!" — says E. J. Griser, foreman, Elwin G. Smith & Company, Emsworth, Pittsburgh, Pa. — Specialists in roofing and siding for commercial and industrial buildings. This firm cuts aluminum, asbestos, cement products, plastics, plastic skylight material and galvanized sheet metal. "We've had such great success with SKIL Saws that we've standardized on this famous make," says Foreman Griser. "We now have 100 SKIL Saws in constant use."

Uses 18 SKIL Saws
"We can see the cut... produce 30% faster with SKIL Saws" — says James Morrison, foreman, Joseph R. Farrell, Inc., Philadelphia, Pa. "We have 18 saws, all of them SKIL," says foreman Morrison. "Position of blade and balance give us maximum accuracy, easier handling and faster production. And the main reason we swear by SKIL Saws is the worm gear—it gives us more than enough power for tough cutting!"

Cuts Asbestos Cement
"Give Me SKIL Saw Power For Fast, Clean Cuts In Asbestos Cement" — says Joseph Derry, Graver Construction Company, Chicago, New York, Houston, a division of Graver Tank & Mfg. Co., Inc. "Cutting this asbestos cement roofing would be tough going with ordinary saws, ordinary methods," argues Joe Derry. "But it's no work at all to make a fast, clean cut with the power and balance of this "Model 825 SKIL Saw with an abrasive disc."
WE'LL HELP YOU WITH YOUR TOUGH CUTTING PROBLEMS

FREE! Test Cutting Service on your problem materials. Send us samples of materials and details of any cutting problems on your construction jobs. We'll tell you the SKIL Saw and blade or disc that will best answer your problem.

FREE! Ask for a demonstration—and a FREE Trial—of the SKIL Saw with the exact SKIL Blade or Cut-off Wheel to solve your toughest cutting problem.

FREE! New SKIL Blade Selector to help you solve cutting problems in your plant. Quickly shows you the blade and SKIL Saw that will most efficiently cut practically every material used in construction. Ask your SKIL Distributor for your selector or send coupon below.

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For High Quality Woodwork
... Without High Cost

Specify ARKANSAS SOFT PINE
Satin-like Interior Trim

Here's top quality woodwork equal on all counts to custom millwork, but providing the crucial advantage of sharply lower cost through quantity production. Crossett supplies this highly refined trim in A. I. A. approved contours or standard patterns, affording you the widest choice.

Truly Satin-like, Arkansas Soft Pine's soft texture works easily to close detail, contours matching exactly at miters. Free from pitch and supplied at specified moisture content, the wood doesn't shrink or swell. Thus stabilized, it absorbs primers evenly, holding finish coats uniformly smooth, permanently free from raised grain.

FOR BUILT-INS AND STAIR WORK

Of the same guild-craft refinement, are Crossett's related Arkansas Soft Pine products for built-ins, stair work and the like, identified by these trademarks and available at your local lumber dealer's.

CROSSETT LUMBER COMPANY
A Division of The Crossett Company
CROSSETT, ARKANSAS

NORTHERN NEWS (Continued from page 15-N)

Roamin' the North—
Cincinnati will stage its first Parade of Homes during National Home Week next September, in which all houses will be light-conditioned, reports Wilford H. Miller, president. To stimulate ideas, HBA of Greater Cincinnati members will spend March 23 at General Electric's Nela Park in Cleveland . . . Cincinnati home show, April 3-11, will feature house winning Carrier Weathermaker home design contest, says Joseph F. Carabin, chairman . . . George M. and Alfred Gross, who as Gross-Morton built over 15,000 dwellings units on Long Island, have formed the Gross Brothers Corporation in New York City to engage in large-scale apartment work . . .

Seventy-four builders attending the first Wisconsin Builders Conference sponsored at Stout Institute, Menomonie, Wis., heard that modular techniques will help them save valuable construction time and can be applied to any design that may come off an architect's drafting board.

G. S. Clark of the Homasote Co., modular control authority who authored American Builder's extensive series on the subject last year, and R. F. Luxford of the Forest Products Laboratory conducted the shop courses . . . Ezra Osterhaus will head the Minneapolis National Home Week Committee for 1954 . . .

Arthur Olesen, '54 head of the New England Council of Home Builders, is planning the group's first two-day convention for October. Hotel Statler, now nearing completion in Hartford, Conn., will be the setting . . . Burton B. Batty of East Providence is the new HBA of Rhode Island leader. His slate includes Ralph D'Ortonia, Elio DeCesaris and Clinton Ainsworth, vice presidents; Frank Calabro, secretary, Romeo Pierro, treasurer . . . Harrisburg (Pa.) Builders Exchange will stage a 482-booth show March 8-13. A. C. Horner directing . . . Russel R. Fling, Columbus HBA president, has named P. Edward Kreider to the executive secretary spot . . . First Parade of Homes in Dayton, Ohio, will have 23 model homes. Robert Clark, chairman of Montgomery County Builders Assn., will run the show.

Westchester's 'Big Four' Convene

Discussing national policy at Chicago NAHB convention are officers of Home Builders Association of Westchester, New York. From left: Charles L. Weinberg, alternate national director; Charles F. Haungs, first vice president; Edward A. Leibenberg, president, and Fred A. Bellotf, alternate national director.
NORTHERN BUILDING WEATHER FOR MARCH

During March, 1954 the northern United States should expect outdoor working conditions to be relatively close to normal. When compared with last March, only Area 4 shows major improvement in the outlook for the coming month.

Warm and dry weather, as compared to normal, is in prospect for most of Area 1 during March of this year. In Michigan, however, rainfall totals are expected to be generally above normal and interruptions in outdoor construction are likely to be more frequent than over the balance of the area. Last year in March, Area 1 experienced warm and wet weather with only eastern North Dakota recording less than normal rainfall.

Areas west of the Mississippi River may expect relatively favorable working weather during March, 1954 as mostly warm and dry conditions are in prospect. In the eastern portion of Area 2, however, warm and wet weather is expected to prevail with critical rainfall amounts likely to reduce the number of good working days here. During March, 1953, temperatures averaged above normal throughout the area with greater than usual rainfall occurring everywhere except in Ohio.

The weather during March, 1954 in Area 4 is expected to average about normal. Both temperatures and precipitation totals should average near normal for the month in contrast to the weather of last March when warm and very wet conditions prevailed. Thus, the estimate of about 18 good working days for the coming month is considerably higher than the total recorded in March, 1953.

CRITERIA

Special climatic studies were made for selected cities in each area to determine AVERAGE and LAST YEAR Operational Days. ESTIMATES are generally applicable to each area. Precipitation and temperatures extreme enough to stop outside work have been forecast as number of NON-operational days. Naturally, inside work (plastering, wiring, finishing, etc.) may on occasion proceed without interruption even through the cold and wet spells shown on the month's timing bar.
ARE YOU SURE

you're getting the best deal

in home heating and air

conditioning equipment?

FORCED WARM AIR FURNACES

Builders in all parts of the country are comparing the quality-to-price ratio of leading furnace lines . . . and are specifying Mor-Sun! It's not surprising when you consider what Mor-Sun offers...

. . . a complete quality line — competitively priced.

. . . the right capacity, size and shape to fit every home.

. . . dependable, economical gas or oil heating equipment that helps sell houses.

And—another Mor-Sun exclusive—all Mor-Sun Forced Warm Air Furnaces feature the unique Mor-Sun Heat Exchanger, fully guaranteed for 10 years.

WRITE FOR PRICES . . .

GET ALL THE FACTS

You get so much more with MOR-SUN.
AIR CONDITIONERS

Air Conditioning is one of today's greatest selling features for any new home. Be sure you're installing the best . . . specify Mor-Sun.

Here's why . . .

...a complete quality line, competitively priced — for every central residential or light commercial application.

...a water or air cooled model to help you sell every home.

...extremely compact — easy to install in any type home — requires a minimum of house space.

Although Mor-Sun Air Conditioners are ideally matched with Mor-Sun Warm Air Furnaces, they can be installed as individual cooling units with any make heating system.

Check MOR-SUN for

a complete line . . .

top quality . . .

competitively priced

Mor-Sun Division, MORRISON STEEL PRODUCTS, INC.
605 Amherst Street, Buffalo 7, New York

Please send me all the facts about Mor-Sun Forced Warm Air Furnaces and Air Conditioners.

Name

Street

City and State
Brick veneer, painted white, with horizontal strips in cedar shakes

**AMERICAN BUILDER**

Selected Homes

**AMERICAN BUILDER**

Chicagoland Irvin Blietz's 'new thought' house

Master bath has narrow twin glass jalousie windows

House has full storage attic, with disappearing stairway

22-N

**AMERICAN BUILDER**
IRVIN A. BLIETZ, well-known builder and developer of high quality tracts on Chicago's North Shore, is presenting this house as an appealing answer for buyers of conservative taste who want a house expressing the contemporary spirit. Modern planning, ease of household management, indoor-outdoor living, smart but not extreme architectural character, are all built into the “New Thought” house. It is one of seven types being offered by Blietz in a 62-house subdivision, Sprucewood Village, in Wilmette, Illinois. Lots average 50x130.

Blietz has coined several apt phrases to describe the features of the house. The window wall in the living room is a “Plant-a-rama,” because it brings the garden inside. The beamed ceiling in the living room is a “Bermuda ceiling.” The den can become a bedroom by use of a “convert-a-wall.”

The house has a Mueller Climate control heating plant with warm-floor recirculation system. Floors are Bruce prefinished oak. The house has Rockwool insulation and is completely weather-stripped and caulked.

The “New Thought” is priced at $41,000. A garbage disposal unit and a dishwasher are included.

In showing this house, Blietz hit on a clever merchandising idea which proved its worth. Just inside the fence at the front entrance (see photograph) was placed a wrought iron planter shaped like a tree. Suspended from it were cages of parakeets and other birds. Called the “Singing Bird Tree,” this trick not only attracted much attention on open house days but held the sustained attention of small fry while their parents wandered unmolested through the world of “New Thought” living.
A Significant Development in Lathing and Plastering... of Vital Interest to the Building Industry!

This Emblem of Certified Craftsmanship symbolizes higher standards of job performance and responsibility in lathing and plastering.

It is the emblem developed by the National Bureau for Lathing and Plastering, an organization of lathing and plastering contractors and lathing and plastering craftsmen.

Certified craftsmanship is a working reality. It means that job performance and responsibility will comply with the Code of Standard Practices for Lathing and Plastering, prepared by the National Bureau and subscribed to by local chapters throughout the country. Scores of such chapters are already established. New ones are being formed every month.

Associated Manufacturers of Lathing and Plastering Materials
This Pledge of Performance

is your written and signed assurance that the lathing and plastering on your job will be in compliance with this newly adopted Code. It is a written commitment to work schedules, job cooperation, work of craftsmanship calibre and nationally recognized standards of quality. It is yours for the asking, on specific jobs, from lathing and plastering contractors adhering to the Code of Standard Practices for Lathing and Plastering.

For full appreciation of this Pledge of Certified Craftsmanship we suggest a thorough reading of the Code of Standard Practices which appears on the back of every pledge. Ask your contractor for a copy and for the complete story of this significant program.
This model, with full basement, is being offered by the Bisanz Brothers Construction Company at $13,250 in their newest subdivision, Riverwood Terrace, in St. Paul, Minnesota. Under 25-year FHA financing, required down payment is $3,250, with monthly payments of $73.65. A VA mortgage requires $1,350 down, $81.30 per month. The house is of drywall construction, has oak floors, pine trim, flush doors, combination storms and screens. Siding is of processed shakes over shingle backer, 1x12 V-joint boards applied vertically, and 3/8-inch exterior plywood for end walls above ceiling.
is the rambler on the way out?
—a Michigan answer

This house was built by Don L. Cederlund in Grand Rapids, Michigan, and sold, with double garage, at $29,800. General reaction of people who inspected the house was so positive that Cederlund has been encouraged to build more of the same type. He finds that many prospective buyers who have been thinking in terms of the prevailing ranch type of house are now turning instead to this more conventional type. "It affords so much more living per dollar." Reports Cederlund candidly:

"If I made any mistake with this house, it was in being perhaps too conventional. The next house of this type will incorporate an extremely different kitchen, designed along Provincial lines; an extremely different bathroom, and other features which I suppose would be classified as 'sales punch.' But the architecture will stick to traditional lines."
National Association

FOR DISTINGUISHED REPORTING
OF
HOUSING ACHIEVEMENTS
BY
HOME BUILDERS
IN 1953
NATIONAL ASSOCIATION
OF HOME BUILDERS
PRESENTS ITS
FIRST ANNUAL
PRESIDENT'S PLAQUE
TO
LIVING FOR YOUNG HOMEMAKERS

CHICAGO, JANUARY 20, 1954

First Annual President's Plaque
presented on January 20th to
Editor-in-Chief Edith Brazwell Evans
by E. M. Spiegel, President of
the National Association of Home Builders,
at the National Convention
held in Chicago.
Home Builders honors

LIVING FOR YOUNG HOMEMAKERS

LIVING For Young Homemakers ... and its enthusiastic and loyal readers ... accept with pride and gratitude the first award ever to be presented to a magazine by the National Association of Home Builders.

This recognition by the home-building industry climaxes five outstandingly successful years in which LIVING For Young Homemakers was the only magazine to be twice awarded the home-furnishings industry's highest tribute*.

The acceptance of such a tremendous honor assures that LIVING For Young Homemakers will continue to encourage and activate all phases of home ownership in America's most rewarding market — Young Homemakers.

* The Dorothy Dawe Award for "distinguished reporting of home furnishings" went to LIVING For Young Homemakers in 1950 and in 1952.
a trail blazer in southern Ohio

First contemporary-styled house to attract widespread attention in Scioto County, Ohio, is this design of 1,500 square feet in a new subdivision at Portsmouth. It was designed and built by the Wm. A. Newman Company, custom builder, for $11 per square foot. Siding is redwood over Celotex insulated sheathing and 4-inch full-thick balsam wool insulation. Windows are Albintite horizontal sliding aluminum units. Roof is a 20-year built-up Carey. The perimeter heating system uses an International counter-flow furnace with Sonoair ducts. Floors are Kentile rubber and asphalt. Interior finish uses butternut paneling for living-dining room, Marlite for the bathroom and kitchen. Zonolite plaster on gypsum foil-backed lath for the sidewalls, and metal lath for the ceilings.

all-year air conditioning for Clevelanders

The Di Carlo Mason and Building Company of Cleveland, Ohio, has opened up that area's first major project offering all-year air conditioning as part of the package. Di Carlo's 50-acre tract, known as Alberta Park Estates, will have 140 houses of two, three, or four bedrooms, ranging in price from $29,300 to $33,500. Construction is brick veneer. All houses will have Perfection gas furnaces of 100,000 or 125,000 Btu's, and Perfection two-ton cooling units. If the buyer doesn't want the summer cooling, he pays $500 less.
front-to-back split-level from Long Island

By putting the bedrooms across the rear, this split-level at Huntington, Long Island, avoids the conventional split-level look. It is being built by Hillside Terrace, Inc., on 1/4-acre plots, for $22,500. The warm-air heating system has ducts suitable for the addition of a summer cooling unit.

Living room is one step below entry hall, has corner fireplace. Open mezzanine adds to spaciousness

Recreation room is on grade level facing garden at rear, extends 30 feet
BUILT-IN CONDUIT

Large or small...new or remodeled...the homes you build will have one or more telephones.

And most homeowners do want telephone wires concealed.

There's an easy, inexpensive way to provide for this. Have telephone conduits built in.

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

BELL TELEPHONE SYSTEM
Give your homes extra sales appeal with "Century" NU-GRAIN asbestos-cement siding

Colorful, attractive NU-GRAIN siding gives any type home a decided "plus" in the minds of prospective buyers. For here is a siding material that offers beauty, durability, and economy!

These remarkable shingles are made from asbestos fiber and portland cement—which makes them as permanent as stone itself. They won't burn, rot, or corrode; they can't be damaged by vermin; they are completely weather resistant.

And here's a feature really worth noting: To make the attractive NU-GRAIN shades as long-lasting as possible, K&M embeds colored ceramic granules into the shingles under hydraulic pressure. There's no paint or protective coating to peel or wash off—and no such finish need ever be applied. Both the color and the distinctive wood-grain pattern are designed for a lifetime!

What's more, because they are low in cost and easy to install, NU-GRAIN shingles help you hold down the prices of your homes, thus broadening your potential number of buyers!

Ask your K&M distributor to tell you more about these nationally-advertised, widely-known shingles. Or, write directly to us for complete information.

These attractive shingles are made in four distinctive colors: NU-GRAIN brown, gray, whitestone, and green (illustrated).

KEASBEY & MATTISON
COMPANY - AMBLER - PENNSYLVANIA
America's first maker of asbestos-cement shingles.
Look what we got since our Daddy

NEW-COLORED

With exclusive new deep-tone colors and glazed ceramic surface that's washable!

Ceramo in colors is completely different . . . the only glazed asbestos siding with deep, rich, modern colors that are unfading! Colors that have depth and character unlike any you've ever seen before!

"No other siding can duplicate these rich, deep 'n mellow CAREY CERAMO COLORS!"

- CERAMO CONGO BROWN
- CERAMO GRANITE GRAY
- CERAMO SHERWOOD GREEN

... And don't forget! Famous Ceramo White—whiter than fine white paint by actual laboratory tests!
Carey White Ceramo siding has long been the World's standard for quality, durability and beauty in white sidewall materials. And new colored Ceramo offers the same proven advantages that made white Ceramo famous: Resistance to fire, insects, weather, dirt and grime, stains... A glazed ceramic surface that's 100% washable. Plus unfading, lasting colors that are baked-on as an integral part of the ceramic surface. No wonder folks can’t resist Ceramo for their homes!

Fast, easy application, no special tools or equipment

You can plan a Ceramo job with full assurance that Ceramo’s ease and speed of application will provide real economics. And your customers will like Ceramo’s beauty, freedom from maintenance and painting expense. So don’t even think about another sidewall material until you call for complete information on new Colored Ceramo! The coupon will bring you literature and samples. Mail it right away!
Another Flintkote First!

...The New Flintkote SKYLINE Roofing System engineered especially for Low-Pitched Roofs

SKYTAB permits use of strip shingles on low sloped roofs, with either Standard or Custom application. It is ideal for ranch houses and other types of contemporary structures where roof slopes are within the range of 2" to 4" per foot.

SKYTEX is perfectly suited for decorative, low sloped built-up roofing... either residential or commercial... where incline is from 3/4" to 2" per foot. Decorative beauty is accomplished by the use of protective Mineral Surfaced roofing felt... and it can be further enhanced with Skykote color.

SKYKOTE is designed to recoat or color existing roofs or to decorate built-up roofs. Applied by either brush or spray—this beautiful coating really dresses up a roof—makes it stand out. Comes in white, green, gray, coral and buff.

The famous Flintkote laboratories are continually at work developing new roofing methods and materials—and improving on existing techniques and products.

Now, they announce a new 3-in-1 roofing system—SKYLINE—for low sloped roof construction. In one file, you have the answers to most of your modern-day roofing problems.

SKYLINE consists of three separate specifications: Skytab... Skytex... and Skykote.

Wire, phone or write for complete detailed information... and see for yourself.

The Flintkote Company, Building Materials Division, 30 Rockefeller Plaza, New York 20, N. Y.

FLINTKOTE Style and Color Leader since 1901
For air conditioning this 1600 square foot house, the Chrysler Airtemp air-cooled condensing unit is on outside. Operating cost for 1953 cooling season - $48. In nearby house of similar area, water-cooled air conditioning cost $72 to operate for same period. Inexpensive water rate held difference down in this case. Also, cost of maintenance of water-cooled unit was not considered!

Chart below, based on average 3000 ton-hour load (8 hours continuous operation for 125 days), shows how savings increase for operation of air-cooled air conditioning over water-cooled in proportion to local water rates.

 Builders and their home buyers have welcomed it because it operates without water—requires no plumbing—costs less to install. And now you can build in Chrysler Airtemp Air-Cooled Air Conditioning to give your new homes the dramatic sales appeal of Year ‘Round Air Conditioning—with assurance to the buyer that it should cost him substantially less to operate than conventional air conditioning utilizing city water.

*Cost of cooling for a season may run as much as $185 less than with water-cooled equipment (see chart at lower left). Depending on local water and power rates and ton-hours of cooling used in a home, this difference may be less—or even greater. From thousands of installations in homes in every section of the country, Chrysler Airtemp has accumulated data establishing the operating economy of its Air-Cooled Air Conditioning—the system which also gives the home owner complete protection against water shortages in hot weather.

Your local Chrysler Airtemp Dealer installs both Air-Cooled and Water-Cooled types of air conditioning—you can trust his recommendations! And whichever type you choose, you can depend on the Chrysler Airtemp name to give your prospects the utmost confidence in your houses!
Mayo Clinic:

New Diagnostic Building gets same “prescription” as 1929 main building: Eljer fixtures!

The Mayo Clinic’s main building, completed in 1929, was equipped throughout with Eljer plumbing fixtures.

Now, the same “prescription” has been given the new Diagnostic Building—a strong testimonial to the quality and durability of Eljer fixtures.

There are two other big reasons for considering Eljer first:

1.) Eljer’s strenuous program of design and development in specialized institutional plumbing fixtures—for hospitals, hotels, schools, prisons, and other public buildings. Eljer has a long and notable record of supplying materials in such fields.

2.) Eljer offers the builder, architect, and plumbing contractor a full, wide selection of cast-iron, steel, and vitreous-china fixtures, and of high quality brass fittings for specialized institutional and commercial tasks. You can specify all four from just one source, Eljer.

For the facts on Eljer advantages see your Eljer distributor, or write Eljer Co., Box 192, Ford City, Pa.

ELJER

A SUBSIDIARY OF THE MURRAY CORPORATION OF AMERICA

The only name you need to know in plumbing fixtures
New Legislation Develops Slowly
Congress Gets President's Housing Message, But Early Passage of Bill Is Held Unlikely

Don't look for much in the way of new housing legislation before late May or June at the earliest. At least that was the prevailing opinion in Washington a few days after Congress received President Eisenhower's special message on housing.

The message went to Congress January 25. It was couched in general terms, and was not accompanied by detailed legislation. A bill embodying the President's proposals remained to be worked out "cooperatively" between the Administration and Congress. That bill had not reached final form as late as February 7.

Most of the President's recommendations were in line with the report turned in last December by the Advisory Committee on Housing. It touched nearly all areas of government activity in the field of housing. As a result, Congress may be expected to move slowly in handling the legislation.

The omnibus housing bill was slated for introduction in both the House and Senate by mid-February. The House Banking Committee said it hoped to begin hearings around March 1. Most observers think it will take at least 60 days after that, perhaps more, for the legislation to wind its way through the House and Senate.

Meanwhile, there has been cautious endorsement of the program outlined by the President. The National Association of Home Builders said the January 25 message made clear that private enterprise is the best way to obtain needed housing. But, NAHB added, the message did not contain enough "specifics" to determine its scope and workability.

FHFA Administrator Albert M. Cole was more enthusiastic. He said the President proposed a "helping hand" housing program designed "to make sure that every citizen who wants a better home has a real prospect of fulfilling that hope."

"Under this program the home builders can produce 1,000,000 houses a year without any question," Cole declared. Not only that, he added, but buyers can absorb this production.

The President himself explained to Congress that his program has "three important objectives": To emphasize the role of private enterprise and the role of local governments; to fill important gaps in the present housing program and eliminate obsolete activities, and to strengthen the administration of all housing programs.

Here are the highlights of the 8-point program recommended by the President:

1. Neighborhood rehabilitation and elimination and prevention of slums.
   (a) Title I should be broadened to provide loans and grants for renovation and for outright elimination of non-valuable slums.
   (b) FHA should be authorized to issue private credit used to rehabilitate homes in declining neighborhoods.
   (c) A program of "matching grants" should be established to help states and cities do the "planning job" for rehabilitation.

2. Conservation of existing homes.
   (a) The maximum mortgage term for loans on existing houses should be made comparable to those for new homes. (This aims at stepping up the trade-in program).
   (b) The maximum Title I loan for repair and modernization of a one-family home should be increased from $2,500 to $3,000, and the maximum term extended from three to five years.

3. Housing low-income families.
   (a) FHA should have new authority in order to insure long-term loans, with low down payments, on both new and existing dwellings. This would represent a "more posi-
   (Continued on page 42)

Eisenhower Report Sees 'Good' Market for 1954

We are still confronted by a good housing market, and housing construction, which has played so important a role since World War II, may be expected to continue at a level close to that of 1953.

This view was expressed in President Eisenhower's "Economic Report," which went to Congress in January.

Vacancies in our cities are, with few exceptions, below the level regarded as necessary for a healthy, competitive housing market, the report said. It added that "other factors" on the side of demand include the continued movement toward suburbs, the high birth rate of recent years, and the improvement of incomes during the past decade.

"The recent easing of funds in the mortgage market will strengthen the forces of supply as well as of demand. Further, in contrast to earlier times, many of today's builders have considerable overhead expenses to reckon with, and they will not be adverse to making price concessions if this will help to keep their organizations intact.

"Finally, if the volume of housing showed persistent signs of declining, the terms of FHA-insured mortgages could at once be liberalized under existing law," the report said.

Hugh Askew Leaves FHA To Head NAHB Mortgage Finance Dept.

Hugh Askew, Federal Housing Administration assistant commissioner in charge of field operations, resigned his post effective March 3 to become director of the National Association of Home Builders' mortgage finance department.

The appointment, announced in Washington by R. G. "Dick" Hughes, NAHB president, marks a new department in the organization.

Recently, Askew directed several field test cases to help determine FHA's position on the trade-in house program. Before coming to Washington, he had served as FHA district director in Oklahoma City.
'Dick' Hughes Elected 1954 NAHB President

Texas builder R. G. "Dick" Hughes was named president of the National Association of Home Builders at the group's tenth annual convention-exposition in Chicago, January 17-21.

The 48-year-old Texan, NAHB's first vice president during 1953 and a member of President Eisenhower's Housing Advisory Committee, succeeds Emanuel M. Spiegel of New Brunswick, N. J. and New York City, as head of the nation-wide builders' organization.

Texas builder R. G. "Dick" Hughes

The 1954 convention, attended by a record crowd of more than 20,000 persons from every section of the United States, also saw Nathan Manilow of Chicago elected first vice president for the 1954 term.

Other Officers Elected

Other NAHB officials elected were: Second vice president—Paul L. Burkhard, Glendale, Calif.; Treasurer—V. O. Stringfellow, Seattle, Wash.; Secretary—Franklin L. Burns, Denver, Colo.

Hughes makes his home and business in Pampa, Texas, and builds several hundred low-cost houses annually in the Texas-Oklahoma Panhandle area. As one of the largest project builders in the Southwest, he won national recognition for pioneering new construction techniques and for introduction of air conditioning in low-cost homes.

He is president of the Hughes Development Company in Pampa, and directs numerous other corporations and partnerships in addition to three West Texas radio stations.

Long Active in NAHB

The association's 1954 president has been a leading figure in the association for many years. As first vice president in 1953, he was a driving force behind legislative programs which the home building industry successfully advocated to Congress. President Eisenhower selected him to serve on the special advisory committee which drafted recommendations for the Administration's new national housing program.

Prior to his election to the NAHB presidency, he had held a number of national offices with the association, including secretary, treasurer, chairman of the Legislative and Defense Housing Committees, and chairman of the Regional Vice Presidents' Council.

Chicago Builder Elected

Manilow, who was born in Baltimore in 1898, moved to Chicago in 1909 where he was later to enter the home building field. He has developed and built Jeffrey Manor on Chicago's South Side, the largest single development within the city's corporate limits, as well as the nationally-known Park Forest project. America's first completely planned private enterprise community. He has built thousands of homes in other Illinois and Indiana areas surrounding Chicago.

Manilow served as treasurer of NAHB from 1949 to 1952, has been a member of the association's executive committee for eight years, and is chairman of the Building Committee in charge of constructing NAHB's new National Housing Center in Washington, D.C. In addition, he was president of the Chicago Metropolitan Home Builders Association for two years, and its treasurer for four years.


NAHB Cites Nine Builders in Design Competition

Six winners and three honorable-mentions were cited in the annual National Association of Home Builders Design Merit Award Competition, sponsored by the NAHB Construction Committee.

Six builder-architect teams were selected for producing the most outstanding new house designs in 1953, according to the panel of judges. The competition was initiated to recognize excellence and initiative in modern home design.

The jury of three nationally recognized architects and one builder consisted of W. Alex Simms, Dayton, Ohio, the builder member, and architects Herman York, Jamaica, N. Y.; Alfred B. Parker, Miami, Fla., and Edward Burch, Wilmette, Ill.

Honors went to the following builder-architect teams:

George Alexander Co. and architect Edward H. Fickett, both of Los Angeles, for the 30-unit Sunset Laniak apartments in Los Angeles.

Myron Aiches, Blue Ribbon Construction Co., Hollywood, Calif., and architects Smith and Williams, Pasadena, for 13 houses at Reseda, selling for $16,500, including lot.

David D. Bohannon Organization, San Mateo, Calif., and architect Mogens Mogensen, also of San Mateo, for an $8,600 house at Mayfair Heights, San Jose.

Stern & Price, Cupertino, Calif., and architect Alexander C. Prentice, Jr., Palo Alto, for a $7,150 house on $1,800 lot in Cupertino, Calif.

Pardieh-Phillips Construction Co., Los Angeles, and architects A. Quincy Jones and Frederick E. Emmons, also of Los Angeles, for 21 houses at Southdown Estates, Pacific Palisades, Calif. Houses sold for $19,950.

Laurin Brothers, Arlingtn, Va., and Mogens Mogensen.

(Continued on page 48)
The future of America belongs to its school children. Thus, today's efficient modern school buildings are "Built For The Future" in more ways than one.

Increasingly, school boards who look to the future favor schools built with reinforced concrete. Such construction means clean lines and attractive appearance . . . extra strength and durability . . . long-lasting weather resistance . . . utmost protection from fire.

School builders, architects and engineers find it pays to specify CF&I Clinton Welded Wire Fabric for their concrete reinforcing needs. This fabric provides strong steel members closely and uniformly spaced for proper load distribution and added strength. CF&I Clinton Welded Wire Fabric meets all A.S.T.M. requirements; is available in all popular sizes and weights.
FNMA Raises Price
On FHA, VA Mortgages

The Federal National Mortgage Association has raised sale prices on its 4 per cent and 4 1/2 per cent FHA-insured and VA-guaranteed mortgages by two points, HHFA Administrator Albert M. Cole announced on February 1.

The action, Cole said, reflects improvement in the mortgage market, and the "firming up" of government long-term bond prices.

"Under the new schedule for mortgages on one-to-four family dwellings, FNMA will sell VA 4 per cent mortgages at 98, and FHA 4 1/4 per cent mortgages under Title II, Section 203, and Title IX, Section 903, at 99.75," Cole announced.

FHA and VA 4 1/2 per cent mortgages will be sold at par. Cole added that FHA-insured mortgages for multifamily dwellings will continue to be sold on a negotiated basis.

Fannie Mae has been buying and selling FHA-insured and VA-guaranteed mortgages on a one-for-one basis since July 27, 1953. Latest available figures, for December, show that FNMA sold 7,930 mortgages during the month. These mortgages had gross value of $61,000,000, and "practically all" the sales were under the one-for-one plan.

Lumber Dealers' Association
Contest Entries Sought

The deadline for the receipt of entries in the 1954 Public Relations and Merchandising Contest being conducted by the National Retail Lumber Dealers Association is March 31. Every dealer member of the group's 32 federated associations is eligible to enter.

About half the entries received so far are said to describe public relations programs alone, and the other half deal with programs which combine public relations with good merchandising ideas. Any activity carried out since April 1, 1953 is eligible. Entries will be judged early in April by editors of building industry publications. Names of winning dealers will be announced in May during the meeting of the NRLDA's Board of Directors.

Special national awards will be made to the ten entries ranked highest by the judges. In addition, certificates will be awarded to the three best entries from each of the 48 states, and an honorable mention will be voted to each of the other entries which, in the opinion of the judges, represents meritorious public relations or merchandising activity. A total of 168 awards will be made. Entries should be addressed to Public Relations and Merchandising Contest, National Retail Lumber Dealers Association, 302 Ring Bldg., Washington 6, D.C.

Flint Builder Receives Achievement Plaques

Al Borgman, Flint, Michigan builder, was recently presented with two awards for meritorious achievement during his city's "Operation Tornado." He had served as general chairman of the organized volunteer building campaign held in Flint last August 29 and 30 to rebuild the city after a tornado had devastated one entire section.

Recently elected 1954 president of the Flint Association of Home Builders, Borgman holds in the accompanying picture two awards presented to him and to Flint by the National Municipal League and Look magazine, and by Emanuel M. Spiegel, retiring president of the National Association of Home Builders. The NAHB award, presented at the recent Chicago convention, was in recognition of Flint's volunteer service to its stricken neighbors.

"Operation Tornado" was accomplished by 7,800 volunteer workers who donated $286,000 worth of labor time during the two-day rebuilding operation. Seventy-eight houses were roughed-in in two days time and 93 houses were finished during the two weeks following.

New Legislation
(Continued from page 39)

ative and direct" approach by the government, while offering a "challenge" to private builders and lenders. Cole believes this experimental program will relieve the "pressure" for public housing.

(b) Public housing should continue at a "reasonable level" in the meantime. Congress should authorize construction of 140,000 units during the next four years, to be built at the rate of 35,000 a year.

4. Minority housing.

(a) Steps must be taken to police slum clearance programs to prevent "dislocation" of minority families. In addition, adequate mortgage financing to build new housing for such families must be brought out.

5. Adjustment of FHA and VA mortgage terms.

(a) Government operations in connection with mortgage loans should be "judiciously adjusted" to prevailing conditions. Congress should grant the President authority to adjust maximum interest rates and loan-to-value ratios and maturities.


(a) FNMA should be "reorganized" to require its users to invest their own funds and thereby retire government funds from secondary mortgage market operations.

(b) The new FNMA should have three "basic" responsibilities: Authority to issue and sell non-guaranteed debentures; authority to liquidate the present FNMA mortgage portfolio "in an orderly manner"; and authority to borrow directly from the U.S. Treasury for the purpose of purchasing "certain kinds and types of insured and guaranteed loans when the President determines such action to be necessary in the public interest."

(NAHB withheld comment on this secondary mortgage proposal pending introduction of the bill itself.)

7. Reorganization of federal housing activities.

(a) Present organization of federal housing activities is "unsatisfactory," and Congress will be asked to approve a reorganization plan for improving the "cumbersome and inefficient" setup.

8. Modernization of the National Housing Act.

(a) The basic housing law should be "modernized" to eliminate unnecessary provisions. Changes should include a new scale of mortgage ceilings "more realistically related to the increased cost of both single-family and multi-family structures."

American Builder
**BETTER PLASTICITY**

To build the best possible concrete-block walls, the bricklayer must use plastic mortar. The mortar must be plastic enough to stick to the long head joint. It must not drop off when the mortared edges of the block are swung to a vertical position and lowered into place. It must be plastic enough to enable the bricklayer to quickly and accurately tap the block down to the line.

Brixment mortar provides this necessary plasticity. Moreover, it stays soft and plastic long enough to let the bricklayer level, plumb and straighten the unit and adjust it to its final position in the wall before the mortar stiffens.
Spike Club Issues
Membership Citations

Murray Hartt of Houston, Texas, reigns as "The Big Spike" because he obtained 46 new members for the Houston Home Builders Association in 1953. The newly-formed "Spike Club" is an organization set up last year within the National Association of Home Builders to promote membership and good fellowship. The recent convention was the club's first.

The "Spike Club" awards were made to local builder associations which showed the best membership increase, both on a numerical and percentage basis.

Winner of the first award in Group I was the Building Contractors Association of California, with a membership increase of 196. Best percentage showing in this group was by the Home Builders Association of Greater Boston, which showed a 28.6 per cent increase in membership during 1953.

Second-place award in the Group I category went to the Home Builders Association of Texas, with a membership increase of 196. Best percentage showing in this group was by the Home Builders Association of Greater Boston, which showed a 28.6 per cent increase in membership during 1953.

Second-place award in the Group II category went to the Houston Home Builders Association. This group added 105 new members for a percentage increase of 22.6 per cent.

The Group II winners were headed by the Home Builders Association of Memphis, with 134 new members and a percentage increase of 74.8 per cent, this association led the field.

Denver's Association of Home Builders was in second place with 97 new members. On a percentage basis, the second best showing was by the Associated Home Builders of Sacramento, up 50.5 per cent.

Omaha, Austin Among Winners

Group III was headed by the Omaha Home Builders Association, with 150 new members and a percentage increase in membership of 263.1 per cent. Second place in this category went to the Home Builders Association of Jacksonville. This group added 116 new members, for a percentage increase of 161.6 per cent.

Winner of the first award in Group IV was the Austin Home Builders Association. It added 158 new members in 1953, and showed a percentage boost of 359 per cent. Second place went to the Mid-Florida Association of Home Builders, which added 42 new members and made a 200 per cent increase.

The final awards in Group V went to the Home Builders Association of Tyler, Texas, and the Staten Island Home Builders Association. The Tyler group, in first place, had an increase in membership of 70, for a percentage showing of 437.5 per cent. The Staten Island builders added 39 new members, increasing their membership by 130.4 per cent.

Three lady home builders also were eligible for membership in the Spike Club. Mrs. N. R. Dichiara, builder from El Paso, Texas, and a national director of NAHB, earned the office of vice president for the coming year, due to her efforts in securing members in the local association. Mr. Henny Mollgaard, Milwaukee home builder, was also established as a bonafide member of The Spike Club, as was builder Lilly Ann Snyder of Louisville, Ky.

Ten-Year Exhibitors
Receive Plaque Awards

In all, 22 companies have participated in all NAHB annual expositions since their inception ten years ago. These firms received due recognition at the recent Chicago show in the form of handsome inscribed plaques with the insignia of the National Association of Home Builders at the top, and a citation below reading: "Award of merit presented to (name of firm) for having participated in our first ten annual shows for home builders, 1945-1954." Each of the firms had a special plaque in its exhibit booth to identify it as among the "first 22."

TREMENDOUS SUCTION . . . UNUSUALLY QUIET . . . PRIZE DESIGN!

Terrific performance at half the power—unmatched beauty—and tagged with a low L.O.W. price is this new JET STREAM axial flow ventilator which Trade-Wind has developed under wraps over the past three years.

This revolutionary ALL NEW design now for the first time brings all the great advantages of straight-through axial air flow to the home ventilator field—and at a price that makes kitchen ventilation a BIG feature even for the lowest priced house.

In styling the JET STREAM is as outstanding as its performance. Completely original with its deep intake scroll, it's a prize beauty created by one of America's top industrial designers.

There's nothing that comes close to matching this all-new axial flow development by Trade-Wind. See it, test it, compare it and you'll understand why the JET STREAM will sweep the light construction market.

Write or Wire for Complete Information

ORIGINATED BY TRADE-WIND MOTORFANS, INC., 5705 S. MAIN ST., LOS ANGELES 27, CALIF.
NOW...the research, experience and quality standards which made WARE WINDOWS national favorites have produced the BEST JALOUSIE VALUE on the market!

DEALERS - DISTRIBUTORS!
NAHB President Calls for 1,400,000 Homes a Year

The 1954 president of the National Association of Home Builders, R. G. "Dick" Hughes, has called for a "ten year campaign to clean up slums, keep America in needed new housing and get ready for a family formation boom in the 1960's."

The newly-elected spokesman for the home builders outlined a broad program for meeting the nation's housing needs. Speaking at the recent NAHB Convention-Exhibition in Chicago, he called for the construction of 1,400,000 new houses a year over the next ten years.

Hughes said the attainment of this program hinges on whether Congress provides new "legislative tools." He endorsed the program outlined in the report of President Eisenhower's Advisory Committee on Housing—with one major exception.

"The recommendations contained in that report will be a hoax, and we who proposed them will be a laughing stock unless we get a federally-controlled and supervised central mortgage bank getting its money from private sources," Hughes said. He added he believes there is a "good possibility" the builders will get what they want.

The new president promised to push ahead with programs initiated by his predecessors at NAHB—better design and eye appeal for American homes, improved construction techniques, the rehabilitation of slum areas and homes for America's forgotten families.

"A combination of these four objectives will provide a tremendous housing program for 1954," Hughes said. The old problems are still with us, and our population is still growing, he added.

The NAHB president said he did not believe it "economically possible" to put every American in a new house. He said he did not agree, either, with the idea of destroying homes which are structurally sound and can be rehabilitated.

"I do believe," he said, "that every American family deserves, and should have the opportunity to live in a decent, safe and sanitary house."

Home builders can expect a "tremendous increased need" for houses in the early 1960's because of the increased family formations, Hughes continued. The most practical solution, meanwhile, is to combine the construction of new houses with the "new conditioning" of existing houses.

"There are approximately eight million families living in houses unfit for human habitation and another..." (Continued on page 48)
1,400,000 Homes
(Continued from page 47)

four million in houses that have deteriorated to a point where they lack necessary health and safety features," Hughes declared.

The NAHB official gave this breakdown on the 1,400,000 new units needed yearly: Larger houses with greater comfort and more livability should account for 1,000,000. Another 250,000 should be well-designed small houses for low-income families. Still another 150,000 would be built to replace units that are demolished in slum clearing programs.

Conservation and rehabilitation of existing structures are also in the home building picture. Hughes said. The so-called trade-in plan should be developed in order to "new condition" 250,000 units a year, while urban renewal accounts for another 350,000.

Hughes wants special attention for the small town and city which, because of insufficient mortgage money, "shows signs of dying on the vine." He said lack of housing has kept "scores of corporations" from establishing plants in smaller communities.

On the outlook for housing in 1954, Hughes said consumer demand has shown "marked improvement" since the first of the year. He believes there will be a good market if down payments are lowered for buyers in the middle and lower income groups.

VA Guaranteed More Home Loans in 1953 Than 1952

Home loans guaranteed by VA during 1953 increased by nearly five per cent over 1952. More than 320,000 home loans, totaling over $8 billion, were guaranteed last year, compared with 306,000 home loans, totaling over $8.2 billion, in 1952.

VA reported approximately two-thirds of the veterans who obtained GI home loans in 1953 bought newly-built homes. This added up to about 200,000 new homes, or approximately 20 per cent of the one-family and two-family homes built during the year.

Average purchase price for these GI homes was $11,725 in 1953, compared with an average of $10,915 in 1952.

"Larger homes with additional equipment have in part accounted for the upward trend in the purchase price of new homes bought with the aid of GI loans," the VA said.

The "typical" GI home loan in 1953 called for a down payment of 11 per cent and ran 20 years. During the last quarter of the year, about 38 per cent of the loans had 25-year maturity, and another 10 per cent had 26-year to 30-year terms.

Building Trades Wages Continue To Increase

Another "slight advance" in the hourly wages of the construction trades occurred during the fourth quarter of 1953, according to the Bureau of Labor Statistics.

BLS conducted a survey of seven major building trades in 85 cities. The agency found that the average wage rate for organized construction workers was $2.72 per hour as of January 2.

Hourly wage scales for the seven building trades increased about 11 cents an hour during 1953. This compared with a 15-cent increase during the previous year.

Bricklayers were, on the average, the highest paid as of January 2. Their average wage level in the 85 cities was $3.30 per hour.

NAHB Cites Nine Builders
(Continued from page 40)

architects Keyes, Smith, Satterlee & Lethbridge, Washington, D.C., for 49 houses at "Pine Spring" in Fairfax County, Va. This is a $14,000 house with a carport on $2,500 lot.

Honorable mention awards were made to the following:

Robert Gerholz, Gerholz Community Homes, Flint, Mich., and architect William K. Davis & Associates, Ann Arbor, for houses in Westgate Park. Howard C. Grish, Tulsa, Okla., and architect Donald C. Honn, Tulsa, for houses in the Lortondale Addition at Tulsa. It is a $13,000 house on a $2,250 lot.

Elliott B. Badanes, South Orange, N. J., and architect Harry Maslow, Elizabeth, for their Sunset Valley project of medium priced homes.

Dealer's Viewpoint

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

NRLDA's Advertising Guide Will Pay Off in 1954

It has become crystal clear that retail lumber and building materials dealers are going to get far better results this year and in the future from the approximately $40,000,000 they spend yearly on advertising.

One reason for the improvement is that dealers have received valuable advice and guidance in planning and preparing advertising through NRLDA's Dealer Operating Guide.

That help will be augmented through the new Quarterly Merchandising Calendars that will go to members every three months as an association service.

In addition, building products manufacturers and commercial material services are planned to offer dealers a better assortment of advertising mats and materials to aid them in preparing good advertisements.

The recently issued Operating Guide chapter entitled "Preparing Your Advertising" contains this advice on the selection of themes or appeals to be featured in dealer advertising:

"In all advertising, the dealer is talking to a passing parade made up of individuals from nearly all walks of life whose needs are changing almost every day. Basically, the task of advertising is to present a message which will catch the eye or the ear of an audience which is in the market, or can be persuaded to enter the market, to buy your materials and services. Customers' needs, and their desires to fulfill those needs, change with the seasons of the year.

"In other words, in the fall many people are in the market for storm sash; in the spring there are many who are looking for screens. That is why the NRLDA Merchandising Calendar has been produced to give lumber dealers a program of sales messages geared to the seasons. Following such a program helps to insure the presentation of the right merchandise at the right time.

"Timely seasonal and climatic offerings are all-important in advertising because they create not only a greater audience for your advertising but also a much greater responsiveness and that, primarily, is what every advertiser is most interested in.

"When people need anything they naturally shop ads on that particular item. If a woman is in the market for a hat or a dress, she pays close attention to advertisements featuring fashion merchandise when she reads her newspaper. It's the same way with products that dealers have to sell. If a man is in the market for a garage, he looks at garage ads. So a cardinal advertising is:

"One of the surest ways to gain advertising readers or listeners is by making timely offerings week after week. Use the Merchandising Calendar to help keep you on the right track."

NAHB's Advertising Guide

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"One of the surest ways to gain advertising readers or listeners is by making timely offerings week after week. Use the Merchandising Calendar to help keep you on the right track."
Yes, easy is the word... with MALT-A-MATIC Wood Window Units—easy, quick removal of sash for cleaning or painting, and better yet, easy finger-tip operation—no sticking or binding when raising or lowering either sash!

All MALT-A-MATIC Wood Window Units are fully weatherstripped and feature the "400" weatherstripping metals. Modular construction, plus the use of jamb liners, enables fitting in any thickness or type of wall.

Only select, kiln-dried woods are used in all MALTA Wood Window Units... chemically treated for a water repelling, longer lasting, easier to paint surface... highest quality at down to earth prices. Yes... Easy Does It! Plan now to use MALT-A-MATIC windows in the homes you plan and build. They make new homes easier to sell. See your nearest MALTA dealer or write for literature.
Best Buy!

CORBIN
Aluminum Trim Hardware
STRONG RUST-PROOF
AND LOW-COST, TOO!

At no extra cost you can give your customers trim hardware with handsomer finish, superior strength, better quality! Corbin Pressure-Cast Aluminum Hardware won't rust — keeps its smooth beauty for years. Never needs painting. Never your best buy! Phone your Corbin dealer today.

ON and OFF the RECORD

SOME TRADE-IN selling enthusiasts are beginning to weigh the practicability of allowing home owners to take income tax exemption on 35 to 50-year depreciation schedules.

REASON IS THAT when a trade-in deal on an old house for a new one is broached, most owners feel that their home is an investment, and that trade-in appraisal should be on a basis of appreciation rather than depreciation.

IMMEDIATE OBJECTIONS and problems surrounding such a proposal are, of course, legion.

FIRST, the average home owner would likely shudder at any suggestion that he depreciate the entire value in anything less than a century.

AND, INDEED, there is ample evidence to substantiate such an attitude.

DEPRECIATING over a century, however, would provide an annual deduction on income tax so small as not to make it worth while.

IF THE TOTAL value were depreciated over a 35 to 50 year period the annual deduction would increase, but it is questionable if the amount gained on income tax payments would compensate for the thus admitted depreciated value to the owner at sale time.

THEN, TOO, there would be little incentive to maintain a structure for effective life after the depreciation period.

AND WHAT would be debited against the depreciation factor for remodelling and additions to the house?

AND WHAT about clothing and automobiles? The former is an admitted universal necessity, and the latter marginal in some areas and conditions, actual in others.

NO MATTER HOW it is cut, if trade-in selling is to develop to proportions comparable with those obtaining in the clothing and automotive industries, builders, for the time being at any rate, will have to sell the desirability of the new and modern house, and a mark down on the old for the advantages of the new and modern just as competitive industries do.

OR, DO YOU THINK there is merit and practicality to the idea?

SEVEN major challenges, says The Urban Land Institute, confront those interested in development of metropolitan areas.

FOREMOST AMONG them is the urgent problem of raising enough public funds to provide schools, sewer, water, police and fire protection and other essential services in expanding areas. And do it without excessive real estate taxes.

MAYBE THE TIME has come to stop syphoning so much of the tax dollar to Washington for federal services. There is a limit to taxation, beyond which the incentive to create and earn is stifled.

MAYOR CZELUSTA of Toledo, Ohio, however, says that his city has solved the school problem with a simple municipal income tax that keeps pace with school requirements and provides a surplus for any conceivable demand. Real estate taxes are low and will remain low.

ANOTHER PROBLEM pointed out by the Urban Land Institute is the need for adopting performance standards in zoning regulations to control industrial air pollution, noise, odors, fire hazards and traffic volume.

AIR POLLUTION, thought until recently to be the unique problem of Los Angeles, has reared its head as a major health problem in London, England, and at one time this fall, along the Atlantic coast, particularly New York and Philadelphia.

SMOG, generally believed to be a combination of industrial and automobile gasses, is an evil which, under certain atmospheric conditions...
Are you paying more for cheap locks than you'd pay for NEW TROUBLE-FREE CORBIN LOCKS?

Corbin's two new cylindrical locks, the “Guardian” and the “Defender”, are made to END LOCK COMPLAINTS and COSTLY CALL-BACKS! They give you the three things you need most—BUDGET PRICES, EASY INSTALLATION AND TROUBLE-FREE SERVICE.

Take 5 minutes to compare! You'll be convinced you get more lock for your money with Corbin. You give more customer satisfaction ... and at the same time you save servicing time and money. See your Corbin dealer today!
More often than not, it's the conveniences in a home that play cupid with the prospects and help them decide to buy. You get just such a sales clincher with Zegers Dura-seal Combination Metal Weatherstrip & Sash Balance!

Wives like the way Dura-seal keeps out dirt and dust... gives them a clean house the year 'round. Husbands like the way Dura-seal saves them up to 30% on fuel costs. Everybody enjoys the smooth, silent way Dura-seal equipped windows glide up or down.

So... make it a point now to use Zegers Dura-seal!

BUILDERS: see your lumber dealer—Lumber Dealers: see your sash and door or millwork jobber.

ZEGERS, Incorporated
8096 South Chicago Avenue, Chicago 17, Illinois

- Complete and constant air seal maintained with one piece, flexible jamb member!
- Easy to operate when sash contracts and expands with the weather!
- No noise with exclusive Si-Vel coated counterbalance springs!

FREE FOLDER...
"Facts on Weatherstripping...gives complete information on Dura-seal. Send for your copy now!"

On and Off the Record
(Continued from page 50)

tions, now seems to be a real or potential hazard in any industrial area, and is suspect as a major medical problem.

AT ONE TIME in mid-autumn, while New York, London and Philadelphia were blanketed by smog, the Pacific coast for several hundred miles north of Los Angeles was suffering from the acid gas blanket.

AMONG THE OTHER problems outlined by the Institute are those concerning preservation of down-town shopping areas, the size, design and make-up of local shopping centers, intelligent use of land from which slums are removed, and greater emphasis on conservation.

MUCH OF THE time of the NAHB at its recent convention and exposition in Chicago was used for consideration of these and many related problems.

SPEAKING of the NAHB convention and exposition it was again bigger and better than any of its predecessors.

THE TWO-HOTEL exhibit arrangement apparently worked to the satisfaction of most of the exhibitors and delegates.

ONE LIMITATION of the present exhibit facilities, or possibly the season of the year in which the convention is held, is the lack of opportunity for the manufacturers of earth moving equipment and trucks.

THESE COMPREHSE a major item in the home builder's capital investment, and he buys more of them each year as he is required more and more to manufacture his own land for building development.

IT HAS BEEN suggested that possibly a large circus tent in the park opposite the Conrad Hilton might provide an acceptable facility for exhibiting and operating trucks and earth moving equipment.

SINCE THERE is a large market for manufacturers of equipment and trucks among the thousands of home builders that attend the convention primarily to learn what they can buy to improve their opera-

(Continued on page 56)
The Specific Answer For Builders With Particular Needs

Hotpoint presents...

The Hotpoint Custom Range Line
FOR ULTRA MODERN CUSTOM KITCHENS

Incorporating the fine features that have always maintained Hotpoint's leadership in the range industry, this custom, sectionalized electric range offers an entirely new concept for modern kitchens. With separate built-in ovens and custom surface units, both carrying the approval of the underwriters' laboratory, here is your opportunity to provide the maximum in modern electric kitchen equipment.

The Hotpoint Super-30 Range Line
FOR MORE EFFICIENT SMALLER KITCHENS

Where kitchen space is at a premium, Hotpoint's Super-30 Range line provides the answer. These are not just 30-inch ranges—but a feature-packed 30 inches. Presented in three distinctive models, they have the de luxe features of 39-inch models packed into a range just 30 inches wide. They offer unsurpassed usable capacity for three-rack baking, compartment broiler, roto-grill with removable barbecue skewer, color-keyed pushbutton cooking, raisable thrift cooker with Golden Fryer French-fry unit, plus super-Calrod® surface units.

Write to Hotpoint Builder Division for A.I.A. specifications on these and all other Hotpoint appliances.

Hotpoint ...Pacemaker of Progress!

RANGES • REFRIGERATORS • DISHWASHERS • DISPOSALLS® • FOOD FREEZERS • CABINETS • AUTOMATIC WASHERS
CLOTHES DRYERS • ROTARY IRONERS • AIR CONDITIONERS • DEHUMIDIFIERS
HOTPOINT Co. (A Division of General Electric Company) 5600 West Taylor Street, Chicago 44, Illinois

MARCH 1954
Here is the highest quality, lightweight chain saw at the lowest possible cost. It's the new Homelite Model 17... the mighty mite of chain saws... the only saw its size with 3.5 actual dynamometer rated horsepower. Powerful enough to do the job faster... light enough to make the job easier... this new Homelite will save time, save money and cut labor and operating cost on every type of woodcutting job.

Built and backed by Homelite, manufacturers of high powered lightweight gasoline engine driven units for more than thirty years, this sturdy, dependable saw will out-perform and out-last any other saw its size or price. Makes every type of cut... notching, felling, limbing, bucking, boring and undercutting. Operates in any position... cuts right, left, up, down, or upside down... without carburetor adjustment or loss of power. Available with 14" to 38" straight blades or 14" and 18" plunge cut bows.
Now you can greatly increase the sales-appeal of all your homes with a fireplace! Yes, the new, completely packaged AIR-JET makes a fireplace available at an amazingly low cost every home owner can afford. ½ to ¾ less cost than a conventional fireplace of like size! And just consider these outstanding features...

AIR-JET—the complete, self-contained, insulated fireplace—is designed for zero clearance from combustible materials on all sides! Smoke-free operation assured. 30” firebox constructed of heavy steel and features smart, attractive black enamel front. Can easily be used with conventional chimney...

BUT FOR EXTRA ECONOMY, the perfect pair is the revolutionary new packaged AIR-JET FIREPLACE and the widely used AIR-JET PACKAGED CHIMNEY. Get complete information today on how you can give your home the extra sales-appeal of a fireplace with little extra cost!

Consult your distributor or write to

GENERAL PRODUCTS COMPANY
FREDERICKSBURG, VIRGINIA
Distributorships Available
McKINNEY HINGES are precision made of quality metals.

McKINNEY HINGES are available in all standard sizes and finishes for every hinge need. The pins are perfectly rounded by a special rolling process to a tolerance of plus or minus one one-thousandth (.001), to assure proper fit with no looseness or wobbling.

McKINNEY PRIME COATED HINGES are carefully and thoroughly bonderized to prevent rust creeping. They are prime coated with a neutral prime color approaching the tone of natural wood. No extra primer is needed when painting them—and they take varnish or stain as well as paint.

McKINNEY BEARING HINGES are available with self-lubricating Oilite bearings (oil impregnated powdered metal) at the same price as ball bearing hinges.

McKINNEY STRAP AND TEE HINGES AND HASPS are furnished bulk packed in protective boxes, which are then packed in convenient-to-handle shipping cartons.

McKINNEY SCREW HOOK AND STRAP HINGES have forged pintels with cut threads.

AND, DID YOU KNOW that these are some of the features that make McKINNEY HINGES so acceptable everywhere—and therefore so easily salable? These are the basic reasons why architects, builders and owners alike agree that—"To be sure, you couldn't make a better choice than McKINNEY HINGES!"

ORDER McKINNEY HINGES NOW

McKINNEY Manufacturing Co., 1715 Liverpool St., Pittsburgh 33, Pa.

On and Off the Record

(Continued from page 52)

tions, it might be well for these manufacturers to give some serious thought to how they might exhibit and thus advance their sales and customer relations.

INTEREST IN the numerous convention sessions was at an unprecedented and unexpected high.

BUT IT WAS noticeable to observers that the public relations and how-to-do-it sessions in both hotels were jammed to the limit of standing room, and that to get a seat required arrival at least a half-hour in advance of announced starting time.

BEST DESCRIBED as a twenty-ring circus, the mammoth show ran with a smooth professional efficiency that does great credit to Paul Van Auken and his staff, and to the tireless workers from the headquarters staff in Washington.

THE ENTIRE interlocking panorama of convention sessions, committee meetings and exhibit activity had to be timed to split-second precision, and at the same time have flexibility to provide for adjustments occasioned by last minute contingencies, of which there always are many. Nothing less than magnificent organization and a high sense of individual responsibility could have achieved such results.

AL BALCH SAYS that there must be about 35 billion dollars in real estate transactions each year in the United States.

HERE'S HOW he arrives at the figure. The state of Washington has two per cent of the national population. There is a one per cent real estate tax on all transactions in the state.

LAST YEAR the state tax receipts on real estate transactions amounted to seven million dollars. That means that there were 700 million dollars in transactions.

PROJECTED NATIONALLY, if Washington's two per cent of the national population represents the same percentage of real estate transactions, Al comes up with the 35 billion.
with the ORIGINAL Carved Raised Panel Wood Sectional Overhead Door

For individuality the “built-in” beauty of the Raynor Carved Raised Panel Door invites comparison!

With the design carved in 1” thick panel blanks (especially constructed by dielectrically gluing together narrow strips, for maximum strength) only the rugged durable construction and smooth performance of the Carved Raised Panel Door can match its beauty.

Equipped with “Meter-Balanced” springs and Patented Graduated Seal, a Raynor Carved Raised Panel Wood Sectional Overhead Door can be operated by a woman or small child with ease.

Carved Raised Panels for these doors are available in two sizes—square, approximately 16” x 16” and long, narrow or streamlined, approximately 41” x 16”.

See our catalog in Sweets. Check your telephone directory for the name of the Raynor Representative nearest you.

MARCH 1954
how to build a lean-to atomic shelter in the basement

After several years of scientific research culminating in the Yucca Flats tests early in 1953, the Federal Civil Defense Administration has released detailed information on how to construct low-cost home shelters for protection against atomic explosion.

The cheapest type of shelter to build is the basement lean-to type, which can be built for an estimated cost of about $10 per occupant ($40 minimum) if wooden materials are used, or about $16 per occupant if the shelter is built with reinforced concrete. The lean-to shelter is suitable for any house that has a basement with a floor at least five feet (Continued on page 60)

Experts believe this is one of the safest shelter designs— for houses with basements which extend five feet or more below the ground level.

Fig. 1—Cutaway of the shelter used with cinder block wall

Fig. 2—Shelter used with poured concrete, concrete block, brick or stone basement wall
NOW!
SAFER - BETTER -
LOWER COST VENTING with

WV METALBESTOS

NEW EASY-TO-INSTALL OVAL GAS VENT PIPE

- Listed by Underwriters' Laboratories as both a Type B and Type BW gas vent pipe.

- Sturdy, durable, safer galvanized steel outer pipe gives maximum protection to fast-heating, corrosion-resistant inner pipe.
- Specially designed for "in-the-wall" venting.

- New Fastloc double-lock, double-safe coupling gives visible proof of safe, permanent connection — you can see it lock into place.
- Reinforced ends protect against damage in handling.
- Easy-to-connect pipe sections — no forcing.
- Can be unlocked easily during installation if necessary — may be cut easily to desired length.

- Convenient, complete BW Installation Kit with new WV Metalbestos permits officially correct venting of recessed gas heaters.

- Complete line of fittings.

ANOTHER FIRST BY METALBESTOS — leader in gas venting.

For illustrated price sheet and your copy of "How to Install Type BW Gas Vents," write today to Dept. J-1508

MARCH 1954
build a lean-to

(Continued from page 58)

below ground level at the location of the shelter.

Location and Size

The shelter should be located as far away as possible from the furnace, gas meter, water heater or any other source of fire. If possible, do not choose a spot directly under the piano or the refrigerator. Be sure that no permanent fixture on the basement floor, such as a drain, will interfere with the floor support of the lean-to. There should be at least three feet between the open end or ends of the lean-to and the corner of the basement wall or any large obstruction.

To determine the length of the shelter, allow two feet for each two occupants plus two additional feet for each of the open ends.

Building Method

If the basement wall is built of cinder blocks, the lean-to should be attached to the wall at the top as shown in Fig. 1. If the wall is of poured concrete, concrete block, tile, brick or stone, use Fig. 2 as a guide. Following are the materials that will be needed for an 8-foot wooden lean-to. Scrap lumber or sheathing may be used to cover the joists, but 1&g roofers make a stronger job.

For use with basement walls of cinder block, concrete block, tile, brick or stone:

- 20 pieces—2x6x8
- 16 pieces—1x6x8 1&g rooders
- 1 piece—2x10x8
- 1 piece—1x4x8
- 8—½-inch diameter bolts by 8 inches with expansion sleeves and washers
- 8—½-inch diameter bolts by 4 inches with expansion sleeves (for concrete block, tile, brick, or stone walls only)
- 4 pounds—6 d nails
- 2 pounds—16 d nails
- 1 pound—12 d hardened cut nails

For use with basement walls of poured concrete:

- 20 pieces—2x6x8
- 16 pieces—1x6x8
- 1 piece—2x4x8
- 1 piece—4x4x8
- 8—½-inch diameter bolts by 8 inches with expansion sleeves and washers
- 4 pounds—6 d nails
- 2 pounds—16 d nails

Testing the Floor

First check the basement floor to
atomic shelter
determine whether it is thick enough
to support the lean-to and the
weight it will have to carry. Measure a distance of about five feet out
from the basement wall at the spot

selected for the lean-to. Test the
floor for a length of eight feet at
this distance, by giving it a series
of hard blows with a heavy ham-
mer. If no cracks appear and no
hollow sound results from the
blows, the floor is strong enough.
If it is inadequate, or the basement
has an earth floor, a footing will
have to be built under the floor end
of the lean-to.

Fig. 3—Method of measuring and mark-
ing holes in basement concrete floor for
wooden lean-to

Another type of basement shelter recom-
mended by the government is the built-in
corner-room shelter

Figures and data from “Home Shelters for Family
Protection in an Atomic Attack,” Federal Civil
Defense Administration

Air-Vue’s Standard
Windows Come
Equipped With 1
More Ventilator Than
Those of Most Manu-
facturers

Patents Pending

Easy to handle, easy to
install. Here’s a masterfully
engineered window that
saves labor costs, saves
dollars on actual unit cost
and saves even more money
by eliminating maintenance
return calls. Get the full
facts about this big,
beautiful, money-saving
window—TODAY!

COMPLETELY WEATHERSTRIPPED

R. B. Leonard, Inc.—Dept. AB-3
5775 N. W. 35th Court, Miami, Fla.
Gentlemen: Please give me full facts
about the Air-Vue Aluminum Awn-
ing Window.

Check one: Builder □ Dealer □
Name: ........................................
Address: ......................................
City: ........................... Zone... State...
Phone: ..........................
Leading builders have proved that the beauty of Lockwood Oak Flooring helps sell homes on sight!
Yet, Lockwood’s precision-milling, soft texture and other features, such as nail groove, save up to 35% in laying and finishing cost.

Lockwood comes from nature’s finest native oak, grown in the Ozark Mountains. It is kiln-dried in compartment, cross-circulation, fan-type kilns, the same kind used by manufacturers of fine furniture where gluing-up is required. Lockwood lays easily and lays straight.
ABRASIVES
Any masonry material can be cut in seconds with either a "WET" or "DRY" specification. New type Clipper Abrasive Blades approach the cutting speed of diamonds.

DIAMOND
No other means of masonry or concrete cutting can equal the cutting speed of a Clipper Diamond Blade. Only Clipper has every necessary specification to do your cutting job.

"CBR" Break-Resistant
Drop—Bend—Twist—they're virtually unbreakable! 50% to 100% longer blade life on softer ranges of materials. Ideal for both masonry and hand power saws.

Today!...try the NEW—Faster Cutting—Economical CLIPPER SUPERIOR BLADES
Why guess about performance? Why experiment? Why take a needless loss? At our 24 locations you will find a Clipper Specialist who can tell you exactly which Clipper blade will give you the fastest cut at the lowest cost on your materials.

CLIPPER BLADES to fit
Every Make and Model Masonry—Concrete—Hand Power Saw
Your guarantee of the finest, fastest, most economical masonry and concrete cutting is the familiar Clipper Trade Mark on a Wet Abrasive—Dry Abrasive—"CBR" (Break-Resistant) or a Diamond Blade.

Nearly 20 Years Experience Behind Genuine CLIPPER PRODUCTS
The unqualified Clipper guarantee of satisfaction is backed by nearly 20 years of world-wide experience, the ability to select the finest materials and the "know-how" to put them together.

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2808 E. WARWICK • KANSAS CITY 3, MO.
Send FREE Literature and Prices on
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MARCH 1954

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COAST TO COAST

PHILADELPHIA • BOSTON • SAN FRANCISCO

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IN CANADA—P.O. BOX 476, WINDSOR, ONTARIO

MARCH 1954

63
THOMASON Flush Doors
Give You a Choice of

(or more)

BEAUTIFUL FACE VENEERS
...but only ONE high quality!

In residential, institutional, industrial or commercial structures...interior and exterior door design is important.

THOMASON Flush Doors add more eye-appeal and blend pleasingly with architectural features.

Make THOMASON Flush Doors a part of your planning. From the finest quality of foreign and domestic woods, you can choose a face veneer to suit your needs.

JUST LOOK AT THIS CHOICE OF FACE VENEERS
- Philippine Mahogany
- African Mahogany
- Genuine Honduran Mahogany
- Walnut
- Oak
- Birch
- Knotty Pine
- Gum, or any face veneer desired. In addition, THOMASON plastic-faced flush doors are available in all domestic and foreign wood grain plastics, as well as in decorative plastics.

Remember: keep design in mind...buy from the THOMASON line.

THOMASON Flush Doors
THOMASON PLYWOOD CORPORATION
Pawletsville, North Carolina

HOLT NMPL12 FLOOR SANDER
with patented demountable cushion that's replaceable in minutes right on job—no long, costly delays when nails rip cushion. Designed and built to eliminate vibration and chatter, so you get smooth floors easily. Double, self-adjusting belts, sure-grip clamps, high-speed cutting keeps jobs rolling, enable you to sand more floor daily.

HOLT Rotary Edgers for quick, easy sanding of edges, corners, stairs, closets, etc. Two-hand front and back controls permit fast starts and stops, improve control on close work.

HOLT Floor Machines put a sheen on floors that wins friends and extra business. Use for waxing, polishing, scrubbing, rug shampooing, steel wooling.

Take the HOLT way to more profitable floor jobs—mail coupon TODAY.

HOLT MFG. CO.
Room 8-3, 669 - 20th St., Oakland 12, Calif.

Please send me folders describing HOLT's exclusive, new features.

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Now, RICHMOND offers a compact "low-boy" steel furnace — the SH — in five different sizes, for a full range of warm air heating needs.

The RICHMOND SH features a stainless steel, chromium alloy combustion chamber, heavy 12 gauge heating element and unusually large filter area. Operation is fully automatic. All controls are enclosed in the sturdy steel jacket. Casing is Duridized to provide a superior bond for the handsome green enamel finish. Units are equipped with raised steel base which eliminates the need for grouting and permits installation on combustible floor.

Oil-fired types equipped with pressure atomizing burners, U/L listed and complying with commercial standard CS-75. Gas-fired units, A.G.A. approved for use with all types of gases, meet S.U.R. requirements.

You will be surprised at the reasonable cost of the SH model — it's priced right for today's more competitive heating market. Send off the coupon today for full details.

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Automatic controls — fully enclosed
Heavy 12 gauge heating element
Stainless steel combustion chamber (SH-P)
Extra large filter area
Raised base
Steel jacket — Duridized green enamel

**RICHMOND** radiator co. Box 111, Metuchen, New Jersey

Please send me more information and literature on the new SH Winter Air Conditioner. No obligation, of course.

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CITY ZONE STATE

We are ( ) heating wholesalers ( ) heating contractors.

MARCH 1954
General adds... the finishing touch

...another reason why General Doors cost less to hang

Each General Door comes to you carefully sanded to a velvety-smooth finish on precision belt-sanding equipment.

Clear finishes, stain coats, or paint “lay” evenly on this super-smooth surface.

General adds extra operations at the factory to give you a door that will “hang” faster, one that will finish easier.

ALL General Doors are HOT Pressed

Heat and pressure not only form a perfect glue bond, but reveal any weakness in a door before inspection, not months later after the door is hung.

General saves you time and money, eliminates costly call-backs.

General Plywood Corporation
Louisville 12, Kentucky
Vikon Aluminum tiles can be recommended for use under any conditions because they are guaranteed to be corrosion-free. What's more, Vikon aluminum tiles are absolutely the finest that money can buy. They are extremely light in weight, yet as tough, durable and rigid as you would want. You have a choice too of 26 beautiful decorator colors, designed to please your most discriminating customers. Write today for complete information.

**VERSATILE ALUMINUM TILES**

Enameled Steel • Enameled Aluminum • Stainless Steel • Plastic • Mastic • Accessories

Matching electric receptacles and switch plates

**VIKON—THE ONLY COMPLETE LINE**

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Washington, N. J., Dept. XD-2

Please send me, without cost or obligation, the complete story of Vikon Tile together with full-color brochure and sample tiles

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CITY    ZONE    STATE
ALUMINUM COMBINATION DOORS HELP
YOU BUILD BETTER, SELL QUICKER!

Adverse climatic conditions and weathering have no effect on rustfree, rotproof aluminum combination storm-screen doors. These durable doors last longer, stay attractive, require absolutely minimum maintenance and permit fast, convenient interchanges of screen and storm panels. These doors fit right in with popular aluminum storm windows and screens—offer another important aid to faster, easier sales because home buyers quickly recognize that they are getting more for their money.

Put aluminum’s advantages, both in special designs and standard products, to work for you. Attractive appearance, long life, low cost, availability, ease of fabrication with regular carpenter tools—these and many other aluminum advantages help you build better, sell quicker.

Remember—for help on your building material problems, call your nearby 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.

*Aluminum's lustrous natural color in a wide range of finishes matches all decorative schemes.

*Aluminum siding is easy to work with and apply. Won't rot, warp, shrink, swell or crack. Fire resistant.

*Aluminum ductwork is easy to handle and install. Won't rust, is a natural insulator, minimizes heat loss.

Send for free Architectural Aluminum catalog. For quick reference, see catalog 156 in Sweet’s Architectural File.

See “Mister Peepers” Sundays on NBC-TV. Consult local listings for time and station.
"Everyone wants Bondstone"
says J. W. Livingston
NEW Bondstone Dealer, Arkansas City, Kansas

J. W. LIVINGSTON

Mr. Elliot Mesnick, General Manager
Esco Cement Products, Inc.
Shamokin, Penna.

Dear Mr. Mesnick:

In answer to your letter regarding my progress as a new BONDSTONE franchise dealer, I am happy to report a terrific reception with BONDSTONE. I have been selling HOME IMPROVEMENTS for fifteen years and have never handled a product that appeals to so many different people. Everyone wants BONDSTONE, commercial owners and home owners alike.

To give you an idea of my progress since becoming a BONDSTONE franchise dealer on August 26, 1953, I have sold eight BONDSTONE jobs totaling 125 squares. These jobs total $16,294.00, on which there will be a HANDSOME PROFIT. Three of these sales resulted from leads furnished me by your home office in answer to BONDSTONE advertising in Consumer Magazines. Needless to say they were very much appreciated.

Last week my BONDSTONE display at the Kay County Fair at Blackwell, Oklahoma, produced over 100 leads. Mr. Mesnick at times we could hardly breathe for the people around the display. Interest was fantastic. I certainly appreciate the cooperation extended me and I am looking forward to a lasting and profitable future with BONDSTONE.

Sincerely,

J. W. Livingston

Be a Bondstone Dealer

Hundreds of franchised Bondstone Dealers like J. W. Livingston are making MONEY now! The home renovation market is wide open and can be sold easily. Sell Bondstone—supplement your present construction activities—increase volume and profits. It's easy to be a Bondstone Dealer. Good territories are available. Bondstone gives you SALES ASSISTANCE—NATIONAL ADVERTISING ... PRODUCTIVE LEADS.
Three Men Erect 66 Tied Arches In Only 85 Man Hours!

NO SPECIAL EQUIPMENT or SKILLED LABOR USED!

"We erected 66 Rilco Laminated Arches with three unskilled men—including arch assembly—in only 85 total man hours on this 46x130' IGA Foodliner in Weatherford, Oklahoma...and at only 25% of what we figured steel erection would have cost!" That's the statement by Johnny Klaassen, Weatherford contractor. "They're the best I've ever seen! We found Rilco Laminated Wood Tied Arches are of fine quality and workmanship—strong, rigid and attractive. And no trouble at all to achieve an even roof and ceiling.

"The ease of erecting arches saved time. I used only common labor under the supervision of a carpenter—no scaffolding or cranes."

Rilco glued laminated arches are prefabricated, precut and drilled for hardware furnished. Placed two feet on centers, they offer true level framing for roof and ceiling construction. Write for free data on tied arches.
Design for kitchen-dining-play area by Richard Neutra, F. A. I. A.

"CLAY TILE CONTRIBUTED BEAUTY, UTILITY
...AND A TRUE TOUCH OF THE UNUSUAL!"

World famous architect Neutra used all of the virtues of clay tile in his design for a kitchen-dining-play area. The playroom and patio floors flow naturally from the ingenious "stepsaver” kitchen. Cheerful tile work surfaces invite food preparation. The rear wall wainscoting presents a glistening, easily-cleaned surface that cuts down on cleaning chores. Clay tile can add much to your next residential, industrial or institutional project: top color and design potential, durability, ease of maintenance and real long range economy. Be sure to check comparative costs before specifying a substitute material—your clients will appreciate clay tile!

Tile Council of America, Room 3401, 10 East 40th Street, New York 16, N. Y. or Room 433, 727 West Seventh Street, Los Angeles, Calif.

PARTICIPATING COMPANIES: American Encaustic Tiling Co. • Architectural Tiling Co., Inc. • Atlantic Tile Mfg. Co. • B. Mifflin Hood Co. • Cambridge Tile Mfg. Co. • Carlyle Tile Co. • General Tile Corp. • Gladding, McBean & Co. • Mosaic Tile Company • Murray Tile Co., Inc. • National Tile & Mfg. Co. • Olean Tile Co. • Pacific Tile and Porcelain Co. • Panama Tile Mfg. Co. • Robertson Mfg. Co. • Royal Tile Manufacturing Co. • Summitville Tiles, Inc. • United States Quarry Tile Co. • Winburn Tile Mfg. Co.
THIS KITCHEN SELLS HOMES!

Pictured here is one of scores of different installations of the new Thor Built-in Electric Range. And wherever or however it is installed, the story is the same. Leading builders all over the country are unanimous in reporting that homes sell faster—when the kitchen features a new Thor Built-in Electric Range.

Yes, the new home with a new Thor Built-in Electric Range has the “something extra” it takes to attract women—and to swing the buying decision in your favor. Instantly, this most advanced of all built-in electric ranges identifies your new home as the last word in modern design. Women applaud the back-saving eye-level oven—largest of all “built-ins.” They go for the built-in color choices on the oven trim—another Thor exclusive. And they rave about the step-saving convenience of the new Thor top-surface cooking units—the ultimate in electric cooking.

To see what new Thor Built-in Electric Ranges will do for your sales in the competitive days that are here right now, drop us a line or mail coupon today!
Gold Seal Ranchtile

big sales asset
in the spectacular
TECHBUILT house

Here's why this special inlaid linoleum
is perfect for Carl Koch's space-stretching design:

The exciting principle of the TECHBUILT house
is that you can buy as much space as you'll ever
need for as little as $10,000. Carl Koch cut a
substantial slice of the building costs by turning
the ground level into a warm, handsome, living
floor. To do this he needed a quiet, comfortable,
practical flooring . . . yet a flooring that would go
on concrete slab. He found the perfect solution in
Gold Seal Ranchtile, the only genuine inlaid lino-
leum developed and proved for installation on
grade—with or without radiant heat.
Resilient, easy to keep clean, moisture-alkali-and-
grease-resistant, Ranchtile offers the Gold Seal
Guarantee . . . satisfaction or your money back.
Specify Ranchtile for your next on-grade project.

GOLD SEAL® FLOORS
and WALLS

CONGOLEUM-NAIRN INC., KEARny, N. J. © 1954
You'll want Ranchtile information right away! For details and free sample
write the Builders' Service Dept., Congoleum-Nairn Inc., Kearny, N. J.
The living room (above) and the dining room (right) are designed as a single unit with a battery of windows providing a continuous exposure for both. However, extension of the fireplace into this area, at right angles to the side wall, gives the impression of two separate and distinct rooms.

A built-in planter with storage space below separates the living room from the hall. Grille above is formed of 1x4-inch vertical boards spaced diagonally to the wall surface.
This ranch-type design, with its long sweeping roof lines and wide overhangs, produces a ground hugging effect that makes it adaptable to all areas.

a house for today and every day

Designed in the popular ranch house style, this 1953 National Home Week demonstration house is one that meets every requirement for today's living. Through the skillful use of new materials, sound handling of design features and effective room arrangement, everyday living is made easier and more comfortable.

The house is divided into three zones—living, service and quiet or rest zone. Living-dining area and porch comprise the first; kitchen, garage and stairs the second; three bedrooms and bath the third. All rooms of each
The departmentalized bathroom is accessible from the hall and the master bedroom. The kitchen is planned for maximum efficiency with major appliances grouped in a compact unit. All cabinets are oak with a blond finish.

The departmentalized bathroom is accessible from the hall and the master bedroom. A powder room is conveniently located off the hall.

The living-dining area has an interesting and pleasing fireplace and extended brick wall which partially separate these two rooms. Buff colored Roman brick laid up in stack joints is exposed in both rooms. Raised hearth of the fireplace extends the full length of the brick wall above, and the open area under the hearth provides ample storage for firewood.

Ceilings in these rooms are sloped, with an eight-foot height at outside wall increasing to ten feet at the opposite wall. Vertical 1x10-inch redwood paneling is the facing material for the wall adjoining the fireplace in the living room. Two rows of horizontal shelves are placed on this wall at door height for book and knick-knack display.

The service zone—kitchen and breakfast area—is an example of compact convenience. It is easily accessible from all parts of the house. Equipment, including sink, refrigerator, built-in oven and counter top plate, is arranged on two walls for easy accessibility.

Stair at one end of kitchen leads to a large basement space containing recreation room with fireplace, furnace and laundry room. This house is completely air conditioned and is mechanically ventilated, assuring year-round comfort and cleanliness.

The quiet zone has three bedrooms, one of which doubles as a study, and a large bath. Each bedroom has wardrobe-type closets with sliding doors. The walls of the study are finished in 1x8-inch ash boards laid horizontally. The bathroom has a 14-foot built-in L-shaped lavatory-vanity combination, a tub enclosure of plate glass and a glass-enclosed water closet. Walls and floor are covered with textured clay tile.

Placed on a poured concrete foundation and footings, the house has exterior walls of face brick. The recessed area on street front is faced with vertical redwood boards of random width. All framing members are wood, including studs, joists and rafters. White asphalt shingles cover the roof of the house.

BRAND NAME PRODUCTS USED

Armstrong Cork tile
Barrett asphalt shingles
Bryant gas-fired furnace
Bryant air conditioning unit
Crane plumbing fixtures
Flor-Ever vinyl asphalt tile
General Electric Disposall
Formica counters
Hall-Mack bath accessories
Johns-Manville Rockwool insulation
Kennarack sliding door hardware
Libby-Owens-Ford Thermopane
McKee garage door
Minneapolis-Honeywell controls
Morgan doors
NuTone kitchen fan
Pratt & Lambert paints
Reynolds insulation
Rheem water heater
Schlage hardware
Sterling cabinet hardware
Thorn aluminum windows
Versans & Kerling recessed lighting fixtures

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

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

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# Quantity List of Materials

For American Builder Blueprint House No. AB 200

Lawrence Schwall & Assoc., Architects

## General Information

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>House — Type</td>
<td>masonry</td>
</tr>
<tr>
<td>Area</td>
<td>1,730 sq. ft.</td>
</tr>
<tr>
<td>Cube</td>
<td>29,410 cu. ft.</td>
</tr>
<tr>
<td>Average height for roof</td>
<td>17 feet</td>
</tr>
<tr>
<td>Garage — Area</td>
<td>484 sq. ft.</td>
</tr>
<tr>
<td>Cube</td>
<td>5,324 cu. ft.</td>
</tr>
<tr>
<td>Height taken for cube</td>
<td>11 feet</td>
</tr>
<tr>
<td>Porch — Area</td>
<td>248 sq. ft.</td>
</tr>
</tbody>
</table>

## Excavating

- Trench for foundation: 194 lin. ft.
- Chimney and column footings: 276 yds.
- Excavation for basement: 850 sq. ft.

## Cement Work

- Foundations: 2,130 cu. ft.
- Concrete work: 1,475 sq. ft.
- Sidewalks: 100 sq. ft.
- Anchor bolts: 50 — 1/2" x 12"
- Foundation vents: 3
- Metal areaways: 5
- Metal basement sash: 5

## Masonry

- Type: brick and stone
- Walls — Brick: 1,500 sq. ft.
- Stone: 36 sq. ft.
- Chimney: 12" x 12" — 32 lin. ft.
- Flue lining: 10" diameter round — 20 lin. ft.
- Cap: concrete
- Fireplaces — Crab Orchard Stone: 2
- Throat and Dampers: 2
- Lintels: 2

## Iron Work

- Structural: 1,452 lbs.
- Lally columns: 2
- Miscellaneous: 10

## Millwork

### Windows — Type

<table>
<thead>
<tr>
<th>Material</th>
<th>Fixed and casement</th>
<th>wood</th>
<th>casement</th>
<th>aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glazed, including trim</td>
<td>Fixed, wood set in stops</td>
<td>5 — 35&quot; x 7&quot;</td>
<td>4 — 36&quot; x 24&quot;</td>
<td>1 — 12&quot; x 72&quot;</td>
</tr>
<tr>
<td>Casement</td>
<td>4 — 18&quot; x 36&quot;</td>
<td>4 — 18&quot; x 42&quot;</td>
<td>13 — 18&quot; x 50&quot;</td>
<td>7 — 18&quot; x 28&quot;</td>
</tr>
<tr>
<td>Fixed picture windows</td>
<td>2 — 36&quot; x 24&quot;</td>
<td>1 — 35&quot; x 50&quot;</td>
<td>1 — 24&quot; x 42&quot;</td>
<td>1 — 24&quot; x 50&quot;</td>
</tr>
</tbody>
</table>

### Exterior doors — Material

- wood: 3 — 28" x 68" | 1 — 30" x 68" | 1 — 36" x 68" | 6 — 30" x 68" | 1 — 36" x 68" | 6 — 24" x 68" | 4 — 36" x 68" | 7 — 28" x 68" |

### Interior doors, including jambs and trim

- 1 — 36" x 68" | 6 — 30" x 68" | 1 — 36" x 68" | 6 — 24" x 68" | 4 — 36" x 68" | 7 — 28" x 68" |

### Special interior doors

- Sets of sliding doors (included above): 6

### Special interior millwork

- Kitchen cases
- Bathroom cases and partitions
- Planters

## Carpentry

- Beams and girders: posts — 2 — 6" x 6" — 80'
- Joists: 20 — 2" x 10" — 260'
- 22 — 2" x 10" — 160'
- Bridging: 230 — 2" x 6" — 80'
- Studying and plates: 4 — 2" x 6" — 200 lin. ft.
- 2" x 6" — 700 lin. ft.
- Ceiling joists: 26 — 2" x 8" — 220'
- 32 — 2" x 6" — 260'
- 18 — 2" x 6" — 180'
- Roof rafters: 64 — 2" x 6" — 160'
- 4 — 2" x 8" — 260'
- 6 — 2" x 8" — 180'
- Framing lintels: 2 — 2" x 10" — 120'
- 3 — 2" x 10" — 180'
- 4 — 2" x 8" — 100'
- Subfloor: 2,200 b.f.m.
- Roof sheathing: 4,700 b.f.m.
- Sidewall sheathing: 300 b.f.m.
- Furring: 150 — 80' — 200 lin. ft.
- Grounds depend on interior wall material, jams and trim
- Carpenter stairs: 2 — 2" x 12" — 160'
- 14 — 2" x 10" — 30'
- Flooring — Hardwood: area to cover — 1,220 sq. ft.
- Softwood: area to cover — 325 sq. ft.
- Exterior material
- Soffits: 200 — 5" x 2" — 30'
- 1/2" plywood — 2,000 sq. ft.
- Eaves: 1" x 6" — 270 lin. ft.
- Parches: included elsewhere
- Insulation — Ceiling: 2,485 sq. ft.
- Sidewall: 1,300 sq. ft.

## Sheet Metal

- Gutters: 270 lin. ft.
- Downspouts: 70 lin. ft.
- Flashing: chimney

## Roofing

- Type: 210 lb. asphalt shingles over 15 lb. felt
- Area: 2,485 sq. ft.
- Interior Walls

| Area to be covered | 5,900 sq. ft. |

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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.
Labor and cost-saving advantages of precutting and preassembly, "tilt-up" construction, roof trusses and storage walls were effectively emphasized during the NAHB convention by Andy Place and an eight-man crew from South Bend, Indiana.

A step-by-step "live performance" dramatized these advantages:

Precutting—greater accuracy; lower cutting cost through the use of assembly line production methods; better use of "scrap" lengths; more efficient use of "on-site" labor.

"Tilt-up" construction—quicker, easier and more accurate layout through the use of templates; materials can be held in position more easily; nailing is faster, easier; men can work more safely and efficiently, as compared to working on ladders and scaffolds; an estimated cost saving of 20 per cent.

Roof trusses—stronger construction; greater flexibility in floor plan; can be preassembled, thus getting the house under roof more rapidly; provides a more level ceiling; permits finishing economies such as application of plasterboard to the single open room before partitions or storage walls are installed; in freezing weather, permits slab to be poured after house is under roof; provides large volume of storage in a dry area.

Storage walls—more rapid completion of house; savings in drywall finishing due to larger open areas and fewer corners; improved closet design with more accessible space; greater flexibility of living areas (bedrooms can be changed to meet family requirements).

Said Andy Place, "This system will work for 5 to 500 houses."

1. Workmen assemble a 28-foot wall section. This operation is controlled by the use of two templates extending the full width of the panels. After chalk lines have been drawn on the floor of the working area for the necessary width, templates are placed between lines and approximately six inches from top and bottom plates. Templates are notched every 16 inches to receive studs.

2. Panels of plywood sheathing are applied after studs, window and door assemblies are in place and nailed. Just before application of sheathing, wall section must be squared.

3. Template also is used for siding or shingles. Fabricated metal corners are used for both siding and shingles.

4. Less than one-half hour after workmen started on wall section, it is tilted in place. Note template as workmen detach it from studs.

5. Second section is tilted into place and workmen are locking the sections firmly together. Extensions of 2x6-inch topplate (one can be seen in foreground of photo No. 1) interlock as sections are brought together.

6. Two workmen assemble roof trusses in five minutes. Note use of automatic nut running device.
Trusses are raised into position and secured 24 inches on center.

Demonstration nears finish as workmen slide storage wall unit into place. The entire operation required approximately 2½ hours, including time for the foundation demonstration described below.

**Place uses standard steel curb forms for his foundation**

Simulating a corner section of the pier and beam construction used in their South Bend operations, Place and his crew demonstrate how the job can be done with the use of standard highway curb forms. "These forms can be used for 400 to 500 houses by just keeping them clean," stated Place.

1. This illustration shows workmen placing reinforced steel around perimeter (grade beam). Operations preliminary to this step include leveling of the site; placing of stakes around the perimeter by the engineer (see photo 1); digging of pier holes around the perimeter with 16-inch augur on tractor; and trenching for placement of concrete forms.

2. Steel forms for outside of grade beam have been set and workmen are securing forms with steel stakes.

3. Rear view of outside forms in position. Note steel stakes and bracing at corner.

4. Forms for inside of grade beam are of wood. They are secured by steel stakes, thus assuring rigid four-inch separation between outside and inside forms.

5. Perimeter insulation (two-inch fiber glass in sheet form) is placed and wrapped with Visking vapor barrier. Insulation is installed against the inside form and also flat, extending two feet into center of slab area. Place subgrades eight inches from top of form. Simulated layer seen in photo is sand fill.

6. Here workmen complete installation of perimeter heat duct (vitreous tile). Although not shown in this sectional mockup, plenum chamber for heating system is placed in position at this time, as are simple metal forms for heat duct outlets. Vapor barrier, which had been folded back to permit installation of ducts, is then placed over entire slab area, followed by 6x6-inch steel mesh. (Mesh is raised when concrete is poured to assure its being an integral part of the slab.)
seven trade groups stage unprecedented seven-ring demonstration circus

SPARKED by NAHB Construction Committee Chairman Earl W. Smith and Construction Department Director Leonard B. Haeger, seven trade associations joined hands to sponsor and conduct an unprecedented series of demonstrations. These ran concurrently on seven stages in the Grand Ballroom of the Conrad Hilton on the last day of the convention. Appropriately named the “How To Do It” Circus, each trade group staged five complete 30-minute demonstrations during a three-hour morning session, returning in the afternoon until all questions were answered. On these and the following pages are picture and word condensations of the “how it’s done” message each association put across during its half-hour show.

Ringmaster Earl “Flat-Top” Smith

how to finish drywall—
The Gypsum Association

1. Cutaway section of second ply of gypsum wallboard. Special adhesive on back of this face layer is used to laminate face layer to first ply.

2. First step in concealing and reinforcing drywall joints, is the taping of horizontal wallboard joints with this taping tool.
3. Here the same tool tapes a corner wallboard joint.

4. Mechanic applies tape to outside corner. Tool can tape all kinds of corners and joints—inside or outside corners, regardless of angle; recessed or flat edge joints. Taping device applies correct length of tape where you want it, and with adequate cement to properly imbed it.

5. Mechanic finishes horizontal wallboard joint with 12-inch hand finisher.

6. Cement is feathered out for an even, smooth finish, as mechanic applies second coat with hand finishing device.

7. Corner finisher is used after corner roller imbeds and squares corners. Finisher plows excess cement back over tape evenly and smoothly.

8. Mechanic spots wall and ceiling nails with special nail spotting tool.

9. The finished drywall. (Ames taping tools, available on lease only, were used for this demonstration. This particular set of tools has been used in taping and finishing more than 65,000,000 square feet of wallboard.)
how to get better clay tile installations—The Tile Council

1. Shown are two of three basic types of clay tile. Three types are: (a) 4 1/2 x 4 1/2 inch glazed, square; (b) ceramic mosaic; (c) quarry.

2. Good tile work begins with the carpenter. He should select straight and true studs. These should be braced midway in their height with 2x4 herringbone bridging cut between 15 and 30 degrees with the horizontal.

3. Good tile work also depends on the plumber. He should always use tub hangers to avoid tub settlement and opening of cracks where tub meets wall.

4. See that all pipe connections are brought out at least 1 1/2 inches from stud line. This assures adequate tolerance for fittings.

5. Conventional mortar installation is shown here. Studs have been waterproofed, proper type of metal lath used, scratch and leveling coats of mortar applied, followed by skim coat of neat cement paste just before tile is set in bed.

6. Mechanic sets tile using mortar method. Always soak tile in clean water before installing in mortar. Cut the mortar bed with a trowel every four or five courses, vertically and horizontally, to allow for shrinkage of mortar.

7. Mechanic sets tile using adhesive method.

8. Mechanic applies white grout to joints between tile.

9. Here are ingredients for proper 1:1:4 mix: one bag of Portland cement, one bag of lime, and 13 1/2-quart buckets of clean, damp sand.
ILLUSTRATION above shows workman installing 12x12-inch ceiling tile with adhesive. In using this method, care should be taken to apply the adhesive in spots or dabs two inches in diameter, \( \frac{3}{4} \) to \( \frac{5}{8} \) inch thick, one in each corner of the square tileboard. For larger rectangular tileboard, use two or more additional spots.

In corner photo above, random width plank is applied on furring strips over framing members. For typical installation, furring strips should be at right angles to plank on nine-inch centers up to a height of five feet, and 12-inch or 16-inch centers above this height.

Illustration at right shows application of 4x8-foot building board direct to framing members. Framing should be installed in the usual manner on 12- or 16-inch centers. Headers should be cut in between framing members at the ends of the insulation boards to provide a nailing base, and also in back of chair rails and all other heavy moldings. Insulation boards should be of sufficient length to completely span between sills and plates or other structural members.

At right below, mechanic applies lath over framing members. Lath should be applied with long edges at right angles to the framing or furring strips.

Photo at left below illustrates use of newly developed shingle backer. Wood shake shingles are applied directly to 25/32-inch sheathing with the use of the shingle backer and a special 2-inch galvanized annular-grooved nail. The shingle, along with a wood lath strip, can be used to apply asbestos-cement shingles to sheathing.
solder joints for copper tubing—
Copper & Brass Research Institute

There are nine important steps in properly making a solder joint for copper tubing. Four of the steps are illustrated in the photos at left.

1. (Upper left) Cut tube square and to exact length. If it isn’t cut square, it will not seat properly against the shoulder. If you cut too short, you steal part of your socket depth and the joint is weakened.

2. (Upper right) Remove burrs or irregularities.

3. (Lower left) Clean tube end and fitting. This removes oxides which prevent the solder from bonding with the copper. It is the most important step in the entire operation.

4. (Lower right) Flux tube end and fitting. This removes residual oxide, prevents further oxidation during heating; and floats out dissolved oxide ahead of the solder, thus presenting a clean surface to the solder at all times.

5. Assemble tube into fitting.

6. Heat the joint until metal is hot enough to melt solder. This assures capillary action and good bonding.

7. Apply solder to joint. If it isn’t hot enough, mechanic again applies heat to the joint, not the solder.

8. Clean excess flux and solder from tube and fitting.

9. Inspect joint for complete ring of solder.

how to install kitchen cabinets —
Steel Kitchen Cabinet Mfgs. Ass’n.

The proper use of hanger bars and the systematic placement of wall and base kitchen cabinet units were detailed in this demonstration.

In the top illustration at right the mechanic is installing hanger bars for wall cabinets. These are placed on a level line at the height recommended by the manufacturer. (When using hanger bars follow instructions of the maker carefully, it was emphasized.)

Hanger bars are not necessary, however. Wall cabinets can be anchored with wood screws regardless of wall construction. This is particularly true in remodeling. For new construction, metal wall cabinets also can be installed easily and solidly by anchoring directly into ground strips.

Center illustration shows installation of corner wall cabinet on hanger bars. Placement should always start in corner, working outward in both directions for additional units. To simplify the installation of wall cabinets, they should be positioned before the soffit is completed.

In the bottom photo workman is assembling the corner base section unit. He does this in the center of the kitchen floor and, after assembly is complete, he slides the unit into position. Adjoining units are then placed in position, again working outward from the corner.
Some of the newer fasteners and techniques for applying asbestos cement siding shingles to non-wood sheathing are illustrated and described on this page.

1/2-inch gypsum board—Two self-clinching nails for use with 1/2-inch gypsum board are the ES Nail No. 11 and the E. G. Loc-Nail. Both nails secure the shingles to gypsum board by automatically clinching immediately behind the board.

Insulating board sheathing—The E. G. Loc-Nail also is made in proper lengths for 1/4-inch and 2 1/2-inch insulating board sheathing. ES Products, Inc., maker of the ES Nail No. 11, is developing a nail for 2 1/2-inch sheathing of this type. It will be known as ES Nail No. 13 and will be available in June, 1954. The recently developed Flintkote “hook nail” is used for shingles which have four head nail holes, instead of the usual three holes at the bottom. Flintkote and other manufacturers will supply shingles so punched on order. The “hook nail” fasteners, for use with 1/2-inch or 2 1/2-inch insulating sheathing, are tin-coated, red copper nails. They are driven down at a slant and the shingles in the course above fit into the “hooks”. Since part of the hook comes between the overlapped shingles, an accentuated shadow line is produced.

3/16ths and thicker plywood—A 1 1/8-inch aluminum alloy nail is available for use over plywood sheathing. Point, barbing and other features are planned to give it good holding power. It is usable on all plywood sheathing 3/16-inch and thicker. It can be used with lumber sheathing as well.

2 1/4-inch twist nail—This nail, made of hardened copper and tin plated, can be used over any non-wood sheathing or nailing base. The nail is driven through the sheathing and clinched from behind with a “twister tool,” similar to a forked screw driver. This twisting draws the shingle tight and forms a lock which holds it in place. Suitable for all thicknesses of gypsum and insulating board sheathing, they also can be driven into studs after a portion of the shank is cut off.

1 3/4-inch multiple-thread barbed nail—This aluminum nail was developed for remodeling work in fastening shingles to old wood siding. The multiple-thread shank is designed for extra holding power.

Metal channels—Several types of metal channels are now available. The channel strips fit over the head edge of the under-course shingles, and are held in place with “hook headed” nails driven into the studs, one nail to each stud. The nail is L-shaped at the head and the “hook” clamps the strip to the top of the shingle. Some channels have flanges which extend upward flush with the sheathing, and are nailed through that flange for extra rigidity. The butts of shingles in the succeeding course engage with, and are supported by the channel. The headlap in this method is reduced to one inch from the customary 1 1/2 inches.

“Horsefeathers” method—The “horsefeather,” or beveled furring strip, is a piece of wood not less than 3 1/2 inches in width and not less than 3/8 inch thick at the butt. It is nailed securely to the studs, two nails to the stud, and laps 1 1/4 inches over the top of the shingle. The next shingle is applied so that its butt extends 1 1/4 inch below the base of the nailing strip, nailed through the face nail holes with standard face nails.
"The 1954 'Country Clubber' represents the ultimate in our many years of effort to deliver the most house for the least money."—Bill Levitt

Levitt "Country Clubber" will probably be America's biggest housing value news in 1954
1954 “Country Clubber” Has All This for $15,500:

1. 2,000 square feet of finished living area—1,200 on main floor and 800 on second floor.

2. Two complete baths—each features double sliding mirror medicine chest and wall tile.

3. Complete landscaping—over a dozen trees, 43 assorted shrubs and lawn.

4. Double glazing—panel window system eliminates need for storm sash.

5. Radiant heat—oil-fired boiler supplies hot water to coils imbedded in slab.

6. Dishwasher sink—six-foot double drainboard, stainless steel sink has built-in dishwasher.

7. Automatic washer-dryer—combination washer-dryer unit is conveniently placed in kitchen.

8. Stove and refrigerator—push button range with clock and timer, 11.2-cubic-foot automatic defrost refrigerator.


10. Outdoor living—a slate patio near kitchen for outdoor entertaining.

11. Fireplace—two-way log-burning brick fireplace, includes screen and fireplace tools.

12. 100x200-foot lot—fully improved streets, water, sewer, storm sewer are included.

13. Planned community—community planning integrates neighborhoods as part of larger developments.

14. Recreation facilities—swimming pools, ball diamonds, playgrounds, parks—all part of Levittown, Pennsylvania.

Buyers are ordering Levitt and Sons’ “Country Clubber” now, even though the first owners will not move into one of the nation’s biggest housing values until next September. This “Country Clubber” is big news. It costs less and has more square feet of living area than the previous Levitt model.

On the drawing boards a year, this house was planned to offer maximum amount of usable space for the home owner’s dollar—major requirement for the ’54 Levitt model. It is a house of 2,000 square feet with many flexibility features. It can have from two to five bedrooms, and the flexibility is such that a sixth can be added later by the owner with only the construction of a partition.

But best of all, this house provides ample living area for a large family. There is no sacrifice of living space in order to add more bedroom area.

The Levitt selling model has a floor layout designed to suit the average family with a moderate income. The model has three bedrooms and enough extras to tempt most buyers.

It features a living-dining room combination plus a large kitchen. The ground floor also has a “garden (Continued on page 92)
room," new to the housing field, with an exterior wall and interior partition of glass. Two bedrooms and bath complete the ground floor.

The second floor has a large recreation room, complete bath, and third bedroom.

But if this isn’t housing news enough, add to the package a large double carport, a host of automatic kitchen appliances, extra large

The two-way fireplace is focal point in the large L-shaped living room. The room measures 22½ feet across the front.

New to the housing industry in such a low-cost package is the “garden room” with fenestration on both exterior and interior walls. The room can be used as den, sewing room or bedroom. The room measures 11 feet by 10 feet 8 inches.

20,000-square-foot lot, a well-planned community with direct suburban transportation service, and ample recreational facilities—all this for $15,500.

Financing requires $1,000 down for vets, $3,100 for non-vets with carrying charges of $74 per month. Included in the monthly tab are amortization, interest, insurance and taxes. There are no closing costs in Levitt financing plan, which forms another plus feature.
Bedrooms include shoulder-high windows that add extra wall space and privacy. Closets have sliding screen doors and are engineered for storage use.

The plus-value kitchen is complete. Included in the sales price are stainless steel sink with electric dishwasher, stainless steel topped push-button automatic range, automatic defrost 11.2-cubic-foot refrigerator, automatic washer-dryer combination and broom closet. Room is 12x12 feet with plenty of eating space.

There are two baths in the “Country Clubber,” each containing extra large all-steel wall medicine cabinets with sliding door mirrors, porcelain tile walls.
Second floor is completely finished in knotty pine, has recreation room, bath and third bedroom. If family requirements call for additional sleeping areas, recreation space can be made into two or three additional bedrooms.

The pine paneled second floor area is 16 feet wide and runs the full length of the house. The enclosure shown houses the bath and walk-in closet. Beyond, is the third bedroom.

The upstairs bedroom is 16 feet wide and is separated from recreation area by bathroom and walk-in closet.

Adjacent to the bedroom is this large storage closet and bath, which has the same extras as the downstairs bathroom.
It's more than likely your clients will LIKE everything about Ro-Way Overhead Type Doors—because customer satisfaction is built right into every detail.

They'll LIKE the handsome Ro-Way styling—the clean lines that blend so well with any architectural design.

They'll LIKE the way Ro-Way doors are built of carefully selected west coast lumber... with mortise and tenon joints both glued and steel doweled for extra strength; muntins, rails and stiles precision squared for precision fit; sections rabbeted for weathertight joints; millwork drum and hand sanded for real smoothness.

They'll LIKE the way Ro-Way heavy gauge hardware is both Parkerized and painted—after fabrication—for maximum rust resistance.

They'll LIKE the quiet ease of Ro-Way operation, assured by such outstanding features as friction-reducing Taper-Tite track coupled with Seal-A-Matic hinges; easy gliding, ball bearing Double-Thick tread rollers; and specially made springs with tension Power-Metered to the weight of each door.

What's more, you'll LIKE the client goodwill you earn by specifying Ro-Way—for every residential, commercial and industrial application. It isn't likely you'll ever regret it. So remember Ro-Way—for satisfaction all around.
ride the trend to faster sales

**Fir Plywood** built-ins are a definite sales-feature in any home you build

YOU'RE swimming with the tide when you offer buyers plenty of built-in storage space. Even modest homes can be lifted above the ordinary given extra sales-appeal, extra livability with low-cost fir plywood built-ins. Use them in every part of the home—in living and dining rooms, bath, hall and utility area as well as kitchen and bedroom.

And fir plywood is the perfect material for built-ins. Big panels save time and labor. They're easy to cut, fit and fasten. Strong. Fir plywood takes abuse without splitting or chipping. Good looking. Smooth real wood panels take any finish.

Play it safe. Your reputation's on the line with every home you sell. Specify only DFPA grade-trademarked fir plywood. "EXT-DFPA" for outdoor use, PlyPanel for interior finish, PlyScord for structural use. Other grades for other jobs.

* DOUGLAS FIR PLYWOOD ASSOCIATION, TACOMA 2, WASHINGTON

AND REMEMBER—

fir plywood cuts costs... for wall and roof sheathing, subfloors, underlayment, siding, exterior trim
Combination dining bar, buffet and storage unit
designed by Grosvenor Chapman, Washington, D.C.

Shoulder-high sectional storage wall
designed by Seymour R. Joseph, N.Y., N.Y.

Fir plywood wardrobe closet and dresser
designed by Bruce Walker, Cambridge, Mass.

Half-high partition and storage unit
designed by Paul Edward Tay, Long Beach, Calif.

Exterior fir plywood carport storage closet
Designed by Bruce Walker, Cambridge, Mass.

Modular fir plywood storage wall
designed by Project Designers & Planners, N.Y., N.Y.

Fir plywood shelf-door wardrobe closet
designed by Edward Hanson, Stillwater, Minn.

MORE IDEAS FOR BUILT-INS—Send today for free “Portfolio of Architectural Designs for Built-ins.” Over 50 prize-winning ideas from national architectural contest. (7 are shown on this page) Write USA only: Douglas Fir Plywood Assoc. Dept. B, Tacoma, Washington.
NEW SPENCER SUBURBAN
THE OIL-FIRED BOILER BURNER UNIT
with the beauty and convenience of a kitchen appliance!
NEW PRODUCT

COMPLETE NEW HEATING UNIT

combines "kitchen appliance" beauty with "code boiler" dependability . . . offers easier installation and servicing

Spencer now offers a new ready-to-install oil-fired heating unit called the Suburban. This unit combines time-tested Spencer efficiency and durability with a new kind of beauty and ease of installation. It's equipped to supply year-round hot water, conforms to ASME and SBI codes, offers several unique advantages,

FITS IN ANYWHERE—the Spencer Suburban actually rivals modern kitchen appliances in adding beauty to kitchens or utility rooms. All parts are completely enclosed in a gleaming white enamel beauty jacket. Connections are easily concealed. And because the Suburban is completely insulated, it can be placed flush against metal appliances or wooden cabinets, or even set directly on a wooden floor. No special base is necessary.

EASIER TO INSTALL—just hook up electrical connections, oil and water lines, and smoke pipe. That's all.

EASIER TO SERVICE AND CLEAN—readily removed plate on top makes all fire tubes easily accessible. No need to disturb jacket or smoke pipe when cleaning this unit. Controls and all working parts can be reached from front for easier servicing.

This is the newest member of Spencer's Complete Line.

510 SQ. FT. NET SBI WATER RATING

DIMENSIONS—ONLY 21½" x 32½" x 56" SBI

SPENCER HEATER
LYCOMING-SPENCER DIVISION

Spencer Heaters, Dept. AB-3-4, Lycoming-Spencer Division
AVCO Manufacturing Corp., Williamsport, Pennsylvania

Dear Sirs: Please send additional information, including full specifications, on the new Spencer Suburban to:

Name                                Position
Company
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City                               Zone         State
The '54 P&H Pioneer Home

72 sq. ft. larger living room than most at price
27 ½ sq. ft. more closet space than most at price
30 sq. ft. larger kitchen, 43 ft. more kitchen shelving
extra powder room, folding door room for TV or 4th bedroom

Build homes that offer more . . .
you'll sell more, profit more

There's no selling problem with this new P&H Home. Just let your prospects see it; let them compare with others at the price. That's all the selling you'll have to do. The new P&H Pioneer Home has full bath plus powder room, more than 1,100 sq. ft. of living space. And it has more new ideas, more selling features than any home you've seen at the price in years.

Site costs are lower, too, when you build P&H Homes. Homes arrive at site complete with hardware, millwork, glazing and trim, ready to go up in a day. You can build P&H Homes the year around, offer 2, 3 or 4 bedroom models with or without basements. Financing aid is available from a P&H subsidiary when local sources are limited.

See how risk-free and profitable home building can be

WRITE FOR DETAILS ON THE P&H BUILDER PROFIT PLAN NOW

P&H HOMES
HARNISCHFEGER CORPORATION
353 Spring St., Port Washington, Wis. Phone Port Wash. 611

New Flexibility! 3-Way Dining Area

Here's a real sales-closer in the '54 P&H Homes — a changeable dining area. The matchstick bamboo folding screen on a ceiling track makes dining area part of kitchen or living room, or open to both, in seconds.

Now sell homes to the low-cost market — profitably.
Write for details on the new P & H minimum-cost Home, priced to sell at about $6,900.
Here's your BIGGEST VALUE in power saws today...a portable, big-capacity DeWALT for only $229 delivered!

2 New Models for Small Builders

VALUE NO. 1
Model MBC DE WALT 9" Saw
Only $229 Delivered

VALUE NO. 2
Model GWF DE WALT 10" Saw
Only $348 Delivered

Today...your best bet to reduce job costs and make bigger profits is a new portable DE WALT...especially designed for small builders...priced low enough to pay for itself on the first house it helps build with savings these ways:

Big Capacity...new 9" saw cuts 2½" deep, 10" saw cuts 3" deep; both rip to center of 48" wide panels to give you ample capacity for house jobs.

Save Handling...put DE WALT alongside the lumber pile and pre-cut all your framing from a planned cutting list.

Save Marking...lay out one piece, set up your DE WALT and easily duplicate all cuts from ONE marking.

Save Fitting...DE WALT pre-cuts perfectly the first time, saves the added cost of fitting.

Save Material...DE WALT cuts from above, easily follows line marks for perfect work and eliminates spoilage; re-works odd sizes into usable pieces.

Save Millwork Cost...DE WALT shapes, dadoes, etc., turns out millwork on the job...no more mill costs.

Save Repair Costs...direct drive DE WALT motor is grease-sealed for life...no brushes, no repairs to worry about.

Double Use...after framing carry DE WALT inside to “build in” those cozy extras that help sell houses.

Visit your nearby DE WALT dealer and pick up a low-cost DE WALT for your next job. It's easy to operate...easy to move around. And you get low-cost DE WALT PERFORMANCE that produces a better house for less money...more profit to you! Write for complete DE WALT catalog.

See our lightweight builders' model at Booths #15 and #30, National Association of Home Builders' Show, Jan. 17-21, Conrad Hilton Hotel, Chicago.
Tests like these insure the quality of Kentile asphalt tile

Because of scientific tests like these, every tile shipped has precision-straight edges and true right-angle corners. That means installation ease and economy. Further, Kentile's manufacturing techniques and tested ingredients mean that every tile is tougher, more durable, easier to clean...with lasting brilliance of color and uniformity of marbleization. But, get full details when you consult the Kentile Flooring Contractor. He's listed under FLOO RS in the Classified Telephone Directory.

Specifications and Technical Data

INSTALLATION: Over any smooth, firm interior surface free from spring, oil, grease and foreign matter...over metal, wood, plywood, concrete, radiant heated concrete slab, concrete in contact with the earth; on or below grade.

THICKNESSES: Kentile is available in two gauges: 1/8" for residential and most commercial uses—3/16" for industrial use and where extra-heavy duty flooring is needed.

SIZES: Standard tile size is 9" x 9".

SPECIAL KENTILE: Greaseproof asphalt tile for industrial uses in a wide range of marbleized colors—extremely resistant to petroleum and cooking greases and oils, alcohols, alkalis and most acid solutions.

Approximate Installed Prices (per sq. ft.)

<table>
<thead>
<tr>
<th>KENTILE: A Colors</th>
<th>20¢</th>
<th>25¢</th>
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<tr>
<td>KENTILE: B Colors</td>
<td>25¢</td>
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<td>KENTILE: C Colors</td>
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<td>KENTILE: D Colors</td>
<td>35¢</td>
<td>40¢</td>
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<tr>
<td>SPECIAL KENTILE</td>
<td>40¢</td>
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These costs are based on a minimum area of 1,000 sq. ft. over concrete. Color groupings range from Group "A," the darkest solid colors...to Group "D," the lightest marbleized colors. Special Kentile is available in Regular and DeLuxe Colors.

Samples and literature available on request from nearest Kentile, Inc. office listed below. Ask about Kentile for WALL use, too.

Kentile is the floor your clients know and want...

BACKED BY MORE FULL-COLOR ADVERTISING THAN ANY OTHER ASPHALT TILE FLOOR

KENTILE * SPECIAL KENTILE * KENCORK * KENRUBBER * KENFLEX *


KENTILE, INC., 58 Second Avenue, Brooklyn 15, New York * 350 Fifth Avenue, New York 1, New York • 705 Architects Building, 17th and Sansom Streets, Philadelphia 3, Pennsylvania • 1211 NBC Building, Cleveland 14, Ohio • 900 Peachtree Street N. E., Atlanta 5, Georgia • 2020 Walnut Street, Kansas City 8, Missouri • 4532 So. Kolm Avenue, Chicago 32, Illinois • 4501 Santa Fe Avenue, Los Angeles 58, California

102 AMERICAN BUILDER
Built for All-Day Sawing
Deepest Cut of All
Safer 4 Ways
Specially Priced...

$95.

More advanced features than any other saw at any price!

1. MORE POWER—Larger motor with higher amperage provides 10% more power.
2. LIGHTER—New style casting shaves weight to 13½ lbs.—means less muscle strain.
3. KICK-PROOF CLUTCH—Eliminates dangerous kick-back when blade hits knots or hard spots.
4. BLADE GUARD LIFT LEVER—Permits you to pull guard back without risk while blade is spinning.
5. CAM-ACTION BLADE GUARD—Exclusive design (pat. pending) provides steady, full retraction—abolishes extra push required to overcome "hitching."
6. AUXILIARY FRONT GUARD—Automatically covers exposed blade at front of saw when base is lowered for shallow cuts.
7. EXTENDED BASE—Lets you cut in either direction on either side when notching or trimming roof overhang.

PORTER-CABLE Machine Co.
2003 N. Salina St.
Syracuse 8, New York

(Gentlemen: Please send complete information on your new "Contractor's Special"; also name of nearest dealer.

Name ____________________________
Address __________________________
City ___________________________ Zone ____________
State ___________________________
they won't
Park Forest does not want its citizens to search elsewhere for a luxury home if the family’s fortunes rise. It does not want them to outgrow their planned community as to taste. It wants to be able to offer the growing family a kind of house that it needs and wants—in Park Forest!

Park Forest was originally planned as a park city offering housing to a large veteran group who needed inexpensive housing. Now, nearly six years later, it is two-thirds built. Its average male citizen is about 31 and is making around $6,000 a year. Ninety per cent of the families there have children.

It is likely that the average Park Forester will increase his income in the future. This man and his family are very likely to want a nicer home as their fortunes rise. In a children’s community, they may want more bedrooms.

For these reasons, American Community Builders, headed by Nathan Manilow, have built or are planning a series of projects like the following:

A luxury section in which an individual can buy a lot and build a custom house of his choice. This area, called "Thorn Creek," is a wooded section south of Park Forest. Thorn Creek will be restricted for homes from $20,000 to $40,000.

Houses with a custom look, which differ markedly from those homes built in Park Forest in the past. These new homes differ from the standard models built before in that they are of contemporary design. They are generally higher priced than those built in the past. These houses feature eight basically different designs selling at prices from $14,350 to $17,500.

Houses that will appeal to growing families. One of these homes is called the "growing home." It is designed for families with moderate budgets. The growing home is priced at $10,995. It has a semi-finished second floor. Owner can finish this himself. Another model recently built was also designed for the large family, but for one with a larger income. This house contains eight rooms. Five of the rooms are bedrooms. House sold for $13,500.

Two large row houses, originally planned as co-ops. Now built and occupied, they represent luxury rental units called Illini Town Houses. Each of the Illini Town Houses contains 6 housing units—one seven-room unit and five six-room units.

Planned for the future and still on the drawing boards is what will be known as the Carroll Sweet Apartments. Preliminary thinking about the apartments suggests a two-story building containing 96 units. These apartments are thought of as predominantly one-room units with bath. Some will contain two rooms and bath. The one-room apartments will contain a bed alcove and a strip kitchen. Two-room apartments are envisioned as a full bedroom and a living room-kitchen. These apartments will give special consideration for persons. Non-slip floors are planned. Bath-tubs will be designed to eliminate hazard. The Carroll Sweet Apartments are planned to rent for about $70 a month.

With a broad range of different kinds of homes to choose from, both as to price and as to design, a Park Forester will be able to find almost any kind of dwelling he may want to live in. By planning ahead, Nathan Manilow and his firm are creating a community that has flexibility sensitive to family change.

CONTINUED
Here is what Park Forest is doing—

Typical of the houses sold in Park Forest in the past is this two-bedroom model with one bath. Without garage it sold for $13,025 to $13,575. (upper left). One of the 546 new homes for sale in Park Forest (above), is contemporary in design. House has three bedrooms, two baths, carport and outdoor storage wall: meets trend toward larger families, higher incomes. House sells for $16,300 to $17,100.

Park Forest shopping center has been enlarged. Center is free of traffic. Parking areas surround stores which are placed in an island of parks and walks.
Growing home is a frame story-and-a-half expansible unit. Exteriors were varied with different window treatments, use of redwood and colored asbestos shingle. First floor contains 800 square feet. Second floor contains 320 square feet, but is left unfinished. A staggered building line gives variety to street appearance of growing homes. Lots average 50x130. Automatic washer is included with purchase. The growing home sells for $10,995.

For the economy-minded growing family—

Five bedroom house is ideal for a large family. The 42-A is brick and frame, looks very much like the "growing home," but is larger. The 42-A has a kitchen, dining room, living room, bath and two bedrooms downstairs. Three bedrooms and a bath are on the second floor. Two of these houses were built in Park Forest as an experiment to get reaction of the public. The house was popular and sold easily at about $18,500.
houses from $14,850 to $17,200—

New houses for Park Forest now have at least three bedrooms. They show a marked departure in architectural style from those built in the past. This line of Park Forest homes is priced from $14,850 to $17,200, is available in eight basically different exterior treatments. Basementless and one-floored, they have one, one-and-a-half, or two bathrooms.

Kitchens are equipped with steel cabinets, double sinks, automatic garbage disposal units. Floors are asphalt tile. Two-bath home sells for about $16,050 to $16,300. has a living room 12x20 feet. One-bath home is priced at $14,850 to $15,250, also has a living room 12x20 feet. One of the models having a bath-and-one-half has a living room 12x20 feet, a dining room 12 feet 2 inches by 9 feet 2 inches and a kitchen with a snack bar. This home also has about 100 feet of attic storage and a disappearing stairway. This house sells for $17,200.

The row house takes on a new look in Park Forest. The Illini Town Houses recently built make up two structures that differ from the rental units built in the past. Each structure contains six dwelling units. Five of the units in each building have three bedrooms, one has four bedrooms. Each house has its own carport and storage closet.

Living-dining rooms have one wall of floor-to-ceiling windows. Kitchen is equipped with refrigerator, dryer, washer, disposal unit, exhaust fan and range. Each six-room unit rents for $150 a month. Seven-room unit rents for $175 a month.

The Town Houses were developed from the experience American Com-
Community Builders gained after having built 3,010 rental apartments in the past. In those built previously, houses had a front door facing walks and parks. Back door was a service entrance facing parking and play areas for children. People tended to live to the rear of their homes, used the service entrance near their automobiles, seldom used the front door.

The Illini Town Houses differ in that circulation is controlled through entrance hall placed near carport and driveways. Traffic is channeled to important rooms through the foyer and the stairs to the second floor without the necessity of going through other rooms. Door in living-dining room is now logically of secondary importance.

Contemporary in design, this six-room, three-bedroom home was designed especially for families with children. Sponsored by Parents' Magazine, house can be built on a site 60 feet wide allowing approximately five feet on each side of house to lot line. Built of brick, house has no basement. House has floor-to-ceiling window in living room glazed with insulating glass. Overhang protects against direct rays of sun.

House has asphalt tile throughout, perimeter heating. Year-round air conditioning can be made part of the heating system. Sleeping areas are in a wing by themselves, separated from living and dining areas by closets, bathrooms and kitchen-utility areas. Two bedrooms for children can be separate rooms with a solid wall between or can be separated by a folding door which opens to provide a large play area.

Model shown here has carport and storage unit, contains 1,268 square feet within house. Carport adds 257 square feet. Storage unit contains 30 square feet. Fifteen other models similar to this one were built without carports and storage unit, sold for $17,500 each. Plans show how house may be expanded later.
Screened-in porch adds living space, gives this Coronado a long, low, modern look.

"I sold 25 Gunnison

Carport, fireplace, and brick wainscoting give this Gunnison Coronado a look of luxury. Basic model measures 24 ft. x 40 ft., has 3 bedrooms.

How he did it

1. Good product at low price: Gunnison Homes.
3. Trained erection and sales personnel. Every home under roof in 56 man hours. One experienced salesman devotes his full time to selling these homes; he can handle up to 100 homes a year.
4. Development plans approved by local planning commission. All Gunnison designs accepted by FHA and VA.
5. Mortgage financing made easy with help of United States Steel Homes. Ninety-day construction financing also available.
6. Newspaper advertising sells development as new planned community. National and local advertising by United States Steel Homes helps sales.
With brick wainscoting and other extras, this 3-bedroom Catalina home sold for $13,200.

Homes in just 10 days"

says W. B. Eagles,
Louisville, Ky.

W. B. Eagles got his new Whipps Mill Village off to a rousing start last year: he built and sold 55 homes, and he developed the land for more than half of the 74 homes he will complete in 1954. Every home is individually styled, every one fits comfortably on a 60-foot lot, and most important, every one is a Gunnison Home. Here is what Mr. Eagles told us:

"To make a housing development successful today, you have to have a sure supply of mortgage money. The prestige and active assistance of United States Steel Homes helped me to get good financing. Ten days after I had mortgage money I sold 25 homes: nearly half of all the homes I built last year.

"My Gunnison Homes are attractive, well built, and easy to erect. An experienced 7-man crew can get the largest model under roof in just one 8-hour day."

At Whipps Mill Village, Mr. Eagles uses fireplaces, planting boxes, tile baths, brick wainscoting, electrical circuit breakers and other features to add variety and increase sales appeal. He does this and still sells the most luxurious model for only $14,000.

United States Steel Homes, Inc. has helped make Whipps Mill Village a success by providing a large variety of excellent homes and by helping and advising the builder. Send the coupon for complete information about the many advantages of becoming a United States Steel Homes Dealer.

United States Steel Homes, Inc.
Dept. AB-34, New Albany, Ind.
My organization is capable of building more than 15 conventional homes a year. Now I'm interested in what United States Steel Homes has to offer. Send me complete information, telling me what I will gain by building the products of United States Steel Homes, Inc.

Name

Firm Name

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City & State

United States Steel Homes, Inc.
Formerly Gunnison Homes, Inc.

GENERAL OFFICES: NEW ALBANY, INDIANA
Plants at New Albany, Indiana, and Harrisburg, Pennsylvania
DISTRICT OFFICES: Atlanta, Ga. - Chicago, Ill. - Columbus, Ohio - Dallas, Tex.
This says “Here’s Quality”
to the buyers of your houses

Buyers are quick to spot symbols of quality products when they’re house hunting. They naturally respond favorably to names they know.

They certainly know the L·O·F name. Years of constant L·O·F advertising have taken care of that—and in 1954 the famous L·O·F trademark will be printed 226,021,180 times in Libbey·Owens·Ford Glass advertising.

Those labels on the glass are real sales helps for you—whether you use Window Glass, Polished Plate Glass or the most-wanted double glazing...Thermopane® insulating glass.

Your L·O·F Glass Distributor or Dealer stocks glass products, and has the knowledge and the sales helps to aid you in building and selling better homes. Call on him for his ready service and willing help.

LIBBEY · OWENS · FORD GLASS COMPANY
6244 Nicholas Building, Toledo 3, Ohio
Sell your homes faster!

So high in value
...so low in cost
...so easy to install

Backed by the name home-buyers know...

SARGENT of New Haven®

turn the page, and →
Compare

Compare it for price...for appearance
...for design...for that "feel" of quality
...for protective features
...for EVERYTHING that you want!

ALIGNALOCK is backed by the famous...
SARGENT of NEW HAVEN! It is the kind of branded hardware that home owners and home buyers recognize immediately as reliable!

ALIGNALOCKS are available in all the functions you require.
2245AS Entrance door set without guarded latch bolt.
2207AS Entrance set with guarded latch bolt.
4122 Grip handle for entrance sets.
2264AS Bedroom or patio set (without emergency key).
2265AS Bathroom set (with emergency key).
2215AS Passage set.
2293AS Knob pull.

Beautiful appearance! In polished brass, bronze, aluminum, polished chrome for split finishes.

Balanced design! Two big solid brass knobs...both with the "feel" of quality. No unsightly holes for emergency keying or locking buttons.

Fully guaranteed! This Sargent Guarantee Certificate, displayed in new homes, indicates quality throughout.

NO OTHER LOCK CAN BE INSTALLED FASTER THAN AN ALIGNALOCK!

Self-aligning assembly allows even non-skilled help to install AlignaLocks easily, accurately and economically.

Special installation tools!
Available is a strike indicator, centering tool, boring and mortising tool for face plate.

Small cross bored...only 13⁄4 inches required.

Greater projection of bolt gives mechanics more leeway with loose fitting door frames.

Phillips's Head Screws have a neater appearance, speedier installation.

ONLY HIGHEST QUALITY MATERIALS ARE USED IN ALIGNALOCKS

No die-cast parts. Concealed working parts made of pressure-formed metals. No easily cracked zinc die-cast parts.

Rugged steel case!

All working parts, except the cylinder, are in the rose. Knob contour is unbroken.

EASY ON THE LATCH...FIRM ON THE KNOB

TWO springs instead of one! Both springs work against knob action...only one works against latch.

Smooth, positive bolt and knob action!

Automatic unlocking! In bathroom or bedroom functions, if door is closed with the lock "on", it unlocks automatically. Won't remain locked if door accidentally closes.

Emergency unlocking! Even a paper clip, inserted in small hole in exterior rose of bathroom set, releases lock.

All from one source! Sargent offers you a complete line of quality builders' hardware. One source...one invoice...unity of design and finish in all hardware required.

For complete information about the new line of Sargent AlignaLocks, and free literature for your prospective home buyers, see your supplier at once. Or write us.

SARGENT & COMPANY
New York • NEW HAVEN, CONN. • Chicago
THE KITCHEN THAT HELPED SELL A CITY!

"American Kitchens No. 1 Selling Feature," says J. E. MERRION, Builder of $25,000,000 Project, Hometown, Ill.

J. E. Merrion, builder of the Chicago suburban 2,000 home, 310 acre project, Hometown, Ill., labeled American Kitchens the "kitchen that helped sell the city!" He said: "Every builder knows how important the kitchen is in a sale. But with American Kitchens, in every unit in Hometown, my selling job was far easier."

Ease and swiftness of installation—the savings on labor costs—the work-saving conveniences of American Kitchens as well as their beauty are the reasons why more and more builders are choosing American Kitchens over all other steel kitchens or wood cabinets. Let us prove to you... how famous builders use better quality American Kitchens at lower prices to sell homes faster!

"Cabinets of steel for lasting appeal"
"You Save an Easy 50%"
TWO YEARS AGO, Donald J. Scholz, Toledo, Ohio, Home Builder and Designer purchased his first DELTA Saw-Jointer combination. In constructing his well-known California Contemporary Homes, he found that his DELTA unit "paid for itself in six and one-half months."

William Decker, head carpenter for the Scholz organization, and a contractor in his own right, reports that "you save an easy 50% on time and labor in using this DELTA Saw-Jointer on all kinds of finishing work. Not only that, but you know you're holding to precision requirements."

"I just slip it onto my truck and take it to the job. In a minute it's hooked into a power line, and we're really rolling."

A DELTA Saw-Jointer Combination, set up on your jobs, will turn out precision cut pieces faster, with less waste. You'll keep your carpenters busy nailing, not measuring and cutting!

With DELTA Power Tools, you can streamline your operations—keep labor costs and material waste to a minimum. You can build better homes in less time, attract today's selective buyers, and substantially increase your margin of profit. See your DELTA Dealer today, or send the coupon for full information.

**DELTA QUALITY POWER TOOLS**

Another Product by Rockwell

Delta Power Tool Division
Rockwell Manufacturing Company
646C North Lexington Avenue
Pittsburgh 8, Pennsylvania

☐ Please send DELTA AB-53 Catalog.
☐ Please send name of my nearest DELTA Dealer.

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City Zone State
Nobody knows better than you that in today's market the extra values built into a house make the difference between Sale and No Sale.

Most "extras" add to your cost—but Durall Aluminum Tension Screens reduce it!

Durall consumer prices range from $3.65 to $5.82 for most sizes. Compare that with your present screening costs!

Not only will these new and different screens cost you less—your home owner will be everlastingly grateful to you because he'll have no upkeep. Duralls last much longer than conventional screening—never warp, rot, rust or stain.

Duralls are pre-made to fit! That means your installation costs are sharply cut. It also means the home owner can put them on or take them off from the inside in just nine seconds. He can roll them up to store in a nearby closet instead of lugging them from window to basement or attic.

Ask your lumber or hardware dealer today for money-saving, time-saving, sales-building Durall Tension Screens.

**DURALL**
_ALUMINUM TENSION SCREENS_

N. Y. Wire Cloth Co., Inc., New Canaan, Connecticut
If, as the statisticians tell us, the woman is 84% of the decision factor in choosing body style, color and upholstery in automobiles, how much of a decision factor is she in choosing the family home?

Actually, the average woman has made it her business to know a great deal about homes and practically every home you build has to pass a jury of several or many women whose wants are quite well defined.

They want comfort and convenience, of course, and quality and value as a matter of common sense. And, most definitely, they want style—style that they’ll be happy to live with and proud to show off; style to bring compliments from arriving guests and charm them from room to room; style that doesn’t neglect the rear elevation or the inconspicuous gable; style that wears well because it is sound, and satisfies because it is beautiful.

When a woman finds a home like this, she’s quick to say “Yes” because it’s what she wants. And that’s exactly why we include all of them in Modern Homes—comfort and convenience, quality and value and, genuine custom styling of outstanding distinction.

Maybe you should investigate the opportunity of building fine Modern Homes in your community. Why not give us a call at LUzon 4-1550.
This is the kitchen of the Caplan General Electric "Young America" Home that helped sell so many houses. It contains: G-E Refrigerator, G-E Food Freezer, G-E Range, G-E Dishwasher, G-E Disposall, G-E Automatic Washer and Dryer.

REGARDLESS OF PRICE RANGE, your houses can have a G-E Kitchen-Laundry
(See your G-E distributor for suggestions on merchandising your homes)

IN YOUR $9,995 HOUSES
Includes G-E Refrigerator, G-E Range, G-E Automatic Washer, G-E Disposall and G-E Cabinets. Adds as little as $2.98 monthly to mortgage payments.

IN YOUR $12,500 HOUSES

IN YOUR $16,000 HOUSES
Houses the first month!

Alexander Caplan's model home in Chatham Township, New Jersey was a G-E "Young America" House—erected by the builder from basic plans supplied by the Home Bureau of General Electric. The G-E Kitchen-Laundry particularly delighted prospects.

IT WILL PAY you to investigate how helpful General Electric's Home Bureau can be in this new era of tougher selling—just as it has been to Mr. Caplan and other successful builders throughout the country. Today people are getting mighty choosy and want more for their money.

Just completed are specifications for 4 new "Young America" Model Homes which contain features prospects want most in their new homes... features they can afford.

Outstanding among the "want-most" features is the attractive General Electric Kitchen-Laundry.

The value of these dependable appliances can usually be included right in the regular mortgage, and the monthly cost to the home owner is usually no more than that for a typical telephone bill.

Builders in scores of cities are reporting phenomenal sales results of General Electric "Young America" Houses. Why don't you get all the facts through your General Electric distributor today?

Home Bureau, General Electric Company, Appliance Park, Louisville, Kentucky.

New G-E Room Air Conditioners at low per-unit cost! Models are easily installed. No plumbing required.

You can put your confidence in—

GENERAL ELECTRIC

MARCH 1954
Time and money are the two most important factors in any trucking job—and the new Chevrolet trucks for '54 are built to save more of both!

**THEY SAVE YOU TIME**

**ALL THE TIME**

Whether you deliver door-to-door or haul state-to-state, new Chevrolet trucks will speed up your schedules. They bring you new hour-saving engine power—greatly increased acceleration and hill-climbing ability. You save time with greater safety... and without increasing your maximum road speeds. In traffic or on delivery routes, new truck Hydra-Matic transmission* saves time, and saves driving effort as well. It’s the last word in no-shift truck driving.

**THEY SAVE YOU MONEY**

**IN EVERY WAY**

Along with increased power, these great new trucks bring you increased operating economy. You enjoy hefty gasoline savings in every model, thanks to new high-compression performance. In addition, you save on upkeep and maintenance. That’s because you get extra strength and stamina in drive line and chassis. There are heavier axle shafts in 2-ton models, newly designed clutches and stronger frames in all models.

See your Chevrolet dealer for all the facts about the “savingest” Chevrolet Advance-Design trucks ever built!... Chevrolet Division of General Motors, Detroit 2, Michigan.

**MOST TRUSTWORTHY TRUCKS ON ANY JOB!**

**CHEVROLET ADVANCE-DESIGN TRUCK FEATURES**

**THREE GREAT ENGINES**— The new "Jobmaster 261" engine* for extra heavy hauling. The "Thriftmaster 235" or "Loadmaster 235" for light-, medium- and heavy-duty hauling.

**NEW TRUCK HYDRA-MATIC TRANSMISSION**— offered on ½-, ¾- and 1-ton models. Heavy-Duty SYNCHRO-MESH TRANSMISSION— for fast, smooth shifting.

**DIAPHRAGM SPRING CLUTCH**— improved-action engagement. HYPOID REAR AXLE— for longer life on all models.

**TORQUE-ACTION BRAKES**— on all wheels on light- and medium-duty models.

**TWIN-ACTION REAR WHEEL BRAKES**— on heavy-duty models.

**DUAL-SHOE PARKING BRAKE**— greater holding ability on heavy-duty models.

**NEW RIDE CONTROL SEAT**— eliminates backrubbing.

**NEW, LARGER UNIT-DESIGNED PICKUP AND PLATFORM STAKE BODIES**— give increased load space.

**COMFORTMASTER CAB**— offers greater comfort, convenience and safety.

**PANORAMIC WINDSHIELD**— for increased driver vision.

**WIDE-BASE WHEELS**— for increased tire mileage.

**BALL-GEAR STEERING**— easier, safer handling.

**ADVANCE-DESIGN STYLING**— rugged, handsome appearance.

*Optional at extra cost. Ride Control Seat is available on all cab models. "Jobmaster 261" engine on 2-ton models, truck Hydra-Matic transmission on ½-, ¾- and 1-ton models.
BUILDERS PRAISE NEW PLASTIC TILE!

Pabco Floron Offers Beauty, Resiliency Even Over Concrete

A perfect answer to the problem of creating comfortable, colorful, easy-to-clean floors that are economical and long-lasting has been developed by Pabco Products Inc. It’s sensational new Pabco Floron Tile, acclaimed enthusiastically by architects, builders, commercial and institutional buyers.

Easily installed on any floor, including grade-level concrete slabs, this new plastic tile solves the “Big 9” complaints about commercial floor tiles. Floron eliminates objections about “priced too high; can’t install on grade; not resistant to rot; too hard on feet; indents too easily; unmatched joints; unattractive colors; installation cost too high; or difficult maintenance.”

Tough and long-wearing, yet resilient, Floron gives excellent resistance to alkali, acid and grease. It withstands dampness and rot; the surface resists indentation. Its attractive brushed design is available in seven rich colors to blend well into any color scheme.

The result of five years of intensive research by Pabco’s laboratories, this great new plastic tile outcores all other floor tiles in actual on-the-job installations, as well as rugged laboratory tests.
25,000 See G-P Ripplewood In Four Distinctive Rooms

In the den-dining room, family room, kitchen and utility room they saw and loved G-P Ripplewood wall paneling. Thousands said, “That’s what we want,” and asked, “Where can we get it?” During the two-week showing, more than 25,000 people visited this model home built by Byrd Real Estate to promote its new Vestavia Hills subdivision.

GEORGIA—PACIFIC

PLYWOOD COMPANY

Dept. AB-3. 270 Park Avenue, New York 17, N.Y.
... the exciting textured paneling that makes them buy

CHARLES BYRD of Byrd Real Estate Co., Inc. says: "G-P Ripplewood was the sensation of our Better Homes and Gardens 'Readers' Choice' model home. There was tremendous enthusiasm for this wall paneling. It was far and away the most popular feature in our home. We sold the model and made a number of other sales, too, and feel that a large share of the credit for the outstanding success of our promotion belongs to G-P Ripplewood."

G-P RIPPLEWOOD MAKES HOMES SELL FASTER

Discover for yourself the powerful sales appeal of Georgia-Pacific's Ripplewood. You'll find it the most popular feature in your homes, too . . . with the kind of popularity that brings out the checkbooks and makes your homes sell faster.

It all stems from G-P Ripplewood's exclusive combination of features and advantages: the rich sculptured texture, the swirling grain pattern, the beautiful and distinctive finishing effects that are so easy to obtain, and the genuine wood construction. They all add up to the luxury look that catches the eye and the "I'll buy" of today's home shoppers.

You'll be amazed how little it costs to panel and finish a room with G-P Ripplewood . . . little more than many ordinary wall materials. G-P Ripplewood comes in standard 4' x 8' panels and full-size 12" and 16" squares. See your Georgia-Pacific dealer or mail coupon for further information.

FREE: Builders' Fact File. Send for handy kit of G-P Ripplewood literature—specifications, sales features and other useful data.
often the cheapest
ALWAYS THE BEST...

Load supporting members
are also load creating...that's
why strong, lightweight lumber
is the favorite structural material.
Build freely...even on filled ground
...and depend on lumber to carry
the load with the least possible
foundation pressure.
Remember the beauty of lumber
for exteriors, too...especially
West Coast lumber...Douglas Fir,
West Coast Hemlock, Western
Red Cedar, Sitka Spruce.

Send for folder describing free literature
available for your reference files.
West Coast Lumbermen's Assn.,
1410 S. W. Morrison St., Portland 5, Oregon

Douglas Fir • West Coast Hemlock
Sitka Spruce • Western Red Cedar

WEST COAST LUMBER

whatever the job consider WOOD first!
It takes two...
TO BUY A HOUSE

...and Russwin 'All-Star' Features help sell the man

If you know human nature, the man in this picture is about to be paged... but he has an impression already that counts in the builder's favor. Russwin lockset features reflect top quality instantly.

Consider and compare features of the "Homegard" Economy Line... screwless roses... entrance door sets with the famous Russwin ball bearing, pin tumbler cylinders... internal working parts of rugged, pressed steel. Everything about the "Homegard" is designed for top value in its class. In addition, it's just about the simplest, fastest line to install. Ask your dealer for details. Russell & Erwin Division, The American Hardware Corporation, New Britain, Conn.

SINCE 1839
draw crowds to your model; plan on opening at home show time

“SCR brick” is used extensively in this pilot house for new Pottstown. Pennsylvania project. Built on sharp slope, house appears two stories high when viewed from rear.

Window areas make up most of side wall facing street.

Dress up your model home with a new construction feature and time its opening to coincide with that of the local home show. Prepare a booth at the show so attractive that it will be a strong incentive for visitors to drive across town and see your house. Support the booth-home show house tie-in with a strong promotion campaign in local newspaper.

Operating on that formula at
Pottstown, Pennsylvania, Allen K. Davidheiser induced 5,000 persons to inspect his model the first two days it was opened. No attempt to secure sales was made at the time, for the show monopolized the builder’s time; however, more than 20 of these visitors left their names at the house so that he could get in touch with them later.

The model was a three-bedroom, one-story and basement house. Priced at $16,500 with a 65x125-foot plot, it featured profuse use of the new “SCR brick.” In addition to the exterior walls, this was the basic material used in a 28-foot, L-shaped planting box built under the corner window group in the living room. Inside, it made up a 12-foot-long wall with a two-way fireplace at the open end—the only partition separating living room, dining room and kitchen.

High headroom basement is partitioned into three rooms. One of the smaller rooms contains forced warm-air furnace and laundry tubs; another is used for storage. Doors and trim are of same quality used upstairs. Rear elevation is above grade, has full-size windows and door.
Here's Why:

Soft texture is inherent in Arkansas Soft Pine timber. As lumber it is dried in advanced type, cross circulation kilns, automatically controlled. By this precision process, it is stabilized at the moisture content required by the Southern Pine Inspection Bureau, under whose rules it is graded and grade-marked.

Thus stabilized, Arkansas Soft Pine retains its natural "life" free from case-hardening. Result—nails are driven home without splitting the wood, to be tightly gripped and securely held permanently... your dependable assurance of sound framework.

Arkansas Soft Pine is sold by lumber dealers east of the Rockies. For data, illustrated grades, specifications, send today for this FREE Handbook.

BRADLEY LUMBER CO. OF ARK., WARREN, ARK.
CROSSETT LUMBER COMPANY, CROSSETT, ARK.
A Division of The Crossett Company
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FORDYCE LUMBER COMPANY, FORDYCE, ARK.
FROST LUMBER INDUSTRIES, SHREVEPORT, LA.
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OZAN LUMBER COMPANY, PRESCOTT, ARK.
SOUTHERN LUMBER COMPANY, WARREN, ARK.
SIGNIFIES

ilized Soft Texture

- Tops in Rigid Framework Because It Provides Supreme Nail Holding Power

ARKANSAS SOFT PINE BUREAU
333 BOYLE BUILDING - LITTLE ROCK, ARKANSAS
HOW TO SELL HOUSES
"LIKE HOTCAKES"

The Right Topping Sells Homes...

as it does hotcakes. And, while the right topping needn't be the most costly, it does require a distinctive "flavor."

Genuine red cedar shingles add a distinctive architectural "flavor" to most any home style. Cape Cod, Colonial, Western Ranch—all look their best when topped with cedar. Sell their best, too!

Buyers recognize CERTIGRADE No. 1 shingles to be quality through and through. They know there's an important difference between the real thing and a substitute. They want that difference—that "plus value"—in the homes they buy.

That's where you come in. Selling homes with cedar shingle roofs is a pleasure. You needn't apologize for a thing. You're selling quality. You're selling the roof that has stood the test of time. The roof that does more for a home by adding beauty, strength and insulation. The roof that does more to a home by providing "bonus years" of trouble-free service.

What's more, you can market genuine cedar shingle roofs for the same price as makeshift materials. The secret's in the sheathing. Cedar shingles—one of the strongest materials known for their weight—may be applied over spaced sheathing. That means you save up to 50% on sheathing costs when building with cedar. Those savings in application time and materials pay the difference between genuine cedar shingles and substitutes.

So start selling homes as you'd sell hotcakes—with the right topping. Cedar will help you gain the reputation of a quality builder and a volume seller.

For your free copy of a handy roof estimating sheet, write:

RED CEDAR SHINGLE BUREAU
5510 WHITE BUILDING, SEATTLE 1, WASHINGTON
OR 425 HOWE STREET, VANCOUVER 1, B. C.
For the one room that's seldom "done over," Hall-Mack chrome bathroom accessories lend a tasteful styling and long-lasting beauty that never becomes dated. Their clean, simple lines and gleaming chrome finish are in perfect keeping with any type of furnishings or architecture. Include Hall-Mack accessories in your plans—and specify Hall-Mack!
Handle all these Jobs WITH THE VERSATILE LOW-COST Model D Grader

With original cost but one-third that of a large grader, low operating cost and almost unlimited versatility, the Allis-Chalmers Model D Motor Grader is helping builders cut costs on a variety of jobs.

LOADS OR TRANSPORTS sand, gravel, cement, other bulk materials with \( \frac{1}{4} \) yd. rear-mounted hydraulic bucket. Dumping height of 8 ft. \( \frac{1}{2} \) in. allows easy loading of high truck bodies.

LOADS SNOW with bucket or cleans it with V-type plow to help keep winter building operations on schedule — provides year-round versatility.

LANDSCAPES, grades lawns, levels around houses. Maneuverability lets Model D work easily in narrow quarters.

BACKFILLS ditches, trenches; packs and levels ground; loads excess dirt to trucks. Tandem drive and 8,000 lb. weight provide plenty of traction when working in soft materials.

BUILDS AND MAINTAINS roads, streets, alleys, driveways; spreads rock; scarifies; cleans up on construction work. Excavates shallow for slab foundations.

ROUGH GRADES for curbs, gutters; finish grades shoulders, sidewalks, between forms; cuts and cleans drainage ditches; removes weeds and brush.

LET YOUR DEALER DEMONSTRATE right on your own job what the versatile 50-hp. Model D can do for you — on a low equipment investment. Or send for complete information.
Consider the L Shape
from a Profit Angle

Here is a 3-bedroom house with a remarkable floor plan that can save you money. Like other Pollman Homes it is designed for convenient living and styled to appeal to the most discriminating buyer. It offers you the economies of Pollman top flight designing and engineering, and controlled factory assembly. In addition its various orientation possibilities and choice of elevations permit a builder to further cut costs by concentrating on a single house. With the L-SHAPE you avoid completely that "peas in a pod" look.

If you are a builder or an investor interested in building better, more salable homes for less money, write today. We will be glad to send you complete information or have our local factory representative call.

THE THYER MANUFACTURING CORP.

2854 Wayne Street
Toledo, Ohio

For information on the Southerner Line of L-SHAPE Pollman Homes for Southern and Gulf Coast climates write THE THYER MANUFACTURING CORP. 418½ EAST PEARL STREET DEPT. 5, JACKSON, MISS.

MARCH 1954
So many jobs for so many doors — which door is the right one? Here's a way to pick:

Decide on your source of all flush doors first. Pick Atlas Plywood. Then you know you have the range of sizes, kinds, woods and qualities to fit any opening. Atlas Plywood furnishes you hollow or solid core flush panel doors for every purpose. You're sure of getting what you order because Atlas Plywood controls manufacture, inspection and service in every step from forest to finished product. It is among the oldest and largest suppliers of plywood and its products. Make "Atlas Plywood" your word for doors. It's your best and easiest way.

**Atlas Plywood**

**CORPORATION**

**FROM FOREST TO FINISHED PRODUCT**

ALL THE WOODS
ALL THE GRADES
ALL THE SERVICE

Whatever you specify in "Atlas Plywood or equivalent" in doors, dealers can get exactly and speedily from Atlas Plywood Jobbers. You get all the advantages of flush doors for modernity, beauty and ease of cleaning and maintenance PLUS the advantage of Atlas Plywood's quality control from forest to finished product.
Here's ease of installation plus economy in ceiling radiant heating

You save material costs and fabrication time with Bundyweld Tubing, performance-proved in thousands of ceiling radiant heating systems throughout the country.

Consider these advantages: Bundyweld is extra-strong, yet ductile; bends easily to short radii on a simple fixture, in the shop or at the job site. It comes in standard, 20' lengths with one end expanded, when specified, for simpler, sounder joining.

Bundyweld is tough enough to withstand the usual rough handling, too. Although lightweight, it’s rigid enough so that two men can easily position a group of joined coils. The smooth coils keep their shape; lie flat against the ceiling for easy plastering, with no waste of time or material.

In your completed system, Bundyweld transmits heat efficiently; conducts water with a minimum of friction. Just check below for the advantages that only Bundyweld can give you. Then, write us today for more information.

Radiant Heating Division
Bundy Tubing Company • Detroit 14, Michigan

Bundyweld Tubing
DOUBLE-WALLED FROM A SINGLE STRIP

why bundyweld is better tubing

Bundyweld starts as a single strip of steel which is copper-coated. Then, it's... continuously rolled twice around laterally into a tube of uniform thickness, and passed through a furnace. Bonding metal fuses with basic metal. Result... Bundyweld double-walled and brazed through 360º of wall contact.

SIZES UP TO ½" O.D.

NOTE the exclusive Bundy-developed beveled edges, which afford a smoother joint, absence of bead, and less chance for any leakage.
FLOOR TO CEILING INSTALLATION OF BOLTA-WALL provides beauty and protection in busy corridors and rooms at Seton Hospital. Note that Bolta-Wall is applied first; floor and rubber cove base are installed later.

TEXAS HOSPITAL ADDS WING AND REMODELS WITH Bolta-Wall

Beautiful, tough, easy-to-apply vinyl wall covering fills need for lasting installation at Seton Hospital

Here's what one hospital did with Bolta-Wall. It's a profitable example of what you can do for your customers in homes, offices and institutions of all kinds.

Seton Hospital, Austin, Texas used 30,900 sq. ft. of Bolta-Wall for their recent renovation. They used it in corridors and rooms...in cafeterias, on counter-fronts and in private dining areas.

They used it because Bolta-Wall is a product of incomparable beauty and durability at the price...because maintenance costs are unbelievably low — replacement and repair are virtually eliminated and cleaning is easy with a damp cloth...because Bolta-Wall is fire-retardant, conforming to Paragraph E-3b of Federal Specifications SS-A-118a (New York Testing Laboratories, Inc.).

Bolta-Wall is highly resistant to scuffing, staining and fading, will not crack or peel and withstands impact. It adheres to old or new walls with little if any prior refinishing of wall surface. Dimensional stability insures no seam shrinkage. It is heavily advertised to the people you serve.

Bolta-Wall is available in 3 outstanding patterns, Bamboo, Leathergrain and the new Mahogany woodgrain. All come in a wide range of handsome decorator colors. Send for free samples and specifications, Box 508...

BOLTA, Lawrence, Mass.

TRIMMING IS EASY WITH BOLTA-WALL. Material can be cut with ordinary knife or scissors. Combine Bolta-Wall tiles with Bolta-Wall by the yard as wainscoting for handsome effects.

AMERICAN BUILDER
IT ALL ADDS UP TO
TEMCO
...automatic gas wall heaters
...automatic gas floor furnaces

Smart home builders, whose customers clamor for better houses at less cost, are turning to Temco for the best in fully automatic gas heat. Temco's outstanding features make for more attractive homes, more flexible homes... at a price far below other heating systems.

add it up for yourself—
1. No basement required.
2. Less floor space needed.
3. No expensive duct work.
4. Simple, inexpensive installation, both upstairs and down.
5. Completely automatic heat at a figure so low it will fit any family budget, any home.
6. Built and backed by America's Gas Heat Specialists—TEMCO.

TEMCO, Inc.
Department B-650, Nashville, Tennessee
Please send catalogs and full information about Temco Automatic Gas Wall Heaters and Temco Automatic Gas Floor Furnaces.

Name
Address
City Zone State
Donnay-Reitz Inc. of St. Paul, Minnesota, have little trouble selling their houses in the firm's Roseville Terrace subdivision, north of the city. They use miniature models to help merchandise their homes.

Here is what they do: They plot an entire neighborhood in miniature where prospects can see at a glance how the area and each house will appear when the project is completed.

Each miniature is a duplicate in color of an actual building, either completed or under construction at Roseville. Roseville Terrace now consists of about 134 houses, including the latest group of 54 now being built or recently completed.

The miniatures are placed on sheets of plywood. The sheets are painted green to simulate grass and are marked in sections. Each section represents, in scale, a lot plotted in the Roseville development. Streets are indicated in gray on the plywood. On each section that duplicates an actual lot is placed a miniature model of the house to be built. Each of the models duplicates one of ten basic front elevations.

Donnay-Reitz use one basic floor plan, but have designed ten different elevations to add variety to the appearance of their development. When the basic floor plan is reversed, still greater variety is achieved. To further enhance a feeling of difference in the homes, some of them are set back from the street while others are placed forward on their respective lots. Still others are situated diagonally. Each home is given different color treatment.

Each miniature model, therefore, being a true representative of its actual counterpart, indicates to the prospect how his future home will look as to its placement and appearance.

Donnay and Reitz begin their developments by putting up a "sample" or "pilot" house. It is built exactly as the others in the development will be except, of course, for the front elevations which vary according to the ten basic elevation designs.

The partners make the sample demonstration house a salesroom. When prospects enter the sample house they are free to inspect the quality construction. In the living...
One basic plan is used, is often reversed; ten different elevations are available to buyers; four elevations are shown (right) as they will appear when built.

sell houses

room placards tell the potential buyer about prices and financing. (Prices range from $12,250 to $12,742.) Other placards illustrate the ten different elevations available.

The miniature model neighborhood is set up in the basement. Prospects can decide which elevation and which lot they prefer, but they must accept the exterior color pattern of the house shown. If the color pattern is not palatable, the prospect must choose a house in another location. Each lot and house bears a number which corresponds to an identical number placed at the site of each house. If the prospect is sufficiently interested, he is taken to the site of the house he has chosen. If he buys, the miniature model of his house is given to him.

George Donnay's and Martin Reitz's merchandising plan is a success. Most people who come to look, linger and usually buy. Quality construction, moderate prices and miniature models do the trick. "Sold" signs often go up on the miniature neighborhood before the houses it demonstrates are completed.
BUILDERS! Here's the Only Really Low-Cost House for Big Volume...Assured Profits!

NATIONAL HOMES' NEW "CADET"

- Priced to sell as low as $4800 plus lot!
- Less than 80 hours On-Site Erection Time!
- Complete Financing Available!

Write or wire today — learn what it can mean to you to build NATIONAL HOMES!

ALL CADETS have smart beamed ceilings and many other sales-making features

ALSO PRODUCERS OF THE THRIFTY "PACEMAKER"...THE DE LUXE "CUSTOM-LINER"...THE OPEN LIVING "RANGER"...
EACH THE STYLE AND VALUE LEADER IN ITS PRICE CLASS

NATIONAL HOMES CORPORATION
LA FAYETTE, INDIANA - HORNSEHEADS, N.Y.
Mr. BUILDER!

HERE’S THE KEY TO QUICKER SALES and BIGGER PROFITS

When you install Kaustine oil-fired, fully automatic heating in your homes, you make your selling job easier. You offer today’s exacting buyers a top quality heating plant with an unsurpassed ability to deliver maximum heat per fuel dollar and an enviable record for trouble-free service.

Kaustine Engineering and Factory Assembly enable you to cut construction and installation costs. Kaustine Design saves valuable floor space as these compact units operate efficiently in a minimum area. Add to this Kaustine’s competitive cost and you have a greater profit margin.

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

The Kaustine "LOW BOY"
These fully automatic oil-fired Low Boys are designed for cellar installation. There are three factory assembled models delivering 85,000 B. T. U.’s, 95,000 B. T. U.’s and 110,000 B. T. U.’s. Larger units up to 250,000 B. T. U.’s are shipped knocked down.

WRITE FOR FULL INFORMATION TO DEPT. AB-3

There is a Kaustine Furnace or Winter Air Conditioner for every type of home.
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.
Your EVEREADY Dealer
Carries All
EVEREADY Products in Stock

Profitable, efficient masonry or concrete sawing are only possible when you use the RIGHT blade for the RIGHT material. EVEREADY's years of research and experience have resulted in the world's most complete—most economical line of blades. Your EVEREADY Dealer will help you select the RIGHT blade to meet any job requirement.

1. EVEREADY "XTRA-CUT" Abrasive Blades
   The blade that lowers your masonry cutting costs
   The blade that lowers your masonry cutting costs
   Profitable, efficient masonry or concrete sawing are only possible when you use the RIGHT blade for the RIGHT material. EVEREADY's years of research and experience have resulted in the world's most complete—most economical line of blades. Your EVEREADY Dealer will help you select the RIGHT blade to meet any job requirement.

2. EVEREADY "TUFFIE" Reinforced Abrasive Blades
   Bend—Drop—Twist! "Tuffie" is Tuff
   It's almost unbreakable
   Profitable, efficient masonry or concrete sawing are only possible when you use the RIGHT blade for the RIGHT material. EVEREADY's years of research and experience have resulted in the world's most complete—most economical line of blades. Your EVEREADY Dealer will help you select the RIGHT blade to meet any job requirement.

3. EVEREADY "RED-I-CUT" Diamond Blades
   The finest in diamond blades for masonry & concrete
   Profitable, efficient masonry or concrete sawing are only possible when you use the RIGHT blade for the RIGHT material. EVEREADY's years of research and experience have resulted in the world's most complete—most economical line of blades. Your EVEREADY Dealer will help you select the RIGHT blade to meet any job requirement.

EVEREADY BRIKSAW
and the New
EVEREADY POWER-DRIVE CONCRETE SAW

Cutting WET (Dustless) or DRY, the EVEREADY BrikSaw is the fastest, most efficient Masonry Saw on the Market. The SIMPLICITY of the BrikSaw's design plus the EXCLUSIVE labor-saving features, make BrikSaw the most profitable to operate masonry saw for any job. See your local dealer today.

The New EVEREADY "POWER-DRIVE" Concrete Saw takes the "Push-Pull" out of Concrete Sawing—drives FORWARD AT CONTROLLED SPEED! "POWER-DRIVE" increases cutting footage with less operator effort—cuts at the lowest possible cost per lineal foot. Hydraulic blade control and other EVEREADY features make the "POWER-DRIVE" Concrete Saw your best buy! See your local EVEREADY Distributor.
Sterling Hardware

used in buildings where quality counts!

SLIDING DOORS ADD
BEAUTY...SPACE...
Sterling HARDWARE ADDS
"QUALITY BY DESIGN"

Simple to install ... better when installed. No expensive callbacks due to failure of operation because Sterling Sliding Door Hardware is better designed. It has been tested and proved through years of continued service in homes everywhere.

Sterling Sliding Door Hardware is available in Complete Packaged Sets to fit most door openings. Write Today For Catalog.

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Architects Samples Corporation, N.Y.C.
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take a good look at LARCH

one of 10 woods from the Western Pines region

Strong, durable and straight-grained, Larch is an ideal wood for all structural and heavy construction purposes. Tough-fibered and rigid, it holds its shape, works well and resists nail withdrawal. Larch’s handsome grain, satin-smooth surface and reddish color put it in demand for interior architectural woodwork, too.

Larch comes in 3 select, 5 common, 3 structural, 4 dimension grades. You can order it in straight or mixed car lots, together with other woods of the Western Pine region.

the Western Pines

get the facts on LARCH
write for the FREE illustrated booklet to
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Lodgepole Pine

the Associated Woods
Small investment pays cool dividends

Hunter Attic Fan $139.95
(List price 5000 cfm Model complete with shutter)

Home buyers who want cool comfort at lowest cost are "sold on" the Hunter Attic Fan. Initial cost is low, operating expense is only a few cents a night, and there is no maintenance.

The Hunter Attic Fan's method of cooling a house is simple (see drawing at left). It drives out hot, stagnant air through the attic and creates a strong suction which pulls in fresh, cool air from outdoors.

This compact cooling unit, complete with automatic ceiling shutter, is easily installed in any home. It requires only 18" attic clearance, so is ideal for low-pitched roofs. Certified air deliveries range from 5000 to 16000 cfm—for any home size and any climate.

You can depend on the same smooth, quiet operation that has made Hunter Fans famous for 67 years. Fan unit is guaranteed for 5 years, ceiling shutter and motor for 1 year.

For complete specifications, write
HUNTER FAN AND VENTILATING COMPANY
381 S. Front St., Memphis 2, Tenn.

Hunter Attic Fans

SEE OUR CATALOG IN SWEET'S
Thermostat outside the house gives wonderful Weather Control inside

Honeywell Electronic Moduflow comfort helps make this Balch-built house distinctively modern

It's electronic magic! It's an exciting new comfort control system that uses an outdoor thermostat to automatically regulate indoor comfort. Albert Balch, well-known Seattle builder whose house you see here, installs Electronic Moduflow in all the homes he builds. Install this fascinating feature in your new homes and watch the immediate favorable impression on your prospects.

Honeywell is using an extensive national advertising program—13 spreads in LIFE Magazine—to help create demand for your new homes ... and to make Honeywell Electronic Moduflow become a top sales tool for you. Many of your prospects will see these ads and will want to know more about Moduflow and Moduflow-equipped houses.

Add modern Electronic Moduflow to your homes ... you'll add a LIFE-advertised, extremely salable feature to enhance your fine houses.
How Electronic Moduflow Works

The Electronic Weathercaster (1), mounted outside the house, senses the outdoor temperature and by means of electronic signals continually tells the Electronic Clock Thermostat (2) what indoor temperature is required to maintain comfort. This Electronic Clock Thermostat, mounted in the living room, signals the Relay Amplifier (3) which automatically adjusts the heating plant to provide the proper amount of heat required to keep the home at just the right temperature—no matter how changeable the winter weather might be.

A leading Northwest Builder

Albert Balch is one of the country's leading builders. He has built hundreds of homes of every type in the Seattle area. Balch-built homes range in price from $7,900 to $30,000. Mr. Balch is using Honeywell Electronic Moduflow in every house he builds.

For complete information on Electronic Moduflow for the homes you build, contact your heating contractor, your local Honeywell office, or mail the coupon shown at right below.

Honeywell
Electronic Moduflow

"Cold wall" problem solved by Moduflow

With a chilly outside temperature (top sketch), occupants feel comfortable when indoor temperature is 71°. But as it drops (lower sketch), heat loss increases, so higher indoor temperature is needed to compensate for colder walls. Electronic Moduflow does this automatically by raising control point of indoor thermostat so more heat is supplied.

MODUFLOW PROVIDES MORE COMFORT
BY VARYING INDOOR TEMPERATURES

Why people need varying temperatures

Tests show if indoor temperature is merely held constant when outdoor temperature falls, a person inside feels uncomfortable. As the walls of the room become colder, they "draw" increasing amounts of heat from the body.

MINNEAPOLIS-HONEYWELL REGULATOR CO.
Dept. AB-3-42, Minneapolis 8, Minnesota
Gentlemen: Please send me information on Electronic Moduflow.
Name

Firm Name

Address

City Zone State

MARCH 1954
bricks homes priced like frame

You can give home buyers brick's extra value and beauty—at no extra cost—when you use

SCR brick®

thru-the-wall construction

VALUABLE SALES AID... Your "SCR brick" dealer can show you how to use this scale model of "SCR brick" construction as a helpful selling tool. (right)

USEFUL CONSTRUCTION DETAILS... Free booklet "How to Build Homes that Sell with the 'SCR brick'" gives full construction details. To get one, just write us on your letterhead. Address: Dept. AB-3

STRUCTURAL CLAY PRODUCTS INSTITUTE

1520 18th Street, N. W., Washington 6, D. C.
TOLERANCE: \[\frac{1.5}{1000} \text{ INCH}\]

MEANS:

no sagging...no warping
lifetime satisfaction!

There's nothing vague about the superior quality that's built into every Curtis New Londoner Hollow Core Flush Door. For instance, the core and grid are manufactured to such precision standards that permitted tolerances have a plus or minus margin of only \[\frac{1}{1000}\] of an inch!

That's typical of the skill and care that make these better doors famous for their dimensional stability. The patented hollow core of the New Londoner is locked into the stiles, rails and lock blocks. Every New Londoner Door is a completely joined unit with nothing to get out of place.

Time works for you—not against you—when you choose Curtis New Londoner Doors—because these doors give LASTING satisfaction to the homeowner. That's been proved by more than 4,000,000 installations. When the doors have to be good, specify "Curtis New Londoner"—and be sure.

Curtis Companies Service Bureau
200 Curtis Building
Clinton, Iowa
I want to know more about Curtis New Londoner and Curtis American flush doors. Please send literature.

Name: ..................................................
Address: ..................................................
City: ........................................................ State: ..........................
New welded double insulating glass now available in Andersen Casements and Flexivents

Newest development in double insulating glass is now available exclusively in Andersen Casement and Flexivent Wood Window Units.

The two panes of glass are hermetically sealed with the edges electrically welded or fused by a recently perfected process that requires no metal or other bonding material.

Welded Insulating Glass is optional in all the one-light Andersen Casement sash, and in all Flexivent Unit sash.

For specification data see your millwork dealer, Sweet's Light Construction File or write Andersen Corporation. WINDOWWALLS sold by established millwork dealers throughout the United States including the West Coast.

Andersen Corporation
BAYPORT, MINNESOTA
Welded glass cuts cleaning in half; ends handling and storage of storm sash

Andersen Welded Insulating Glass offers two big advantages to homeowners. Most important is elimination of handling and washing of removable storm panel or sash. In addition, homeowners enjoy insulation of double glazing the year around.

Two panes of quality window glass are fused together at the edges to make a perfect all-glass seal with no metal or other bonding material. Air between panes is removed and replaced with dried air pressurized to withstand atmospheric pressure in all parts of the country except areas of over 3000 feet altitude.

The coefficient of heat transmission for Andersen Welded Insulating Glass is .675 BTU under standard conditions as compared to 1.13 BTU for single glass.

*TRADEMARK OF ANDERSEN CORPORATION

Andersen
Windowwalls*
COMPLETE WOOD WINDOW UNITS
Large residential ceilings require quality construction for lasting beauty.

You get top quality by using plaster reinforced with Keymesh galvanized woven wire lath ... applied to gypsum or insulating lath.

This network of multi-directional galvanized reinforcing wire adds greatly to the strength of ceilings. It also helps assure a uniformly full thickness of plaster over the entire ceiling. It guards against cracking. And, where radiant heating is installed in ceilings, Keymesh helps give more uniform heat distribution, as well as accelerating it.

Some architects and builders want this same strength and quality on walls as well as ceilings. Others find that Keycorner applied to inside corners, wall-ceiling junctions and points of weakness, and Keybead at outside corners, give them the quality they require.

That's why the Keystone system of plaster reinforcement is called—3 Keys to Stronger Plaster.

3 KEYS TO STRONGER PLASTER

Keymesh, woven wire galvanized reinforcing lath has been proved through the years as a superior reinforcement for stucco. Now plasterers are recommending it for ceilings to increase strength and protect against cracking.

Keycorner, woven wire galvanized reinforcing lath is preformed to fit accurately and snugly in corners and at wall and ceiling junctions. It also is ideal where strip lath is required ... doesn't rust ... eliminates waste.

Keybead combines open-mesh reinforcing lath with a precision-formed galvanized steel bead. It assures a solid plaster corner, reinforced with a network of galvanized wire that is strong and prevents rust streaks.

KEYSTONE STEEL & WIRE COMPANY
Peoria 7, Illinois

KEYMESH • KEYCORNER • KEYBEAD • KEYSTONE NAILS • KEYSTONE TIE WIRE
KEYSTONE NON-CLIMBABLE FENCE • KEYSTONE ORNAMENTAL FENCE
NOW! Add more strength...more beauty...more sales appeal when you build with SHEETROCK

THE FIREPROOF GYPSUM WALLBOARD


Yes, there's a complete line of SHEETROCK accessories to make your dry-wall construction jobs better than ever! With them you're sure of top product performance, backed by a manufacturer with a 50-year reputation of quality and dependability—United States Gypsum. Ask your building supplies dealer for complete details, or write Dept. AB-1, 300 W. Adams Street, Chicago 6.

These SHEETROCK Accessories Add "Extra" Sales Features to Every Job!

USG METAL TRIM—Nail on for narrow line effect. Provides enduring edge protection, ideal for door and window trim or molding at ceiling and wall line. 7' and 10' lengths fit 3/8", 5/8", and 3/4" thickness. Also 3/8" pre-decorated type to harmonize with Striated or Knotty Pine finish boards.


DUR-A-BEAD—All-metal, nail-on type outside corner reinforcement for maximum strength and durability; true corners. Finished with PERF-A-TAPE Cement. 8' lengths, packed in 25-piece cartons.
BEE GEE modern wood windows

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.
Now build exposed beam new 3 in 1 Roof Deck and

1. It's Roof Deck...
Cuts application time as much as 45% or more. Only one material to handle instead of several. New Roof Deck eliminates need for separate roof boards, insulation, lath, plaster and ceiling finishing. In roof sheathing time alone, Roof Deck can save 12 man-hours per thousand sq. ft. of surface compared with 2” x 6” D&M roof sheathing.

2. It's Insulation...
2” and 3” thicknesses meet F.H.A. “U” requirements. Inch for inch, Roof Deck provides more than twice the insulation value of wood. 2” Insulite Roof Deck, for example, is comparable to 2” wood deck plus 1” fiber-board insulation. Helps absorb sound, too. Exclusive vapor barrier protects against condensation.

3. And Finished Ceiling!
The underside of Insulite Roof Deck is finished with a white flame-resistant surface at the factory. Simply lay Roof Deck over pre-finished beams and the ceiling is done. No need to plaster, paint, stain or wax. Reduces labor and material costs. Insulite Roof Deck is available in 2’ x 8’ units, 1⅜", 2” and 3” thick with or without Insulite’s exclusive vapor barrier.

Now! Roof Deck, Insulation and Finished Ceiling in one quick money-saving operation with new INSULITE Roof Deck
ceilings anywhere with save $80 to $300 a home!

The secret's in the seal! Exclusive vapor barrier lets you build exposed beam ceilings for less, anywhere in the U.S.A. Continuous vapor barrier combines (1) a membrane laminated into each unit, plus (2) a rubber gasket that seals carefully machined T&G joints. Protects against condensation within the deck in any climate. (Also available without vapor barrier for use in moderate climates.)

Send for Complete Information Now! Actual on-the-job pictures and construction details show how to use new Insulite Roof Deck to build better for less. Write Insulite, Minneapolis 2, Minnesota.

INSULITE DIVISION, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota

Vapor barrier membrane

Resilient rubber gasket seal

MARCH 1954
Visible Sales-Plus that Costs You Less!

REYNOLDS ALUMINUM Gutters and Downspouts

To the prospective home buyer nothing says "Quality Construction!" so fast. The soft sheen of aluminum at the eaves instantly signals—quality! Rustproof beauty that needs no painting! Fast installation with slip connectors—no soldering! Lowest in cost of rustproof materials! Add your savings on labor and this visibly superior sales feature actually costs you less than any other gutters. Ogee or half-round, stipple-embossed or smooth finish. Write for literature.

Reynolds Metals Company, Building Products Division, 2003 So. Ninth St., Louisville 1, Ky.

REYNOLDS ALUMINUM REFLECTIVE INSULATION

High efficiency at less cost than most bulk insulations. Perfect vapor barrier. Embossed foil on two sides of tough kraft paper (Type B), or one side (Type C). In rolls of 250 sq. ft., 23", 33" and 36" wide.

REYNOLDS ALUMINUM TRAVERSE WINDOW

Amazingly simple and beautiful sliding window, ideal for the modern home. Precision-made of "Satinized" Reynolds Aluminum. Easiest to install, high rated against air and water infiltration. Vents slide easy, close tight. No sash balances, weights, hinges...no puttying! Wide selection sizes, types.

SEE "MISTER PEEPERS," starring Wally Cox, Sundays, NBC-TV Network.
Get tremendous bracing strength

SAVE 4 WAYS

with Upson
All Weather
Sheathing

Twice as strong in load tests. Proved best in every test. Carried twice the weight of other materials tested.

For stronger in racking tests. Tests by the Univ. of Buffalo Engineers showed Upson Sheathing withstood greater stresses than other materials tested.

Over twice as strong in impact tests. Proved more than twice as strong as all other 25/32” sheathing tested.

Waterproofed by exclusive Upson CuraSeal Process. Waterproofs through entire thickness. Resists water absorption 3 times better than insulating sheathing tested. Store outdoors. Resume work right after rain. snow.

6 plies mean super strength—Made by an exclusive process; 6 plies of specially treated wood fibers laminated and bonded together.

1 save... costs less to buy
Your material costs are lower because Upson All Weather Sheathing is priced lower, yet offers you highest quality.

2 save... eliminates costly corner bracing
Why pay for material and labor for corner bracing when it's not needed. Super strong Upson Sheathing meets and exceeds requirements of FHA Technical Circular No. 12. Also accepted by the Veterans Administration.

3 save... on cost of application
Reduce application time by over 1/2 compared with wood sheathing. Save labor costs. Upson Sheathing is easy to apply, nails direct to studs, saws like wood, clean.

4 save... reduce material wastage
A greater variety of sizes to fit your house at no extra cost. Virtually eliminates waste.

more features
- Treated to resist mold, fungi, termites.
- Smooth surface, easily painted. Base color won't bleed through. No special sealer needed.
- Adds insulation value.
- Moisture content—10% to 12%.
- No wetting or special treatment 24 hours before application needed.

Mail coupon for FREE folder and instruction sheet!

THE UPSON COMPANY
113 Upson Point, Lackport, N. Y.

Please rush me FREE Folder and Application Instruction Sheet on Upson All Weather Sheathing.

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NAME OF FIRM
ADDRESS
STATE

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UPSON | All Weather | SHEATHING
PROVEN QUALITY YOU CAN TRUST

MARCH 1954
Better Homes and Another Record-Break

The 1954
Home for All America

It fits any climate zone, any family group,
any design taste, any materials

TO BE ERECTED BY TOP BUILDERS ALL OVER AMERICA

Chicago, Ill., Jan. 19. At the 1954 convention of the National Association of Home Builders, the editors of Better Homes and Gardens presented the BH&G HOME for ALL AMERICA to approximately 400 builders and manufacturers from all parts of the country.

Using color slides and scale models, John Normile, building editor of BH&G, stressed the fact that this home presents advantages rarely found in model homes. Of contemporary design, the home is unusually flexible, practical, and of striking appearance. The scale models showed how, on one basic design, the home can be adapted to fit any climate, to suit any family group, any design taste, and any materials.

Promotion expected to exceed 1953 record-breaking success

Within 24 hours of the presentation, more builders had signed to build the HOME for ALL AMERICA than the total participation in the 1953 promotion—visited by over 1,000,000 people.

FACTS ABOUT 1954 HOME AND PROMOTION

The 1954 HOME for ALL AMERICA was designed by Robert Little, A.I.A. of Cleveland, Ohio. It answers the needs and desires of most families, regardless of where they live. Its flexibility enables builders in all areas to adapt it as the model home to promote more sales in 1954.

The HOME for ALL AMERICA will first be shown to the public in the September issue of Better Homes and Gardens, on sale August 25, and will be read by over 3½-million BH&G families—guaranteeing that tremendous numbers of top prospects will view the home in September.

Builders are offered exclusive rights to build and finance the home in their cities.

A much more extensive promotion will back up the 1954 home.

Along with the HOME for ALL AMERICA feature in the September issue, two full pages will list all builders’ names, and addresses of their homes. In each city where the home is built, newsstand copies of the September BH&G will carry a special tab on the cover featuring the name of local builder and address of home.

Builders will be supplied with 10 copies of the September issue—newspaper mats—radio and TV spots—publicity releases—special display pieces—suggested site and directional signs—special mailings to all subscribers in the area (at cost)—miniature BH&G cover folders (at cost). IN SHORT, EVERYTHING THE BUILDER WILL NEED FOR A MOST SUCCESSFUL PROMOTION!

Get the exclusive franchise

Rush inquiries to Better Homes & Gardens

162
Gardens Announces Home Promotion!

The models of the HOME for ALL AMERICA pictured on this page, show 3 of the 9 possible variations in basic design. Above, is one in which the garage, or carport, is separated from the home by an outdoor living area, and has a low gable roof.

The home with the high gable roof (lower left) is suggested for areas where local conditions and preferences demand this style roof. This version features an attached garage.

For some areas, the flat roof may be a more popular design (lower right). Here the carport is located in front of the home, separated by the outdoor living area.

The home has 1,415 sq. ft. of floor space arranged to achieve maximum livability. 3 bedrooms, large activity area, 2 baths, utility room—all features combined to make the HOME for ALL AMERICA, the home for most any family, in any area.

for your city immediately.

"Home for All America" Promotion, Des Moines, Iowa!

MARCH 1954
Sales-Condition

the homes you build with...

w...walls and ceilings of All-wood Hardboard go up fast — provide economy without loss of quality.
...Allwood won’t shatter, split or crack. It’s grain-less—equally strong in both lateral dimensions.
...Allwood resists abrasion and moisture — maintains dimensional stability.
...Allwood is buyer-preferred for good looks and long wear.

HARDBOARD

Allwood Hardboard brings built-in sales appeal to every home you build. You can start NOW to gain economy, efficiency and extra versatility on the job. Allwood saws, nails, drills, works like wood because it is wood. It bends for special effects.

Get full details from your dealer on sizes and densities available. If he does not stock Allwood, send us his name. Our jobber will call on him.

DEALERS! Find out TODAY how you can profit from the spreading demand for Allwood Hardboard. Call in your jobber... or write directly to us for information.

Speed door and window finishing with John Day Packaged Trim — Grade A Ponderosa Pine...flawless pieces cut to correct length. Ask your dealer about it ...or write for information.

Oregon Lumber Company
Hardboard Division
DEE, OREGON
BURNS 'father and son' team conducts rehabilitation experiment
FINDS IT PAYES

American Builder's Four-Point Program as outlined in the January, 1954 issue foresees a bright future for the nation's builders. New dollar volume highs are within reach through aggressive action in selling new construction, merchandising of trade-ins, remodeling and rehabilitation. Under point four, this magazine suggests that builders train crews and gather vital information now to help combat America's biggest housing problem—the ever increasing inventory of substandard dwellings.

In Los Angeles "Two Old Dowagers" are undergoing some mighty significant changes despite their 70 odd years of age. Fritz Burns, builder-realtor, and his son Pat are rehabilitating two old structures into duplex apartments. Though the job is only partially completed, it already points up the feasibility of new-conditioning worn out structures. Burns, noted anti-slum fighter (chairman of NAREB's Build America Better Council), is training a crew in rehabilitation work. He also is gathering vital dollars and cents statistics that will aid his operation and his personal crusade against decayed housing.

Recently the builder purchased several blighted structures in Los Angeles' Bunker Hill section. The houses, built in the 1880's, were once fashionable homes in the elite section of the city. Age and shifting population trends have taken their toll, and today the structures, located in the heart of a blight area, stand shorn of their previous magnificence.

The actual rehabilitation work was turned over to Pat Burns, Fritz Burns' son. The first structure that Pat modernized was originally a nine-room, two-story, single-family unit. Pat converted the house into two 1,000 square-foot apartments with rental values of $85 a month for each unit. The structure was purchased by the Burns organization for $6,000. Rehabilitation costs of $8,000 brought the total investment to $14,000. The gross rental ($170) and total investment ($14,000) compares favorably with the old rule of thumb adage that income property rentals should be figured at one per cent of the investment per month.

Rehabilitation of the Building

The structure was in a bad state of disrepair because of age and neglect, rather than poor material and workmanship. The original framing and siding were redwood and in sound condition. However, the few pieces of siding and trim that needed replacing presented a supply problem—manufacturers don't produce the same patterns today. Pat solved this problem by scouring wrecking yards where he was able to secure duplicate patterns at a fraction of the cost of new material.

The rehabilitation and conversion was intelligently planned. No attempt was made to change the architectural lines or the exterior of the facade, and this is the basic difference between rehabilitation and remodeling. This house was brought back to livable standards without major, prohibitive cost changes.

Another entrance is the only exterior change. Paint did wonders to give the house a new look. Major exterior construction was limited to a new covered porch, because the original porch was beyond repair.

Simple Changes to Floor Plan

Partition changes were held to a minimum in the conversion to two apartments. The first floor apartment occupies the area of the original living room, dining room, breakfast room, kitchen and two pantries. A portion of the dining room became a bedroom. Closet space was provided by erecting a partition around the old sliding doors between the dining room (now bedroom) and the living room. Baths for the first floor apartment were installed in one of the pantries and a large closet under the stairs. The second bedroom occupies the area of a pantry and the dining room. To build the second bedroom two partitions had to be removed and two new ones built. The new partitions, placed to increase the area of the room, cut into the original area of the dining room and kitchen.

The second story apartment also had few interior par-
Burns Rehabilitation Experiment— (Continued from page 165)

Before: These are the “Two Old Dowa- gers” being rehabilitated by Fritz Burns and his son, Pat. Although both houses are more than 70 years old, their structural soundness made rehabilitation a practical matter.

Simple rehabilitation with few exterior changes has given this house a complete “new look.” This experiment demonstrates effectively that modernization of older structures is economically sound.

This is the typical foyer of houses built in the late 19th century. The builder was able to make separate entrances to the duplex apartments by putting a partition next to the stair.

Modern Products Speed Repair Work

To speed the job and to hold costs, the builder used many products highly adaptable to repair and modernization work. Plasterboard was installed over all the old plaster walls as a time-saving operation. Floors were sanded and covered with linoleum and cork tile instead of replacing some of the bad pieces. Plastic-coated hardboard panels were installed on the bath walls. The kitchens for both duplex apartments were modernized with packaged sinks and cabinets. A garbage disposer, ventilating fan, gas stove and gas refrigerator also were installed in the kitchen. Individual gas-fired, wall-type...
heating units were installed in both apartments.

**City Helps Builder Plan Conversion**

Los Angeles Building and Safety Department, one of the nation's leading city agencies charged with slum rehabilitation and prevention, recommended changes that would bring the house back to habitable standards. The free service included inspections that would determine what repairs would need to be made, as well as blue printing the new floor plan arrangement.

The typical old kitchen (top) had a thorough rejuvenation to make room for modern conveniences. Packaged units were used to speed the work.
We proved it to Zehman &

NEW B&D 8" HEAVY-DUTY UTILITY SAW
Packed with power, the new 8" Saw works and works...cuts and cuts...up to full rated load! Cuts from 0" to 2 1/2" deep...bevel cuts from 0° to 45°...depth of cut at 45° is 2 1/2". Built-in depth-and-bevel adjustments...plus features that make the new B&D Saws the greatest ever. $96.50.

NEW B&D 9" HEAVY-DUTY UTILITY SAW
Extra powerful, the new 9" Saw can handle all your heaviest jobs and deepest portable-saw cuts! Depth-of-cut from 1/4" to 3 1/4"...bevel cuts from 0° to 45°...depth of cut at 45° is 2 1/4". Incorporates built-in depth-and-bevel adjustments and all the other new extra B&D features! $114.50.

ALSO: New B&D 6" Adjustable Saw...$64.50 and New B&D 7" Saw...$84.50.
Both Heavy-Duty Saws with all the Features Described Above.
Wolf—we'll prove it to you!

NOW! BLACK & DECKER Saws
give you every feature you
want for every job you do!

Zehman & Wolf Construction Company of Cleveland, Ohio, hires as hard-hitting and hard-working a crew of carpenters as any you'll find. We felt that these men would be the best judges of saws, so we took a new B&D Heavy-Duty Saw out on the job and asked them to try it. And did they give it a workout! They made rip cuts, cross cuts, box cuts and bevel cuts with it. They hefted it for weight, tried different depths of cut, balanced it, used it right-handed, left-handed—with one hand and with two. And when they were finished, they were sold! They were sold on the power of the new B&D Saw... on its features... on the amount of work it gets through. As Carpenter Hy Weltman put it: "The new B&D Saw has a lot of power and it's easy to use. Not only is the lever on the lower guard a good safety factor, but all of B&D's new features make it a great help."

Saws brought right out to your job site, demonstrated to you, let you try them yourself! And you'll get your official contest entry blanks right then and there. To arrange for this, just fill out the handy coupon below and mail it to us today!

RIGHT ON THE JOB! To make the big B&D Saw Contest even easier for you to enter, we'll arrange to have the new B&D
When it comes to **development homes**

On three grounds — price, performance and appearance — Gas appliances belong in your development homes. They cost you less to install (and cost your purchasers less to use them). They operate more efficiently because Gas is both flexible and instantaneous. And they sell on sight! For the new Gas ranges are so automatic they cook whole meals all by themselves.

The new Gas refrigerators are so automatic they feed ice cubes into a basket all by themselves. You can talk about, boast about, even write ads about your all-automatic Gas kitchens. They're the plus that can turn prospects into buyers and buyers into happy homeowners. And they make your own margin of profit that much bigger.
... nothing makes as much sense as Gas

This New Freedom Gas Kitchen* features an automatic Gas range, made to “CP” standards by the Hardwick company.

Royal Wood cabinets by the Mengel Co.

Kitchens sell homes, and this Servel Gas refrigerator certainly helps sell a kitchen. It puts ice in a basket automatically, does away with messy trays. Few women (and not a man in the world) can resist it—or the home that has it.

Bryant automatic Gas water-heater; Caloric automatic Gas clothes dryer.

The Gas clothes dryer is another extra that frequently clinches a sale. Most development home purchasers have heard of it, read about it, dreamed about it, but few ever thought it would really be theirs. (If you're considering any dryer but Gas, just remember that professional laundries prefer Gas dryers 30-1.)
The Gas water-heater is demonstrably superior. Not only does it cost less to install and use, but a 30-gallon tank actually delivers more hot water than an 80-gallon tank run by any other all-automatic fuel. Gas—dependable, efficient Gas—is 3 times faster.

Your local Gas company will be happy to work with you on any problem.

Only Gas costs so little to install and operate

GAS—the modern fuel for automatic cooking . . . refrigeration . . . water-heating . . . house-heating . . . air-conditioning . . . clothes-drying . . . incineration.

*Reg. A.G.A.

MARCH 1954
No one can get 'em all. What's important is, will you have the opportunity to bid? You can't get any of them unless you try.

This is sure, with keener competition you just can't afford to miss out on any jobs because you heard about them too late or never heard about them at all.

The one sure way to know at the right time where the jobs are, the way proven for over 60 years by most of the leading firms in new construction, is to use Dodge Reports. Wherever you are in the 37 Eastern States Dodge field men spend all their time investigating new business opportunities for you in the new construction market.

You can have all the business you want if you know where the jobs are . . . at the right time. It's your business to figure, bid and sell...it's Dodge Reports' business to find the jobs and tell you where they are so that you can sell them. There's just no other way to make the most of all the opportunities coming up every day in new construction. There are just too many people to see, too many miles to cover, too little time.

Why not take a look at some typical Dodge Reports covering work right in your territory. We'll gladly let you see them and send along our informative book telling how others use Dodge Reports profitably. Timely, accurate, daily Dodge Reports are backed by the nation-wide facilities of the Dodge organization.

Make sure that from this day on you don't miss out on any jobs you want.

Write today for book. No obligation.
Key your building business to a color-magic idea...

RUBEROID

Color-Styled Home

It had to happen. Today, a knowledge of color harmony is an indispensable tool for every builder of new homes or for remodeling. And... now, Ruberoid offers you a tool to make exterior color-styling sure and easy... and an idea to help you turn the sales magic of color into profits.

You can't ignore the growing demand from a color-conscious public for exterior color styling to match the advance of interior decoration. Ruberoid helps you turn this challenge into a sales opportunity... not only with a complete line of roofing and siding shingles in decorator colors... but with a working tool to turn color theory into sales.

Ruberoid's popular Color-Grained Asbestos Siding offers an appealing choice of decorator colors with a "shake"-textured surface. It saves you money, too... as much as $650 on an average home with 15 squares of siding. Color-Grained Siding's Duroc protective finish enriches the color, resists dirt, stains and weather... never needs paint.

Ruberoid Asphalt Shingles in either regular Thick Butts or famous interlocking Tite-Ons are heavily surfaced with mineral granules in a wide range of harmonizing decorator colors and blends.

Millions of homeowners... and most of your customers and prospects... will see these well-known Ruberoid products advertised soon in The Saturday Evening Post, Better Homes & Gardens and Good Housekeeping. They'll be alerted to the new trend in roofing and siding through the Ruberoid Color-Styled Home idea.

Here's how to put these color-styled products together into sales-winning combinations...

The RUBEROID Colorator

Anyone can be a color expert with the Colorator. It ends color confusion... turns complicated color theory into simple terms, showing Ruberoid roofing and siding colors in pleasing combinations with suggested trim and accent colors. It not only dramatizes exterior color styling, it's a practical, easy-to-use working tool... and sales tool. Your Ruberoid dealer has a Colorator for you to see and use. If you'd like your own Colorator Selector, just send the coupon below.

The RUBEROID Co.
Dept. A, 500 Fifth Ave., New York 36, N. Y.

Please send my free copy of the Ruberoid Colorator.

YOUR NAME
COMPANY
ADDRESS
CITY ZONE STATE

The RUBEROID Co.

Asphalt and Asbestos Building Materials

MARCH 1954
A Fitting Combination

for saving time
and cutting costs

The round cornered hinge and the portable electric mortiser go together. You'll cut hours off your door hanging days with this fitting combination. It's a natural.

Time is saved around these corners

Stanley Round Cornered Hinges are available in any size or finish; in plain joint or ball bearing, regular weight or extra heavy.

Stanley Round Cornered Hinge leaves and pins are completely interchangeable.

Stanley Round Cornered Hinges fit the mortise made by the portable electric mortiser — they fit exactly and uniformly.

Stanley Round Cornered Hinges COST NO MORE!

Costs are cut by this kind of portable power

The Stanley Hinge Mortiser routs out perfect mortises in less time with less work. Using this mortiser and the template shown here, even an unskilled carpenter can mortise 75 doors and jambs a day.

This Stanley Electric Plane has a hundred uses for the busy builder. Wide enough to plane surfaces up to $2\frac{1}{4}''$, the spiral cutter works smoothly with or against the grain and won't splinter edges. The planed surfaces are ripple-free, whether cut is tissue thin or as much as $3\frac{1}{4}''$ deep. Here's a real work-eater.

Stanley service stations everywhere . . . list of addresses packed with every tool. Put this door-fitting team to work for you. Call your wholesaler or write Stanley today.
**N O W !**

cut QUICK, NEAT switch box
holes in drywall with
the QUIC-KUTTER

PATENT PENDING

---

*ELIMINATE PATCHING*

*SAVE TIME*

*DO A PERFECT JOB EVERY TIME*

---

**NOW**—in just a few seconds—you can cut neat, quick, switch box holes in drywall. Every hole is perfect. There's never any need for a follow-up patch job—all this time is saved.

- The Quickutter cuts single, double or multiple holes with equal ease, every hole perfect, with no splitting of the back of the sheet, and no damage to the paper facing on either side.

- The Quickutter is rugged—built for long years of service. In extensive tests, over 1,000 perfect holes were cut in an 8-hour day!

- Follow the easy steps in the pictures at the left—then add this valuable time-saver to your tools.

- Complete with 1 3/4" Misener hole saw (fits any standard brace), with one single and one double cutter die... **$24.95**

This tool is sold ONLY on a moneyback guarantee if not as represented.

---

See your dealer or order direct

**FILL OUT THIS COUPON AND MAIL TODAY!**

NO C.O.D.'s

---

HARTMEISTER MFG., INC.
Room 1, 2020 W. Barberry Place
Denver 4, Colorado

Enclosed is [ ] check [ ] money order for which send me one Quickutter, Misener hole saw, and the single- and double-box cutters. I understand this will be shipped prepaid. No C.O.D.'s, please.

Name _______________________
Address _____________________
City __________________ State

Orders shipped in the order in which they are received.
AND SELL YOUR HOUSES FASTER
A proven fact! Ask any builder who installs BILCO Doors. He'll tell you it's the best selling feature he ever used. Home buyers sign up fast when basements are useful, livable and safe. Don't "date" your homes — investigate America's fastest growing building product ... the BILCO all-metal permanent door.

Direct access to the basement eliminates tracking mud and dirt through the upstair rooms. Countless steps are saved by repairmen, servicemen and the home owner. It's the only means of installing big equipment necessary for a work shop, recreation room or extra living room.

Check all these Bilco Benefits!

ECONOMICAL!
LIFE-TIME DURABILITY!
WEATHER-TIGHT!
FIRE-PROOF!
BURGLAR-PROOF!

THE BILCO CO., 109 HALLOCK AVE., NEW HAVEN, CONN.

Please send me complete information on the BILCO DOOR, sizes, prices and dealers' names.

I build □ 10 or less □ 10-100 □ 100-300 houses

NAME ____________________________
ADDRESS ____________________________
CITY ____________________________ STATE ____________________________

Catalogs —
and Manufacturers Literature

476—VENETIAN BLINDS
—attractive new 20-page catalog presents in picture-caption form the advantages of "Flexalum" blinds, including product's reaction to bend, immersion, salt spray and other tests. Operating mechanism and vinyl plastic cord are described. Decorating possibilities for multiple, bay, double, picture, high and kitchen windows are given, plus suggestions for use with single or double doors. Hunter Douglas Corp., Dept. AB, 150 Broadway, New York 36, N.Y.

477 — REDWOOD AND FIR PLYWOOD — eight-page catalog presents Malarky redwood and fir Shadowood plywood, lumber and matching moldings in full color. Properties, specifications, suggested finishes and uses are included. Shadowood pattern has been given to tkg lumber; paneling is 1/2 inch thick, six or eight inches wide, and comes in 8, 12- and 16-foot lengths. M and M Wood Working Co., Dept. AB, 2310 N. Columbia Blvd., Portland 17, Ore.

478—ATTIC FANS—standard residential-type fans designed for homes with low-pitched roofs are made in four sizes of 21, 30, 36 and 42 inches. Panel-type units are made in eleven models for residential, commercial and industrial applications. Both are described in four-page folder containing complete specifications and dimensions of residential and panel units. Installation shown in picture-step form. The Lau Blower Co., Dept. AB, 2001 Home Ave., Dayton 7, Ohio.

479 — PLASTER AGGREGATE—illustrated eight-page "How to Specify and Use Perlite Plaster Aggregate," contains helpful specification data, information on the perlite industry's certification and labeling program for plaster aggregate and practical hints on the cause and prevention of cracks in all types of plaster. Product is guaranteed to meet ASTM requirements. Perlite Institute, Dept. AB, 10 E. 40th St., New York 16, N.Y.

$ FOR MORE INFORMATION USE COUPON, PAGE 202
MILCOR* Louver Ventilators
made of durable non-streaking galvanized steel
to give lasting satisfaction

MARCH 1954

Series 300 Louver Ventilator
The standard of the building industry for any type construction. Flange is fastened on a wood frame — then applied to sheathing or fastened into masonry opening.

Roof Louver Ventilator
For roofs of any pitch where gables or attic side-walls are not available. Has removable insect screen.

Series 220 Louver Ventilator
Size is equivalent to one concrete block. Easily installed in old or new brick, stone, or masonry walls. Held in place by mortar. An ideal foundation ventilator.

Here’s low-cost ventilation for any home — in a size and type for any construction

Trapped summer heat and winter moisture condensation often lead to paint blistering, structural rotting and damage to insulation.

This trouble can be avoided by using Milcor Louver Ventilators — the low-cost way of drawing off moist, dead air and supplying fresh, dry air.

Architects, Ventilating Engineers, and Insulation Contractors know that every home needs Milcor Louver Ventilators:

- for cooler comfort in summer.
- for protection from condensation in winter.

And here are six more reasons why Milcor Louver Ventilators are first choice:

Low in cost — yet they provide valuable all-weather ventilation for any home.

Durable — Milcor Louver Ventilators are made of heavy galvanized sheet steel with reinforced louver blades that won’t loosen or rattle.

Wide range of types and sizes — for wood, concrete block, brick, stone, or concrete construction.

Convenient — all types are available with a separately framed, removable insect screen — an extra-quality feature.

Scientifically designed — to provide the most efficient cross ventilation possible as well as attractive appearance.

Easy to install — thanks to generously fitted corners and overlaps. Ideal for both old or new construction.

Insist on Milcor Louver Ventilators for the homes you build or remodel. You give the home owner long-lasting protection and build a reputation for fine work.

INLAND STEEL PRODUCTS COMPANY
4025 West Burnham Street • MILWAUKEE 15, WISCONSIN

Baltimore, Md. — 5300 Pulaski Highway — BUFFALO 11, N. Y. — 64 Rapids St.

Chicago, Ill. — 4101 S. Western Blvd. — CINCINNATI 15, OHIO — 3245 Spring Grove Ave.

Cleveland, Ohio — 1556 E. 59th St. — DETROIT 7, Mich. — 690 Amsterdam Ave.

Kansas City, Mo. — 1414 W. 38th St. — ST. LOUIS 10, Mo. — 4125 Clayton Ave.

GET IMPORTANT TIME
AND COST SAVINGS
Set Tile The
MIRACLE® 'THIN-SET'
Way

The Miracle 'Thin-Set' method of installing tile has been proven in thousands of installations in bathroom units and all kinds of other ceiling, floor, counter, and decorative areas, since 1937.

- You quickly, permanently install tile over gypsum board, plaster, plywood, cement asbestos board, and concrete-vertical or horizontal surfaces.
- You don't need heavy construction equipment or bulky setting materials. The Miracle 'Thin-Set' method reduces dead weight 12 lbs. per sq. ft. You cut way down on weight of materials to be transported, stored, hoisted, and handled.
- You speed jobs substantially. You use more economical base materials. You cut costs as much as 20% per job!
- All your setting material supplies may be secured from Miracle Adhesives Corporation: leveling, priming, setting, grouting, and caulking — made by Miracle Adhesives Corporation to work together to give you best possible jobs at lowest possible costs.

*Important:* Be sure the adhesive you use bears this hallmark, as issued by the United States Department of Commerce. Miracle Tile Cements comply with all Commercial Standard Specifications for "water resistant organic adhesives for installation of clay tile."

FREE: New 20-page brochure describes Miracle 'Thin-Set' method of installing clay tile. First authoritative brochure on 'Thin-Set' method ever published, with 20 full pages of facts and illustrations. Shows how to install clay tile quickly, permanently at minimum cost. Detailed, 2-color isometric drawings. Write today for your free copy to Dept. AB1.

**CATALOGS**

**480 - ALUMINUM WINDOWS**—eight page bulletin describes these pre-assembled, "engineered" window units, featuring controlled ventilation, quick installation, all-weather sill, sash removable from inside, box channel construction. Standard double-hung windows are listed in types and sizes, with diagrams showing mullions, installation details for various types of wall construction. Typical installations are shown. Fleet of America, Inc., Dept. AB, 110 Pearl St., Buffalo 2, N.Y.

**481 - LIGHTING FIXTURES**—12 page catalog lists manufacturer's complete line of recessed fixtures for residential and industrial use; 40 units are illustrated, with dimensions, wattage, framing-in details and trim size. Frames, guards and other accessories are listed. Typical installations of fixtures are shown, as well as features of manufacturing processes. Prescolite Mfg. Corp., Dept. AB, 2229 Forth St., Berkeley 10, California.

**482 - BUILDING PRODUCTS**—48-page catalog in full color contains complete information on the company's line of metal building products—metal awnings and canopies, mail boxes, package receivers, etc. It contains the first information available on many new products, including: movable section hardware, sliding door hardware, sliding door track, roller drawer guides and miniature ventilators. Sizes, weights, installation requirements included. Leigh Building Products Div., Air Control Products, Inc., Dept. AB, Coopersville, Mich.

**483 - LAMINATED PANELING**—called Novoply consists of a new all-wood material combining the plywood principle of laminated construction with the use of resin-impregnated wood fibers. Described in this 12-page catalog containing line drawings and photographs showing physical characteristics and applications, product offers economy, beauty, flatness and stability, plus easy fabrication. United States Plywood Corp., Dept. AB, 55 W. 44th St., New York 18, N.Y.

*FOR MORE INFORMATION USE COUPON, PAGE 202*
Count the Jobs
You can do...

with a FORD Tractor
and Dearborn Equipment

Here's a low cost power unit with the right capacity to work on a wide range of earthmoving and material handling jobs... jobs that are too big for hand labor, yet too small to justify the use of heavier equipment.

POWER FOR MORE JOBS

There's almost no end to the jobs the Ford Tractor can be equipped to do economically. One day you can use it for loading, grading or backfilling. The next day you can use it for excavating, ditching or digging foundation footings. It's a time-saver on construction clean-up work. Dearborn Equipment to handle these and other jobs attaches quickly and easily.

The Ford Tractor is highly maneuverable, too. It speeds from one job to another—needs no trailer for transportation. And attached equipment rides on the tractor—operates hydraulically with the touch of a finger.

POWER THAT COSTS LESS

For all it has and for all it can do, the Ford Tractor is priced surprisingly low. You get lower operating cost, too... Ford's low friction engine saves on gas, oil and upkeep expense. And wherever your work takes you, you'll find Ford parts and service available nearby. So, with your work season just starting, take time right now to find out how this all-round power unit can produce more profit by staying busy on more jobs. Try it on your own jobs, without obligation. See your local Ford Tractor Dealer or write to the address below.

TRACTOR AND IMPLEMENT DIVISION
FORD MOTOR COMPANY
Birmingham, Michigan
Build Closets Faster
WHEN YOU USE BROWN’S
SUPERCEDAR

At Little or
NO EXTRA COST!

SUPERCEDAR can be nailed directly to open studding and eliminates the cost of plastering and painting. Houses sell faster, too, when they have the "custom-built" feature of cedar lined closets — yet, this salable beauty costs you practically nothing extra! SUPERCEDAR is genuine aromatic red cedar with 100% oil content. Nationally advertised and guaranteed. Seal packaged in 4 and 8-foot bundles.

Sold by Building
Supply Dealers Everywhere

FREE Closet Planning
Booklet! Write to...

GEORGE C.
BROWN & CO. Inc.
Largest Mfrs. of Aromatic Red Cedar in the World
GREENSBORO, NORTH CAROLINA Established 1886

Catalogs

484—DOOR HARDWARE —line features solid brass knobs and roses; rapid installation; automatic self-alignment; perfect fit for all doors from 1 1/4 to 1 3/8 inches thick; a 3/4 inch thick brass face-plate; heavy-duty steel and brass latch, all described in this four-page brochure. Interior and exterior lock sets; keyless exterior sets; vestibule sets and dummy sets are presented. Sets available in brass or chrome finishes. Technical Glass Co., Inc., Dept. AB, 2050 E. 48th St., Los Angeles 58, Calif.

485—STEEL SCAFFOLDING—tubes, angles and couplers are components for all types of even most complex installations of this product, described and illustrated in 12-page catalog. Units made up exterior, interior scaffolding, concrete formwork, including slab supports and wall bracing, shoring and de-mountable structures for temporary use. Booklet contains useful photographs of equipment, conventionalized drawings indicating typical uses. Shlagro Steel Products Corp., Dept. AB, 84 Washington St., Somerville, Mass.

486—WALL PANEL —this eight-page catalog contains complete descriptive information, illustrations, specifications and detailed drawings on insulated metal wall panel. The factory-assembled product is said to offer superior thermal qualities, flexibility and attractive appearance besides stressing ease of erection. Typical construction details in clear line drawings enhance the catalog’s value to general contractors and architects. The Steelcraft Manufacturing Co., Dept. AB, 9017 Blue Ash Road, Rosslynne, Ohio.

487—UNIT HEATERS —company line of suspended space heaters for use with any type of gas fuel is illustrated and described in this six-page bulletin. Complete data, with dimensions and capacities of both propeller-fan and blowertype units, are included. Available output capacities range from 70,000 to 178,000 Btu’s per hour. Explanations show how they can be used in commercial and industrial applications. Dravo Corp., Dept. AB, 1203 Dravo Bldg., Pittsburgh 22, Pa.
FOR THIS GREAT, NEW STYLE IN TILE!

MATICO Confetti!

HURRAHS—from America’s value-wise buyers. They really go for gay, festive, colorful Confetti. It’s high-style flooring at low asphalt tile prices... easy to clean... lasts for years!

APPLAUSE—from leading decorators. They welcome the fresh, new styling that gives them wide freedom in creating exciting decorative schemes.

A ROUSING HAND—from builders everywhere. Confetti is a brand new aid to home sales. Builders can now "trade up" their homes, "trade down" their budgets... save on installation costs. And Confetti is ideal for on-grade, slab construction homes. Fortified with poly-styrene plastic for bright, enduring colors... extra toughness and resiliency.

Confetti is available in 10 high-spirited colors, in 9" x 9" tiles of \( \frac{1}{8} \)" thickness. Write department 5-3 today for full details and specification data.

MASTIC TILE CORPORATION OF AMERICA
Manufacturers of: Aristoflex • Confetti • Parquetry • Asphalt Tile • Cork Tile • Plastic Wall Tile
Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.
New Coleman gas wall sell low-cost

No special construction—

They fit any home, new or old—

flat top, standard roof,

one- or two-story residences;

basement or slab-floor construction

The biggest selling, best advertised, and by far the most popular wall heater available. Because it fits smoothly between standard 2" x 4" centered studs, it is ideal for installation in new homes as well as existing construction that is to be modernized.

Requires no basement, special excavation or duct work. Beautifully styled and a real space-saver in small homes, upstairs rooms, basements, tourist cabins, etc. Also available in Dual Wall Models to heat two separated areas at the same time. Install them singly to heat a few rooms or use multiple installations for zone-heating larger residences. Write us and we'll have our nearest distributor work out cost to your specifications. The Coleman Company, Inc., Wichita 1, Kansas.
heaters cut your costs-
homes faster
fast, easy installation

**NEW** SHORT ECONOMIZER
puts more heat into room
Fits in wall above the heater.
Reclaims heat from flue area and returns it to the room.
Short enough to fit flat roof, goes in buildings with attic or upper stories.

**NEW** DIRECTIONAIR BLOWER
completely automatic with new Fan and Limit Control
Delivers tempered warmth clear to the floor. Increases circulation, prevents cold-floor discomfort. New Fan and Limit Control automatically regulates operation of burner and blower and economizes on fuel.

Complete in-floor furnaces that need no basement, no air ducts. Like Coleman Wall Heaters, they can be used singly or in multiple installation for zone heating. The famous Coleman Shallowflow is the industry's shallowest gas model.

---

**THE COLEMAN COMPANY, INC.**
Dept. 500-AB, Wichita 1, Kansas
Please have a Coleman distributor give me full information on Coleman Wall Heaters and Floor Furnaces.

Name: ____________________________
Firm: ____________________________
Street: __________________________
City: ___________________ Zone: ______ State: ______

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MARCH 1954
You’ll be closer to a closing if

This strikingly beautiful Weldwood walnut paneled fireplace wall will be featured in full color along with other woods in the April issue of Better Homes and Gardens, American Home, House Beautiful, Living for Young Homemakers and Sunset magazine. It’s an example of Weldwood’s advertising which appears month after month in leading consumer publications. It’s selling everybody on the beauty of real wood paneling... it will help you sell your homes if you panel with Weldwood.
you panel a wall with Weldwood

Do one wall in Weldwood paneling and all the other walls will look better. A Weldwood paneled wall perks up a room — adds the punch that helps to sell!

The idea of doing at least one wall in Weldwood paneling is really catching on with builders everywhere. At the recent Builder’s Convention in Chicago we were told time after time about the big trend to wood paneling for interior finishing.

It makes plenty of sense, too, because after all what other material can match the warmth and beauty of real wood? Women prospects love it. Men respect its quality. Weldwood paneled interiors really help to sell a home!

MAKE THIS TEST! If you have shied away from wood paneling because you think it costs too much then make this simple test. Take any 8' x 12' wall area in

the homes you are building. Figure out just what it is costing you to install this wall with materials other than Weldwood paneling. Now compare this cost with that of beautiful Weldwood paneling.

IT’S INEXPENSIVE! For instance, you can do the same wall in luxurious Korina® for about $53 for materials, in cheerful knotty pine for about $38, in traditional oak at about $53, in popular Weldtex® at about $25, in rustic Surfwood® for about $23 and in dramatic Novoply® at about $25. Then there’s Plankweld® in a variety of wood faces which saves you even more because it is prefinished — requires no on-the-job finishing.

We think you’ll find remarkably little difference in cost, if any. Yet, there will be a whale of a difference in sales appeal when the house is ready to be sold.

For further information see your local lumber dealer now or contact any of the 60 United States Plywood or U.S.-Mengel Plywoods distributing units in principal cities, or mail coupon.

FOLLOW THESE SUGGESTIONS—THEY’LL HELP YOU CLOSE SALES!

IN YOUR HOMES — Check your blueprints and see where Weldwood paneling can most effectively be used. (For homes under construction Weldwood paneling can be included for less than you think.) Visit your local lumber dealer or Weldwood showroom and see the paneling.

IN YOUR PROMOTION — Weldwood products are constantly being advertised in other leading national magazines. Your building site display boards and promotional literature should place strong emphasis on the fact that your homes feature beautiful Weldwood paneling.

IN YOUR ADVERTISING — The Weldwood guarantee has tremendous sales appeal! Use it in your newspaper advertising and promotional literature. You can even include it in your sales contract because the guarantee is backed by the largest plywood organization in the world.

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

FREE: Please send me new Weldwood Catalog packed full of Weldwood data and specifications. ( )

NAME:

ADDRESS:

CITY STATE:

United States Plywood Corporation
World’s Largest Plywood Organization
55 West 44th Street, New York 36, N. Y.

Distributing Agents in 60 Principal Cities
Plants have a great capacity for preventing the passage of solar heat to surfaces on the opposite side. The main reason for this is that most of this solar energy is used in photosynthesis and in transpiration. Part of the heat is lost by conduction and convection to the cooler air and part by radiation. Some is reflected from the surface to the plant.

On the other hand, soils and construction materials absorb great quantities of heat, later radiating it back into the atmosphere. These materials need some sort of protection against the sun so that they will not receive this initial radiation.

In considering these basic facts, a recent conference on housing and building in hot-humid and hot-dry climates, sponsored by the Building Research Advisory Board of the National Research Council, came to these general conclusions:

1. In areas where the warm winter sun is desired, deciduous trees should be used. Even when leaves are not present, thickness of branching and twigginess can screen out great quantities of radiation.
2. The placement of trees and the use of grass near the house allows the heavier cool air to flow inside, provided low openings are present. High strip windows are not desirable in this respect.
3. The greater the number and size of trees and square footage of lawn area, the more cooling there is.
4. Shrubs may even increase the heat if the air circulation which aids transpiration is cut off. The use of very low ones is suggested.
5. Windbreaks, however, may be necessary in order to keep out hot-dry and winter wind.
6. Keep sun off walls to prevent heat reradiation and off glass to prevent it from penetrating inside.
7. Deciduous vines may be used on trellises over windows.
8. Radiation may be partially stopped by the use of a wall cover of vines. This creates a cool air space between the foliage and wall.
9. Roofs may even be covered in the same manner as walls, resulting in a double roof; the upper one of living materials.
10. Keep lawns and trees well watered during dry weather.
11. Shade as much paving as possible by trees and vines to prevent heat absorption. In hot climates it is well to keep paving to minimum.
TRIPLE ECONOMY

It's the biggest truck news of '54

New Ford F-100 Pickup has big 45 cu.ft. payload capacity. Choose new 115-h.p. Cost Clipper Six or all-new 130-h.p. Power King V-8!

1. NEW LOW-FRICTION ENGINES offer power increases up to 23% with gas-saving economy! One reason: modern Deep-Block, short-stroke design cuts internal friction up to 33%!

2. NEW 3-MAN DRIVERIZED CABS cut fatigue. New long-wearing woven plastic seat upholstery. Exclusive Ford seat shock snubbers! Huge one-piece windshield!

3. BIG CAPACITIES! Ford's 221 new models offer low curb weights, top payloads! New Ford-built 6-Wheelers, up to 40,000 lbs. GVW! Two new Cab Forwards!

Ford advances further with big new savings in all 3 vital truck areas! There's more gas-saving power! Still better drivers' working facilities! Big capacities, too!

New Ford Trucks for '54 offer the mightiest concentration of power per cubic inch ever built into any truck engine line! And, smaller-displacement engines like Ford's five new truck powerplants normally need less gas! That's only one big factor behind Ford Truck Triple Economy for 1954. For more information, write: Ford Division, Ford Motor Co., Dept. T-23, Box 658, Dearborn, Michigan—or call on your Ford Dealer, today!


*All items marked by asterisk available at worthwhile extra cost.

New Fordomatic Drive saves driver time and energy. Fully automatic—no clutching, no shifting! Available in all Ford light-duty models for '54.*

New Vacuum Boosted Power Brakes now available on half-tonners make stopping up to 25% easier.* The foot pressure needed to stop truck won't break an ordinary light bulb.

FORD TRIPLE ECONOMY TRUCKS
MORE TRUCK FOR YOUR MONEY

MARCH 1954
new products

STEEL FRAME FORMS AB35406
A lightweight steel frame form for plywood panels features ease of handling and quick field assembly. The width of the steel frame is only 2 1/2 inches, as compared with 4 1/4 inches for wood frame forms. The manufacturer has developed a simple, easy-to-follow procedure that enables a contractor to build his own concrete forms in the field, using the frame and purchasing his plywood panels locally. Symons Clamp & Mig. Co., Dept. AB, 4249 Diversey Ave., Chicago 39, Ill.

PLASTIC WALL TILE AB35403
New plastic wall tile is 4 1/4 inches square and conforms to the commercial standards of the S.P.I. An improved water-seal flange and a knife edge enter the cement without resistance and force the cement under the water-seal flange, assuring a positive waterproof installation, making this tile safe for shower areas and tub recesses. The economy of installation and the shallow cavity back are said to save several cents per square foot on mastic cost.
The contour face provides attractive wall surface with the bevel edge highlighting and shadows. Design also practically eliminates clean-up after installation, as the knife edge prevents cement from coming out between the joints of the tile. Inside and outside corners, feature strip and half tile, bull nose cap, with bull nose inside and outside corners, are made to accompany this new tile. Hächmeister-Inc., Dept. AB, P.O. Box 357, Pittsburgh 30, Pa.

MULTIPLE-USE AWNING WINDOWS AB35401
Said to meet all demands of modern architecture, this new awning window emphasizes horizontal lines and great flexibility, making it ideal for the current trend toward more interior light and ventilation. The laboratory tested unit combines hardware that is especially designed but simple in construction with weathertightness. Called “Bilt-Well” awning windows, they may be grouped together or used singly as swing-out awning windows, swing-in hopper units, or stood on end as a casement unit. Builders will discover their flexibility in using them in ribbons, stacked, or in combination with fixed or picture window units.
The windows are stated to be simple to install and furnished with all hardware. They are available with either a bar operator or a locking handle for easy opening or closing. All cleaning may be done from the inside exclusively. Units are made from kiln-dried Ponderosa pine which has been water-repellent preservative treated. Carr, Adams & Collier Co., Dept. AB, Dubuque, Iowa.

RECESSED CEILING LIGHT AB35414
This new recessed lighting unit bears the trade name of “Ecco.” It is provided with a built-in junction box, a specular reflector for maximum light output, lens of Corning Alba-lite glass and a chrome finish frame hinged for easy relamping. Designed to be installed with the manufacturer’s bar hangers (an accessory), the fixture can be installed in 30 seconds.
Because of its economical features, the unit is recommended as a built-in fixture for tract homes selling for as low as $8,000. According to the manufacturer, the salability of the house is increased at no additional cost to the builder with the addition of an “extra that costs no extra.” Marvin Manufacturing Co., Dept. AB, 3071 E. 12th St., Los Angeles 23, Calif.

PORTABLE SAW AB35404
The “Power-Guide” portable saw weighs only 11 pounds, and will miter a two-inch plank at 45 degrees; it has a shoe adjustment for sloting from 4 inch up to 2 7/16 inches deep.
The saw is equipped with an air-cooled motor in an aluminum housing that delivers one full horsepower under peak load, using a standard 7-inch blade. The gear-box is sealed in grease and has a one-year factory guarantee. With special blades, the unit will cut steel, tile, brick, concrete or corrugated metal. Motor is at left of blade, insuring good balance, safe control. Ram Tool Corp., Dept. AB, 411 N. Claremont Ave., Chicago 12, Ill.

FOR MORE INFORMATION USE COUPON ON PAGE 202
NOW, using the Safway-designed FD-1 folding device, work towers can be opened into working position on the other side. The FD-1, attached to standard Safway scaffold frames, makes it possible to move a 4 or 5-foot wide scaffold through 30-inch doors without time consuming disassembly and re-erection. To fold the work tower, simply detach one end of the diagonal brace; put the tower into working position, re-attach the brace. You can get the full story on the money-saving FD-1 folding device by writing to Safway Steel Products, Inc., 6246 W. State Street, Milwaukee 13, Wisconsin.

GROWING FAMILIES need increased space. Add a room! The Richkraft Co. has products that make that new room easier to install, better to look at and cooler. Richflex, that highly efficient reflective insulation, is easy to apply in sidewalks and ceiling and it cuts heat losses and acts as an effective moisture barrier. In ceilings it can reduce inside temperatures as much as 15° and it has no superior as a guard against heat flow. Also, remember Richbead the metal wall corner when putting in your walls. It protects both interior and exterior corners from damage by toys and cleaning equipment. The Richkraft Company, Room 928, 510 N. Dearborn St., Chicago 10, Ill., can help you.

I VISITED THE IN-SINK-ERATOR booth during the NAHB convention and was I pleasantly surprised. There before me was a complete electric sink from food waste disposer to dishwasher. This sink will be a boon to builders as there, in one unit, is a dishwasher and disposer combination will give you a nationally advertised home selling feature that has been presold for you. Get the facts from In-Sink-erator, Racine, Wisconsin.

HERE'S ECONOMICAL QUALITY that helps sell homes. Cermak's threestyle line of plastic wall tile is a sure bet for added quality that turns prospects into buyers. Budget Bevel, Cleveland Bevel Edge or the distinctive Carra-Plas answer every demand for Price, Style and Quality. As a lasting wall covering in kitchen, bath and utility rooms they give every home colorful sales appeal. Exclusive “Undergate” moulding makes Cermak tiles the strongest. What's more, only virgin polystyrene is used. Be sure to ask your Cermak dealer for Armstrong's 1402 cement. Years of experience prove it best. See your local dealer or write Cermak Tile Company Inc., 4901 Brookpark Rd., Cleveland 29, Ohio.

NEW HOMES SELL FASTER with colorful, distinctive SHAKERTOWN SIDEWALLS... and new Shakertown GLUMAC Units help you finish more homes easier, faster at surprising new low cost. A Shakertown Sidewall is not only factory grooved and stained... it is “double-coursed” too: Thick-butted cedar shakes lend deep, soft shadow lines. They add eye-and-buy appeal, too, with decorator-selected colors, added insulation and real home economy. Here's a wood wall that won't blister or peel... can be applied in any climate, in any weather. See the Yellow Pages, or Write the Perma Products Co., Cleveland 27, Ohio.

ELKAY'S STAINLESS STEEL LUSTERTONE SINKS add the loveliness that attracts the woman's eyes... the permanence that attracts the men's pocketbooks. Once a Lustertone sink has been installed in a kitchen, it never has to be replaced... Elkay guarantees it to outlast the home! This fact, plus the sparkling easy to clean luster of genuine stainless steel, can be a mighty good sales point for your prospects. There is a model and size for every kitchen and don't let price worry you. ELKAY LUSTERTONE Stainless Steel sinks generally cost no more than colored porcelain sinks. Ask about LUSTERTONE and the marvelous new ELKAY DURATONE sink and counter tops of beauty bonded Formica on steel. Write Elkay Mfg. Co., 1854 S. 54th Ave., Chicago 50.

KITCHEN DESIGNS FOR ONLY $57 Yes, it's a new service for builders and lumber dealers being offered by Mutschler...specialists in hardwood kitchens. You send rough floor plan with overall dimensions to be used, preference of natural or enamel cabinets, color and style desired... Modern, Early American or other. Mutschler then advises cost for detailed floor plan and artist's sketch of kitchen as it will appear when completed. (Cost, based on number of appliance and cabinet units used, may be as low as $5.) Your “okay” starts a kitchen design like those featured editorially in leading women's magazines... a design that sells the kitchen, sells the home! For free quotations, mail rough plan and information to KITCHEN DESIGN SERVICE, Mutschler Brothers Co., Nappanee 4, Ind.

BUILDING BUY-WORDS
5510 Cornelia Avenue
Chicago 41, Illinois

Please send information on products checked:

☐ SAFWAY STEEL PRODUCTS, INC.—FD-1 folding device
☐ THE RICHKRAFT CO.—Insulation and metal wall corner
☐ IN-SINK-ERATOR MFG. CO.—Complete electric sink
☐ CERMAK TILE CO., INC.—Plastic wall tile
☐ PERMA PRODUCTS CO.—Shakertown sidewalls
☐ ELKAY MFG. CO.—Stainless steel Lustertone sinks
☐ MUTSCHLER BROS. CO.—Kitchen design service
☐ (Include rough plan)

Name ..........................................................................
Address ........................................................................
DRIVE-IT 320 WITH BREAK-OPEN ACTION

This Alaskan builder uses the new DRIVE-IT 320 with Break-Open Action to fasten 2x6 base plates to concrete block. The powder-operated tool "is more economical by at least 30% : results in material and money savings". Almost all concrete or steel anchorages can be made with more savings and greater strength with DRIVE-IT.

NEW DRIVE-IT 320 FEATURES BREAK-OPEN ACTION FOR FAST, EASY LOADING AND EXTRACTION. OTHER JOB-PROVED DRIVE-IT FEATURES ARE:

ONE POWER LOAD. Variable penetration with one strength power load.

AUTOMATIC EXTENSION BARREL. Integral with tool. Extends to fasten in recesses.

SWIVEL SAFETY PAD. Swivels 360° to fasten near adjoining surface. Steel and tough Neoprene for protection.

SAFE TWO-HAND FIRING. Tool must be held against work to operate. Two-motion firing action for safety.

LOW COST DRIVEPINS. Prices are lower on wide range of drivepins.

FOR MORE INFORMATION

MAIL THIS COUPON

DRIVE-IT

POWDER-ACTUATED TOOL

POWDER POWER TOOL CORP.
7526 S. W. Macadam Ave., Dept. D
Portland 1, Ore.

Please send literature on DRIVE-IT "320"
I’d like a demonstration of DRIVE-IT "320"

Name
Address
City ___________ State ___________

DRIVE-IT

the original

POWDER-ACTUATED TOOL

BASEBOARD ENCLOSURES

New style KS enclosures are designed to provide a baseboard-type enclosure for commercial and industrial installations. The front and top are a one-piece unit, and the whole enclosure is mounted on a full metal backing, similar to the manufacturer’s residential-type unit. Outline louvres are in the front skirt, so that convection currents are directed away from wall to improve distribution. Made of 18-gauge steel, either Galvanite or prime-coated, style KS enclosures can be furnished in lengths of three-inch increments up to a maximum of eight feet in one piece. A full line of accessories is available, including joining and corner pieces and end enclosures. Radiator elements are hung from the backing by patented rod-type hangers. Vulcan Radiator Co., Dept. AB, 10 Francis Ave., Hartford, Conn.

REDESIGNED BUTT HINGE

A new feature of the manufacturer’s butt hinge is a special “E-Z Out Notch” for easy removal of the pin. The annoyance of trying to remove pins, especially those with button tips, is overcome by the simple device of having a specially designed notch on the pin knuckle at the upper left corner of the right leaf. A screw driver will push the pin up without marring or damaging the edges or face of the butt hinge. When the butt hinge is set, the notch is practically invisible. McKinney Manufacturing Co., Dept. AB, 1639 McKinney St., Pittsburgh 12, Pa.
New Home Prospects

came to inspect this attractive model home erected by noted builder, C. Di Felice *(average price $22,500)

A feature attraction was year 'round air conditioning by Bryant's famous "Command-Aire" Twins.

Result: 50 sales in 90 days ... a profitable transaction for which Mr. Di Felice gives due credit to the strong sales appeal inherent in the "Command-Aire" equipped home. Specifically, Mr. Di Felice ... and home buyers ... liked these unique features of the Bryant "Command-Aire" system ...
Home buyers are sold — when they see a carefree NEVAMAR kitchen

Not only in kitchens, but in dining nooks, bathrooms and utility rooms—NEVAMAR adds a new protective beauty that's designed for a lifetime of faithful service. In attractive colors and patterns, including natural wood grains, it gives you endless opportunities for creating carefree rooms in many exciting decorative schemes. NEVAMAR is a pre-finished surfacing material—a high-pressure laminate that's easy to apply on both vertical and horizontal surfaces. Write for complete information and samples.

DISTRIBUTOR: THE NEVAMAR COMPANY, BALTIMORE-30, MARYLAND

The NATIONAL Plastic Products Company
Manufacturers of Nevamar High-Pressure Laminates - SARAN FILAMENTS - Winner Molded Products
ODENTON, MARYLAND - NEW YORK: EMPIRE STATE BUILDING - LOS ANGELES: 505 HAMPTON STREET
In Canada: Richmond Plastics, Limited - Richmond, P. Q.

SUGGESTION

You find, when selling a house, that its special features help you make the sale. You know, too, that a lot of sales are closed in the kitchen—because that room is the focal point of interest for the homemaker.

A few years ago, the progressive builder could sell his houses if the kitchen had space for an electric range and free. No paint needed—ever. Pre- electric refrigerator. Then he found that his kitchens must give greater strength of 26,000 psi, usually was difficult to make the sale without them. and absolute uniformity throughout. 5 colors in flat, or exclusive RIBBED shape so easy to install without costly special moldings. Small “L” rib overlap saves up to 8e per sq. ft. Get facts!

Tomorrow’s Product—available today. For complete facts, prices, free “Idea Folder” or name of nearest dealer, tear out coupon, now. Mail when convenient.

FARM & HOME FREEZER SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

AMERICA'S BUILDER
new products

METAL WEATHERSTRIP AB35417
"Seal-Draft," a new development in weatherstripping steel and aluminum casement windows, is said to seal out drafts and dirt from infiltrating around window openings. It is made of a weather-and corrosion-resistant alloy of chromium, magnesium and aluminum which permits contact with a steel without electrolytic decomposition of the product.

The alloy strip is easy to install: it simply slides onto the window frame. Corner pieces hold it securely in place. The wide sealing flange enables the stripping to conform to such window deformities as the ventilator’s not closing tightly against the frame around the perimeter of the opening. This makes possible a tight seal, instead of providing only occasional contact. Because of the thin-gauge metal, the stripping fits into window manufacturers’ tolerances for ventilator clearance and does not bind the window. It allows full freedom of opening and closing, and does not interfere with storm window or screen placement. Steel Sash Service, Inc., Dept. AB, 2141 Lawrence Ave., Chicago 25, Ill.

DRAWER SLIDE AB35422
A lightweight, nylon ball-bearing extension drawer slide is available in 14,-, 16-, 18-, 20-, 22- and 24-inch lengths. Although the unit is a low-cost and lightweight unit, it will easily carry loads of well over 100 pounds, according to its manufacturer, Knape and Vogt Manufacturing Co., 638 Richmond St., N.W., Grand Rapids, Mich.

Pour faster with a Jaeger

Look how this mixer puts out stiff concrete as fast as you can take it. You charge in only 5 to 7 seconds with Jaeger’s “Skip Shaker” loader. You mix and remix more thoroughly with Jaeger’s criss-cross action, then discharge in another 5 to 7 seconds with Jaeger’s big bucket and flight blades and special “catch all” spoon.

With that speed you can really turn out yardage with a mixer that’s as rugged as it is fast. Your Jaeger has a bigger engine, automotive transmission, Timken bearing drum rollers and heavy duty drum with machined steel tracks—all to give you years of service with low upkeep and without costly breakdowns on your jobs.

Available in 3 1/2, 6, 11, and 165 sizes. Ask for Catalog M-10.

THE JAEGER MACHINE COMPANY 521 Dublin Avenue Columbus 16, Ohio

Mr. Builder... This investment pays off!

SHOWER ENCLOSURES

add to prospective-buyer evaluation

- Heavy-quality metals and glass, precision-engineered.
- Easy sliding overhead track or piano-type hinges.
- Leak-proof mastic and special drip design to prevent leakage.

Gulfspary shower doors and tub enclosures help prove that IF YOU PUT MORE OF THE BETTER THINGS INTO A HOUSE you’ll get more for it. Easy installation and maintenance and beautiful design make Gulfspary enclosures favorites with builders—and home buyers everywhere!

FOR MORE INFORMATION USE COUPON, PAGE 202

MARCH 1954
only the Amazing New

**PER-FIT SLIDER**

**ALUMINUM**

gives you all these features!

Mr. Builder: PRICE? You will be astounded at the low cost of this window when your dealer quotes you.

Acclaimed by everyone as the window they have been waiting for. Its new advanced design results in amazing quality at surprising low cost. Study each of these important features. You too will say "This is the window I've been waiting for".

Screw-lock smooth, mitered frame corners factory sealed. Rock-free rigidity. Close fitted joints—wind, water and dust tight forever. Factory located hardware assures perfect fit at storm sash and screens.

- All frames have continuous perimeter installation fins.
- Semi-pneumatic Ventiseal weather stripping inside jamb. The most advanced weathering system, plus a sash cushion.
- Continuous zinc weathering strip in frame head; smooth operation and full length weather seal.
- Rubbing black on zinc weather strip in head assures perfect closure and seal of meeting rails. Scientifically designed weep holes in sill frame for immediate drainage under all conditions.
- Weep holes in sill frame protected from weather by continuous beaded flange which is an integral part of the removable cover plate.
- All weathering is built into the window frame where it belongs; out of harm's way and thoroughly protected by the frame.
- Screw-lock mitered sash corners permit easy job re-glazing. Lifetime Ventiseal glazing.
- Sash sidersails have two-point contact with semi-pneumatic jamb weather strip for double weather protection.
- Nylon pressure buttons in sash head rail, actuated by stainless steel springs, eliminate wind rattle in any sash position; constantly push sash firmly against the zinc weather strip. Nylon-aluminum, aluminum-zinc contact provides natural lubrication for permanent, easy, fingertip operation.
- Full-length self-sealing action provided between sash and sill cover plates.
- Forged and machined cam action lock forces sash against the semi-pneumatic weather seal in side jambs; seals meeting rails; air-tight, dust-tight; maximum weather seal.
- Top to bottom finger rail for quick, easy opening; prevents pinched fingers; adds beauty—and rigidity—at a critical point.

No sharp, easily damaged weather strip exposed when sash is out; no homeowner injury hazard.
NEW SLIDER SOLVES ALL INSTALLATION PROBLEMS

1" deep by 1/2" wide exterior trim (casing) and 1/8" wide pre-punched full perimeter nailing fin is integral part of window frame. Installed over sheathing in framed rough opening in less than five minutes. Almost impossible to rack. Easily mulled. May be used for masonry block construction; however, Job Condition Frame recommended.

PER-FIT DOUBLE HUNG • REST-VENT DOUBLE HUNG
• PER-FIT SLIDER • PER-FIT GLASS BLOCK VENTILATOR

PER-FIT PRODUCTS CORP.
1204 EAST 32ND STREET • INDIANAPOLIS, INDIANA
MARCH 1954

new products

RECESSED WALL HEATERS AB35419

Eight models of recessed, vented wall heaters are available in sizes of 15,000 through 60,000 Btu input, in single as well as dual units. The Model C-55 single is unusual because by removing plate at the rear and adding a dual kit, it can be converted to a dual unit. This heater is useful to place between a hall and dining room, hall or bathroom, or for regular placement, because it has the warm-air outlet only on one side; all the intake air is from the control side, which has both intake and outlet.

The Model C-60 can be bought as a gravity flow unit, or by adding the blower kit, it can be used with a blower for added circulation. Hammel Radiator Engineering Co., Dept. AB, 3318 Motor Ave., Los Angeles 34, Calif.

CHAIN SAW AB35411

Faster cutting, light weight, high power and low maintenance are among the features claimed for this 30-pound, 5.2-h.p. gasoline powered chain saw. Its makers say that the tool will cut a 20-inch tree in as little as 20 seconds, and will bring down four- or five-foot diameter timber quickly and easily.

Because of its light and balanced weight, the saw is said to be easy to handle; it cuts in any position—up, down or upside down—on all types of cuts, for felling, bucking, boring, notching, trimming or undercutting. Blade sizes include straight blades in 18-, 23-, 30-, 34-, 42-, and 44-inch sizes, and plunge-cut box saws for one- or two-man operation available in 14- and 18-inch sizes. Hemelite Corp., Dept. AB, 111 Riverdale Ave., Port Chester, N. Y.

MALL for the finest saws made

There are two mighty good reasons why craftsmen everywhere prefer MALL saws. First—MALL offers a bigger selection of styles and sizes to give you the EXACT saw you want. And MALL saws are built better, designed better to give many years of dependable service. Here are three of the many MALL saws to choose from—

MODEL 70—7 1/4" blade. Cuts wood to maximum depth of 2 3/4". Free blade speed of 3600 r.p.m. Bevel cut adjustment allows cuts to 30° at 45°. Depth adjustment for minimum cut of 1/4". Arbor hole size of 3/8". Weighs 16 pounds. Equipment—combination blade, 15-foot cord, metal case, special tools, and lubricant. $115.00. F.o.b. Chicago

MODEL 96—9 1/2" blade. Cuts to maximum depth of 3 1/2". Free blade speed of 3800 r.p.m. Bevel cut adjustment gives cuts to 2 3/4" at 45°. Depth adjustment for minimum cut of 2 1/4". Arbor hole size of 3/8". Weighs 19 pounds. Equipment—combination blade, 15-foot cord, metal case, special tools, and lubricant. $135.00. F.o.b. Chicago

MODEL 128—12" blade. Cuts to maximum depth of 4 1/2". Free blade speed of 3200 r.p.m. Bevel cut adjustment allows cuts to 3 1/2" at 45°. Depth adjustment for minimum cut of 3 1/4". Arbor hole size of 3/8". Weighs 36 pounds. Equipment—combination blade, 15-foot cord, metal case, special tools, and lubricant. $215.00. F.o.b. Chicago

OTHER Mall TOOLS FOR BUILDERS

There are two mighty good reasons why craftsmen everywhere prefer MALL saws. First—MALL offers a bigger selection of styles and sizes to give you the EXACT saw you want. And MALL saws are built better, designed better to give many years of dependable service. Here are three of the many MALL saws to choose from—

MODEL 70—7 1/4" blade. Cuts wood to maximum depth of 2 3/4". Free blade speed of 3600 r.p.m. Bevel cut adjustment allows cuts to 30° at 45°. Depth adjustment for minimum cut of 1/4". Arbor hole size of 3/8". Weighs 16 pounds. Equipment—combination blade, 15-foot cord, metal case, special tools, and lubricant. $115.00. F.o.b. Chicago

MODEL 96—9 1/2" blade. Cuts to maximum depth of 3 1/2". Free blade speed of 3800 r.p.m. Bevel cut adjustment gives cuts to 2 3/4" at 45°. Depth adjustment for minimum cut of 2 1/4". Arbor hole size of 3/8". Weighs 19 pounds. Equipment—combination blade, 15-foot cord, metal case, special tools, and lubricant. $135.00. F.o.b. Chicago

MODEL 128—12" blade. Cuts to maximum depth of 4 1/2". Free blade speed of 3200 r.p.m. Bevel cut adjustment allows cuts to 3 1/2" at 45°. Depth adjustment for minimum cut of 3 1/4". Arbor hole size of 3/8". Weighs 36 pounds. Equipment—combination blade, 15-foot cord, metal case, special tools, and lubricant. $215.00. F.o.b. Chicago

OTHER MALL TOOLS FOR BUILDERS

In addition to manufacturing top quality electric and pneumatic saws, MALL produces an outstanding line of drills, sanders, polishers, screwdrivers, planes, door lock mortisers, impact wrenches, flexible shaft machines, and the world's finest line of chain saws.

40 Factory-Owned Service Warehouses, Coast to Coast, To Give Fast, Dependable Service.

MALL TOOL COMPANY
7732 S. Chicago Ave., Chicago 19, Ill.
Send me more information about MALL saws
and____________________
Name____________________
Company___________________
Address____________________

MARCH 1954
WITH THE NEW, FULLY AUTOMATIC, REMINGTON RAND PRINTING CALCULATOR

This new, printing calculator automatically multiplies, divides, adds and subtracts amounts up to ten trillion. It proves and prints every calculation on the tape. It’s the first fully automatic printing calculator with all these features:

*Automatic multiplication*
*Automatic division*
*Automatic credit balances*
*Simpla-tape... printed proof in black and red.*
*10-Key touch addition and subtraction...for faster operation.*
*Constant key... the exclusive multiplication “memory” feature.*
*Automatic Total Control...individual or accumulative totals.*
*Two-color ribbon... totals, subtotals and credit balances in red.*

**FREE!** Ask your Remington Rand Representative for an eye-opening demonstration, or send for your copy of the “show how” folder illustrated here. Write Remington Rand, Room 1882, today. Ask for C669.

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**new products**

**GLASS DOOR WEATHERSTRIP AB35420**

An improvement for the manufacturers’ sliding glass doors uses mohair pile for the weather strip and guide in the glass-run channel of the top section of the door. The door now uses no top guide rollers, wheels or other moving parts. The mohair pile guide makes the door nearly noiseless in operation. The door rolls on ball-bearing brass sheaves in the bottom rail on a stainless steel track.

A double weatherstrip with mohair pile touches both sides of the vertical flange in the head of the frame. With this double contact, the mohair pile seals out drafts, regardless of the wind load applied to the sliding panel. Arcadia Metal Products, Dept. AB, 324 N. Second Ave., Arcadia, Calif.

**TACKER STAPLE AB35410**

A ½-inch leg length staple has been added to the Arrow Model T-50 gun tacker staple sizes, 5⁄16, 1⁄2, and 9/16-inch. The new staple size has been made for tacking jobs which require a shorter leg length. Like the other three sizes, the ½-inch staple is wedge pointed and made of .050-inch carbon steel wire.

The new staple’s uses include upholstering; installing ceiling tile, insulation, building paper, batt wool, foil, roofing felt and underdeckering; for shingles and siding; and numerous other uses. Arrow Fastener Co., Inc., Dept. AB, 1 Junius St., Brooklyn 12, N.Y.

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FOR MORE INFORMATION
USE COUPON, PAGE 202
This little pig goes to town for builders using Temlok sheathing

Starting in March, this little pig will help you sell houses by opening an imaginative advertising campaign. It is designed to create new interest in Temlok® Sheathing and help pre-sell prospective home buyers on its many advantages.

Home buyers recognize brand names in home building as a guarantee of the quality they expect in a well-built house. They know that houses built with the name brand products give them the most house for their building dollar. The brand name, "Armstrong's Temlok Sheathing," has been built by many years of constant advertising.

Now, a new series of Temlok ads featuring familiar figures of folklore will appear regularly in American Home and Better Homes and Gardens. This smart little porker demonstrates, in a refreshing new way, how to build a comfortable and draft-free house with Temlok Sheathing.

In today's competitive market, famous brand names work as effective salesmen to help you sell houses. You're adding a strong sales feature when you tell prospects that your homes are sheathed with Armstrong's Temlok.

If you would like full-color reprints of ads from this series to display in your houses, write Armstrong Cork Company, 3703 Rider Avenue, Lancaster, Penna.

ARMSTRONG'S TEMLOK

The sheathing that helps you sell houses
SHOW 'EM REGULAIRE* - THE COMFORT FEATURE ONLY PERFECTION CAN OFFER

Perfection can make the difference between a big "YES" and a "maybe" from prospects. These automatic gas or oil-fired furnaces with exclusive Regulaire make the system a real talking point with home buyers. Regulaire stops cold blasts and sudden surges of hot air. Ask your heating contractor about it.

Perfection Stove Company, 7519-B Platt Avenue, Cleveland 4, Ohio,

TRIANGLE VENTILATOR AB35418

The "Giant" triangle ventilators are designed to provide builders with a large-sized, assembled unit that gives adequate ventilation on low 5-12 pitch roofs. They are built in three widths: 90 inches opening width, 18½ inches high, providing 344 square inches free area; 69 inches opening width, 9½ inches high, providing 84 square inches free area.

Louvers are held to the side frame with tabs and cannot come apart or fall out. Louvers are designed to keep out snow and rain and have extra rigidity to prevent rattle. The wide frame of the ventilator seals around the opening. A screen is provided in back to keep out birds and insects. Air Control Products, Inc., Dept. AB, Coopersville, Mich.

FOOD WASTE DISPOSER AB35405

This unit features easy installation and quiet, fast operation. Waste material is ground away from the bottom, instead of the sides, so that material remains relatively stationary in the disposer. This type of cutting action eliminates much noise and is exceptionally fast, disposing of a pound of ordinary food waste in 30 seconds.

The disposal unit weighs 24½ pounds and features a special mounting ring which lets the disposer support its own weight before any bolted connections are made. The mounting ring also permits the disposer to be rotated a full 360 degrees for quick connection between the tail piece and existing trap. Absence of any metal-to-metal contact between the disposer unit and the sink, or between the disposer and the waste lines, prevents the transmission of any vibration, and cuts noise. Universal-Rundle Corp., Dept. AB, 157 River Road, New Castle, Pa.
Low-cost sales clincher
Don't overlook the "buy appeal" of this new Westinghouse Disposer

Important house merchandising features should be considered in the planning stage. Here, for instance, is one that offers "buy appeal" far in excess of its modest cost. It's the plumbed-in appliance most new home buyers expect to find in their home. And why not? They want the freedom it offers from unsightly garbage cans and unpleasant kitchen tasks.

New in every way, this Westinghouse Food Waste Disposer shreds all kinds of food waste as fast as it can be loaded. The reversing switch doubles the unit's life by allowing use of both edges of the double-edged shredders. Operation is truly quiet with all metal-to-metal contacts cushioned by Neoprene "shock absorbers".

For complete details, see your Westinghouse Distributor or write direct.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division • Mansfield, Ohio

UNIFORM SHREDDING—Waste is reduced to fine particles that scour drain lines, keep them clean, and allow efficient reduction in septic tanks.

EASIER TO INSTALL—Easily installed by one man, this unit fits all standard sinks, requires no extra plumbing fittings, is 50% lighter in weight than previous models.
GET YOUR POWER TOOLS ON THE JOB—IN A HURRY!

TEMPORARY SERVICE MAST INSTALLS IN MINUTES

MITI-MAST lets you get ready for power the first fifteen minutes you're at the site. Complete unit includes heavy duty wire holders, entrance head and pre-wire utility box. Raises service wires to 12 ft. but telescopes to eight feet for hauling and storage.

36.50
freight paid
Slightly higher in some areas

UTILITY SERVICE CO., INC.
921 THIRTEENTH ST.
RACINE, WISCONSIN

Write for complete line catalog

NEW VULCAN TRIMLINE RADI-VECTOR*

FIRST CHOICE FOR FASTER INSTALLATION

Save Time...Man Hours...Money...On Every Job

PRICE
TRIMLINE radiation costs less. New TRIMLINE features save time and money. Fewer joints necessary, less fittings. All parts mount on one piece top and back. Front cover snaps on after installation.

PERFORMANCE
TRIMLINE provides the two most used types of heat. Radiant for floor level comfort. Convection for warm air throughout “comfort zone”. Continuous inlet and outlet slots assure more heat output.

ATTRACTIVENESS
Vulcan’s NEW, TRIMLINE COVER is designed for enduring beauty...built to harmonize with any residential decor. The STREAMLINED top of cover reduces apparent depth. Front easily removed for cleaning.

The VULCAN RADIATOR COMPANY
26 FRANCIS AVENUE
HARTFORD 6, CONNECTICUT

new products

PANEL ENTRANCE DOORS AB35415

A series of new panel entrance doors, specifically designed for current architectural trends, is available in eleven new styles to suit modern, contemporary and ranch style architecture. The designs are, in most instances, interchangeable to an extent with various types of architecture. Some will fit into ranch style and contemporary homes, others will go into contemporary or modern, and even colonial entrances can acquire a fresh grace with the new styling, say designers. M and M Wood Working Co., Dept. AB, 2310 N. Columbia Blvd., Portland, Ore.

RESIDENTIAL WINDOWS AB35413

Complete new window line called Fenestra Residential Projected Windows has been introduced. It includes ten types, and consists of projected-in and projected-out ventilator units and fixed lights for use in various combinations. The units solve the problem of weather-proof ventilation and offer new styling that keeps pace with modern architectural progress, according to their manufacturers.

Weather protection offered includes the rain-shedding qualities of the projected-out ventilators and the draft-free ventilation provided by ventilators which tilt inwards. Proper inside screening and storm window protection are also available. The ten combinations of vented and fixed units, projecting in or out, may be combined to make up various window areas. Detroit Steel Products Co., Dept. AB, 3101 Griffin St., Detroit 11, Mich.
Johns-Manville Spintex Insulation prevents heat escaping all 3 ways

Tomorrow at breakfast, let your coffee and a lighted match show you how Johns-Manville Spintex insulation can keep heat from moving out of a home.

Only this type insulation properly applied prevents heat escaping all 3 ways.

- **by conduction:**

Notice how quickly the handle of your spoon warms up. Fast-moving molecules in the hot coffee kick into action the slowed down molecules of a cold silver spoon. In this same way, furnace heat kicks its way out through uninsulated or poorly insulated walls and ceilings.

- **by convection:**

When you light a match for your cigarette, notice that the flame is pulled straight up by rising heat. Heat behaves the same way in a house with uninsulated walls and moves to the colder surfaces where it finds ready exit to outdoors. Drafts result.

- **by radiation:**

Now sip your coffee. Notice it has cooled perceptibly in a short time. What happened to the heat? Most of it propelled itself out into the air, will continue to radiate in all directions unless it is stopped by efficient insulation.

This picture demonstrates 3 ways heat escapes from a house.

Johns-Manville Spintex Batts and Blankets are superior:

1. Made of the new long fibre Spun Rock Wool originally developed by Johns-Manville.
2. This long fibre spun wool plus J-M "Know How" results in a better batt or blanket than ever before produced.
3. Spintex will not settle—its long fibres are firmly felted for maximum resistance to normal building movement.
4. Cuts clean; leaves clean sharp edges, for snug fit—will not fall apart.
5. Easy to install. They hold their shape. Rigid yet resilient characteristics assure easier handling, quicker installation.
6. Backed by Johns-Manville's years of experience in developing insulations for home and industry.

For full details about Spintex Insulation, write Johns-Manville, Box 60, New York 16, N.Y.
new products

FOLDING DOOR AB35416

The new “Veni-flex” folding door is being discovered by builders as a money-saving item and as a sales tool. The cost of installation and servicing is stated to be low and the money saved by elimination of jambs and casings, as well as door construction when used as a ceiling-height closet closure or room divider amounts to an impressive figure, the manufacturers say.

The door’s features include savings in space, better ventilation, increased accessibility and convenience. Consolidated Venetian Blind Co., Dept. AB, 2401 Nicholson St., Houston 8, Texas.

FLOOR TILE AB35408

Builders are reporting widespread, growing acceptance of Koroseal Floor Tile. This durable product is made of the same material from top to bottom. It is resistant to oil, fats, greases, acids and alkalies. It needs no waxing because the normal buffing action of walking feet develops a high luster. The tile is said to be especially suitable for installations where there is heavy foot traffic. It is available in 1/8-inch thickness for commercial use and 80-gauge for home installation. B. F. Goodrich Co., Flooring Div., Dept. AB, Watertown 72, Mass.

PORTABLE PUMP AB35412

This new unit is stated to be useful for transfer of liquids, for fire fighting and for dewatering pits and flooded areas. The pump is completely self-priming, yet has no valves or moving parts other than the motor, pump impeller and seal. It delivers over 100 gallons per minute at lowest head, and is capable of forcing water to a maximum height of 100 feet. Impeller is open-faced, non-clogging type which will handle all solids passed by the suction strainer affixed to the end of the suction hose.

A 3/16-inch thick steel wear plate is rigidly fastened to the pump casing by two heavy carriage bolts terminated on the outside by sealed dome nuts. Both impeller and wear plate can be replaced quickly in case of wear or damage. Intake and discharge connections are tapped for a 1/2-inch pipe thread. Pump is powered by Briggs & Stratton 1 1/2 h.p. engine. Keneco Pump Co., Dept. AB, 1125 N. Ridge Road, Lorain, Ohio.

BUILT-IN ELECTRIC OVEN AB35402

A new built-in electric oven unit with a capacity of 4,905 cubic inches and a built-in surface unit is designed to minimize cooking effort. This unit is stainless steel with a satin finish. Oven controls are below the door; from left to right they consist of lighted pushbuttons for broiling, baking, timed baking and a rotary thermostat for desired oven temperatures. A separate time control provides for setting the oven for cooking at any time desired.

Companion piece to the oven is the surface section, available separately. This unit is flush with the counter top. Two 6-inch units of 1,250-watt capacity are set slightly forward, while two 8-inch units, 2,650-watt capacity, are set slightly behind them. A separate indicator light adjacent to each surface unit lights up automatically, telling the user which unit is on. Surface section measures 38 x 20 inches. Hotpoint Co., Dept. AB, 500 W. Taylor St., Chicago 44, III.

PORTABLE POWER SHOP AB35409

A jack-of-all-tools has been introduced that can handle special finish carpentry jobs. It obviates the necessity of taking a man off the job and sending him to the nearest lumber yard. This 5-in-1 power shop is an aid to builders who need an 8-inch tilt-arbor table saw on the job, combined with a vertical or horizontal drill press of unlimited capacity, a tilt-arbor disc sander, a wood-turning lathe. A heavy steel box-girder provides a rigid base for the machine, and the whole shop can be mounted on any improvised table or bench five feet long by 18 inches wide. Planer Centric Power Tools, Dept. AB, 20 Boylston St., Boston, Mass.
YOUR CUSTOMER SPEAKS:

I like this STRAND All-Steel door— and the man who sold it to me

by don harold

The man who sold me my STRAND All-Steel garage door did me a big favor.

After several years, it still works smooth as silk, and satisfies me every day.

And now I know that if that door had cost twice as much, I would have bought it. But, oddly, it cost less than some doors, because, as my builder explained, STRAND doors are standardized and mass-produced and built for simple, inexpensive installation.

I've struggled with other kinds of garage doors in my time—wood doors that rotted and sagged, aluminum doors that dented easily, even inferior steel doors. I've learned that STRAND doors don't shrink, swell, warp, rot, sag or hang heavy.

Most of my previous doors I just left open most of the time—too much trouble to close. But my STRAND door is so easy to close and so handsome to look at, I always shut it. The modern horizontal-line styling makes my house look smart.

Lights in Strand door optional

MARCH 1954

Built Like a Bridge

Welded into a 1-piece masterpiece, with strong diagonal rear braces welded to the deep, sturdy steel frame. Truly, a "Lifetime Door."

STRAND doors are galvannealed with a thick, oven-baked coat of zinc armor. No prime coat needed for painting.

Up in a Hurry

The 1-piece construction, and factory-assembled hardware enable you to put STRAND doors up in a jiffy—more profit for you.

For Today's Wide Cars

For only $5.50 more (factory list) you can give your customer a 9'-wide STRAND door, and he'll thank you for the bigger target every time he drives in or out. (8' and 16'-double door—also available.)

Wide National Distribution

STRAND doors are easy to get through 150 national distributors and thousands of dealers.

This Book Will Help You

This 32-page book will make you a garage expert, and give you 12 designs and floor plans, how-to-build instructions, material lists, driveways, sketches, etc.

Strand Garage Door Division
Detroit Steel Products Co.
Dept. AB-3, 2242 E. Grand Blvd.
Detroit 11, Michigan

Please send 32-page booklet of Garage Plans and Ideas. I'm enclosing 10c for postage and handling

Please send free Strand literature and free Garage Plan of the Month

Name
Address
City
State

203
Depend on Goldblatt for
A Complete Line of
QUALITY DRY WALL TOOLS
One source for everything you need!

THREE-IN-ONE DRY WALL FINISHING TOOL. A new, improved tool that's amazingly versatile! It shears, feathers, finishes! Has 3 interchangeable and replaceable blades... made of very flexible, perfectly tempered spring steel. Each blade locks quickly, securely into the lightweight aluminum blade clamp by means of two small brass wing nuts. All blades can be used in reverse travel position...see small photo.

[Price List]
No. TRIO—Complete with 3 Blades $5.95
No. DW58—Bowed Shearing Blade Only, 11-in. x 4-in, with a 3/32-in. concave curve 1.75
No. DW11—Flat Blade Only, 11-in, x 4-in. 1.50
No. DWB—Flat Blade Only, 8 in. x 4-in 1.30
No. DWBC—Blade Clamp Only 1.75

ONE-MAN, DRY WALL TAPING MACHINE. Low cost, easy to operate. Spreads cement and tape evenly in one quick operation. Cement spreads are even and pressure on tape uniform. Perfect for use in a few hours; tape many times faster. Light-weight alloy, weight only 4 lb. empty or 8 Ibs. loaded with 250' of tape. Loads easily in seconds. Excellent balance, pencil-point precision. ORDER TODAY!

[Price List]
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See your dealer or order direct from AD. If your dealer cannot supply you, use your coupon to order from this ad. We ship promptly. Add 5% to order for postage and packing—minimum 25c.

Write today for details on other money-saving items in the Goldblatt complete line of Dry Wall tools and equipment. Just about everything you need for faster, easier and better work.
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Only CECO offers you 1¼” and 1½” intermediate windows

For years Ceco engineers have been experimenting so as to give you the “just right” window.

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The 1½” window assures greater strength and rigidity, adequate for any need, longest trouble-free service, will outlast any structure.

New beauty is reflected in rich solid bronze hardware.

In these new windows Ceco has reached deeply into the future to bring you truly balanced design plus an innovation in simplicity... an exactness you can find nowhere else.

CECO PRE-PLANNING CONSULTATION SERVICE

Ceco Product and Design Specialists will assist you in the application of Ceco building products at the pre-planning stage... Call your nearest Ceco office for overnight consultation service.
If a house is to have a basement, it should be planned and constructed as carefully as the rest of the structure. The type of construction, waterproofing and drainage for watertight basements depend on conditions of soil and drainage. Three conditions are described below and recommended construction for each is given in the chart.

EXTREMELY SEVERE CONDITIONS exist where water pressure against the sidewalls or the floor of the basement cannot be relieved by the standard drainage methods of foot- or underfloor drains leading to natural drainage or storm sewer.

AVERAGE CONDITIONS exist where heavy soil normally holds water, but where the water pressure on the basement walls can be relieved by footing drains.

MILD CONDITIONS exist where water readily drains.

(Continued on page 210)

KEY TO DRAWINGS

A. Ground should slope away from house
B. Backfill
C. Foundation wall
D. Concrete footing
E. Concrete floor slab
F. Porous drainbed or firm undisturbed soil
G. Floor drain with trap
H. Bituminous coating
I. One-half inch mortar (not necessary on poured concrete foundations)
J. Cove
K. Coarse gravel or other porous fill
L. Footing drain or field tile with open joints
M. Building paper over joints
N. Perimeter gutter sloping to floor drains
O. Firm undisturbed soil
P. Ground-water level
Q. Membrane waterproofing
R. Structural slab with reinforcing if necessary
S. Underfloor drain laid in gravel
T. Thin concrete slab
U. Hot tar or asphalt poured in joint
V. Sump pit with pump
WHO SAID AIR IS FREE?

Were it not for Radiation and Convection, empty air spaces inside walls, roofs, etc. would be the best insulation. But why pay costly labor and storage bills for handling “free” air entrapped before it is used in bulky insulation? Bulky materials also require more freight cars, trailers and trucks. The “free” air is paid for over and over again.

Multiple accordion aluminum envelops large volumes of air and creates layers of air spaces only as it is opened when finally stapled in place. This air is really free.

With respect to radiant heat flow, the aluminum sheets have 97% reflectivity, and 3% absorptivity and emissivity. Low conduction results from the preponderant air spaces of low density. The layers of multiple aluminum and fiber retard inner and outer convection. The tough aluminum sheets are impervious to vapor flow. Infiltration under flat stapled flanges is slight. Condensation formation on or within is minimized by the scientific construction of multiple layers of joist-to-joist, full-depth accordion aluminum, fiber, and air spaces.

MILLION SQ. FT. IN ROOM 12' x 13' x 13'

Because of the low mass of unopened, practically airless multiple accordion aluminum, an ordinary passenger automobile will hold 20,000 sq. ft. of it without being or even looking overloaded. A standard railroad freight car, a huge interstate trailer, or a number of trucks would be needed to transport an equivalent amount of ordinary insulation.

A new multiple accordion aluminum, Infra, Types 6-Si, and 4-Si, gives edge to edge insulation between beams or studs, forming a “blanket” of uniform depth against heat and vapor flow, and condensation formation.

The American Society of Heating Ventilating Engineers has published a booklet which describes convection, conduction, and radiation heat flow through ordinary air spaces and what happens when an ordinary building space is lined or subdivided by reflective metals, thus creating reflective air spaces. Ask us for a copy—it’s free.

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

Type 6-Si: under 9½¢ sq. ft.
Type 4-Si: under 7½¢ sq. ft.
This year switch to conventionally built - easy to sell

Place Homes

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Remington Arms Company, Inc.
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Position __________________________
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Address ____________________________
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"If It's Remington—It's Right!"
appears in sandy or gravelly soil, and the ground water level is below the basement floor, making footing drains unnecessary.

In the chart, drain lines leading to sanitary sewers and septic tanks are grouped together as sanitary drains; drain lines connected to storm sewers, dry wells or open ditches, as storm drains. The proper disposal of drainage water will depend on whether the sanitary and storm drain lines are both low, both high, or one is low and the other is high. Drain lines leading to the sanitary or storm sewer are called low if they are below basement floor.

After a house has been built, any one or all three forms of dampness—leakage, seepage, condensation—may appear in the basement. Leakage and seepage can be reduced or eliminated by the same techniques recommended for new construction; however, most of those methods entail considerable expense since they require excavation of the earth down to the footing. Interior waterproofing and drain lines, if applied and installed correctly, are effective in all but the worst cases.

Dampness on walls can be controlled by applying several coats of cement-base waterproofing to the inside surface of the basement wall. The waterproofing, which is packaged in dry form and mixed with water to a pancake batter consistency, should be scrubbed into the pores, cracks, and crevices with a bristle brush.

The following material is reprinted by permission of the University of Illinois, from its circular F2.0. This, and other circulars in this series on home building, are available from the Small Homes Council of the University for ten cents. For a list of publications write to the Small Homes Council, Mumford House, University of Illinois, Urbana, Illinois.

### RECOMMENDATIONS FOR BASEMENT CONSTRUCTION

<table>
<thead>
<tr>
<th>Walls (Foundations)</th>
<th>Extremely Severe Conditions</th>
<th>Average Conditions</th>
<th>Mild Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poured concrete recommended. (Reinforcing may be needed.)</td>
<td>Poured concrete or masonry.</td>
<td>Poured concrete or masonry.</td>
<td></td>
</tr>
<tr>
<td>Double concrete slab with membrane waterproofing. (The thickness and reinforcing depend primarily on water pressure.)</td>
<td>Concrete slab on firm undisturbed soil or drain bed of gravel or crushed stone.</td>
<td>Concrete slab on firm undisturbed soil.</td>
<td></td>
</tr>
</tbody>
</table>

**Waterproofing or Dampproofing**

Membrane extending above waterline on outside of foundation, and continuously under slab.

**Bituminous coating on outside of all foundations from grade to footing. Masonry foundations should first be coated with mortar 1/2-inch thick.**

**None required.**

### Drainage Connections

<table>
<thead>
<tr>
<th>Drainage Connections</th>
<th>Sanitary, low</th>
<th>Storm, low</th>
<th>Sanitary, high</th>
<th>Storm, high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Drain</td>
<td>2</td>
<td>2</td>
<td>5 or 4</td>
<td>4</td>
</tr>
<tr>
<td>Underfloor Drain</td>
<td>Conditions prevent use.</td>
<td>7 &amp; 1</td>
<td>7 &amp; 3</td>
<td>7 &amp; 1</td>
</tr>
<tr>
<td>Footing Drain</td>
<td>Conditions prevent use.</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Areaway Drain</td>
<td>Connect to storm drain.</td>
<td>Use post-hole filled with gravel to lead water to footing drains.</td>
<td>Connect to storm drain or Discharge on splash block or Omit gutter.</td>
<td></td>
</tr>
<tr>
<td>Gutter &amp; Downspout</td>
<td>Connect to storm drain.</td>
<td>Connect to storm drain.</td>
<td>Discharge on splash block or Omit gutter.</td>
<td></td>
</tr>
</tbody>
</table>

1. Connect to storm drain.
2. Connect to sanitary drain.
3. Connect to sump, then to storm drain. 7. Required only if underground spring feeds water beneath floor slab.
4. Connect to sump, then to sanitary drain.
5. Connect to storm drain if code allows. No laundry or shower discharge permitted in floor drain.
6. Connect to sump, then to storm drain if code allows. No laundry or shower discharge permitted.
Above illustration demonstrates application of overlap joint insulating siding over a wood sheathing, in this case plywood. Sheathing paper should be used between the wood sheathing and siding, and a vapor barrier should be added on the warm sidewall in areas of the country where required. (Exception would be in areas where the established FHA outdoor design temperature for heating is 20 degrees or higher.) Available in two types, square top edge and shiplap, siding panels are nailed top and bottom. Use 10 to 16 nails per panel depending on the size of panel. For wood sheathing, nails should be hot-dipped galvanized, minimum size 1 1/4 inches—13 gauge, 1/4-inch head. When 5/16-inch plywood is used, nails should be barbed.

Photo above shows installation of insulating siding over fiber board or gypsum board sheathing. Black painted galvanized or electro-plated copper twist nails are used to secure vertical joints between studs. Nails must be twist clinched (see photo right) on back side of sheathing before inside wall is finished. Use 2 1/2-inch 11 1/2 gauge black painted siding nails or aluminum nails (etched or plain) at studs only.

Prefabricated home manufacturers have made their product more attractive than ever to 1954 buyers and to builders, realtors and investors.

The well-established fact that prefabrication offers "more house for the money"—more living comfort, more all-around quality, more investment security—is one of the reasons. Add to this what the manufacturers have done to give individuality to each home, whether only a few are built or an entire project is developed.

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Prefabrication's achievement in using mass production methods to produce homes that nevertheless meet every requirement of the individual owner assures you of easier sales, better profits and better satisfied customers. Ask the PHMI manufacturer serving your territory for information on the opportunity prefabrication offers you.
**how would you do it?**  
**ideas for the man on the job**

**to cut rake moldings—**

Before the last pair of rafters are raised, they can be used to make a temporary miter box for cutting the gable cuts of rake moldings. Lay out the rafters on the subfloor. Draw a line along one edge of each rafter and then remove rafters. Tack a 2x4 along each line after they have been miter cut. The two 2x4's will then form the temporary miter box or jig along which the rake moldings can be placed. The correct top or miter cut for the moldings can then be made.—H. E. Hermanson, Jewell, Iowa

**how to repair a slate roof—**

To replace a slate that is missing, take a strip of aluminum one inch wide by about six inches long. Place two diagonal cuts in the strip as shown above. Nail the strip to the exposed surface. Slide the new slate in place, and then bend the two edges of the aluminum strip where the two diagonal cuts were made. The slate will be held secure in the angle formed by the bent sections of the aluminum strip.—J. E. Kmetzo, Stratford, Conn.

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Save one-half or more on the new iron-wood furniture, plus designing it to your own specifications. It's simple with Coffman wrought iron table and chair legs. All you need is a screwdriver! Fasten legs to beautiful veneers and mahogany plywood, Micarta or Formica tops, and build your own...  
- Dinner Table  
- Ding Set  
- Chairs  
- Sofa Bed  
- Coffee Table  
- Occasional Chairs  
- Cocktail Table  
- TV Table  
- End Table  
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Today—with SOLVAY Calcium Chloride, it is both possible and practical to carry on concreting operations during the winter months. The addition of SOLVAY Calcium Chloride assures fast setting to permit quick finishing, full ultimate strength and a short protection period—even in freezing weather.

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**how to make a saw table—**

Make a sturdy wooden saw table that lets sawdust and splinters drop through. Use wood strips about 3/4 x 2 inches in thickness and as long as you want your table to be. Use the 3/4-inch edge as the face of the table. Separate these strips with 3/4-inch plywood blocks about 4 inches long. Space these every 10 inches.—W. W. Howe, Longview, Wash.

**save that old flashlight case—**

Save that old flashlight case. Use it in your toolbox to hold many of those items like pencils, chalk, soapstone, etc. In this way, you can keep these items within easy reach when you want them and you can keep them from being broken.—A. Tanner Jr., Cold Spring, N. Y.

**folding bench for narrow garage—**

Take two angle irons of desired length. Bolt them to 2x4's inside the garage so that the angle irons will swing easily. Place them at a height of about 36 inches from the floor. Bolt a 2x10 or 2x12 plank to the angle irons. Use a 3/4-inch piece or pieces of wood as props to hold the bench when in use. When not in use, bench can drop out of the way.—M. J. Hiland, Lansing, Ill.
98 ACRES of HOMES and an Adjusto Shower in every one!

Why 3 out of 4 Gary Builders Specify Adjusto tub and shower fixtures...

We went to Gary and found the facts! 75% of Gary's builders specified Adjustos in large plumbing contracts year after year—project after project. Why? Because ADJUSTOS cost less per unit—were easier to install and offered another major feature in selling the home. From Maine to the 3000 home Panorama City in California, ADJUSTOS are the answer to large housing projects.

HOMES SELL FASTER...Yes, and rent easier too, because ADJUSTO is both an Adjustable Shower and Tub Filling Spout. Costs little more than separate tub fillers and offers more advantages than a regular shower because it adjusts to any height. A beautiful fixture, it compliments any bathroom.

CUTS COSTS...Adjusto may be put on after tiling and decorating...on the outside of the wall. Takes half the time and labor of other type fixtures. Later installation assures you Adjusto is safe from vandalism, damage or theft.

MAKES HAPPY HOME OWNERS...An Adjusto meets needs of the entire family. A fine needle spray full height shower for father, a leisurely tub bath and shampoo for mother and it's adjustable to any height for children.

To make this simple jig for notching rafters, roofing or stairs, drill a couple of holes in the square at the desired pitches. Then drop common wire nails in the applicable holes, and the jig is ready to use. The illustration shows a 6:12 pitch. Other commonly used pitches can also be devised by drilling the holes where you want them.—G. A. Heffelfinger, Lehighton, Penn.

use a tape plumbob—

An always available, fairly accurate plumbob may be made by using a tape rule. Pull the rule partially out of its case. Place a small nail through the rivet hole. Drive the nail part way into the piece to be plumbed. The tape will hang free and its case will act as a plumbob. Merely make the piece to be plumbed parallel with the tape and the piece itself will be plumbed.—W. W. Howe, Longview, Wash.

keep your paint can clean!

Drive a nail or screw driver through several places in the lip of the paint can to allow accumulated paint to drip back into the can. This not only will keep the sides of the can comparatively neat and clean, but also assures a perfect seal when the lid is replaced.—W. A. Fredricks, New Cuyama, Calif.

how to make a rafter jig—

To make this simple jig for notching rafters, roofing or stairs, drill a couple of holes in the square at the desired pitches. Then drop common wire nails in the applicable holes, and the jig is ready to use. The illustration shows a 6:12 pitch. Other commonly used pitches can also be devised by drilling the holes where you want them.—G. A. Heffelfinger, Lehighton, Penn.

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HOUSING . . . U.S.A., as Industry Leaders see it, compiled by 14-man editorial board of authorities in the building field. Simmons-Boardman Publishing Corp., New York; 1954; 224 pages; $5.00

This timely book has hit the housing market just when it is most needed. Its 22 chapters are loaded with pertinent information which has been correlated by some of the country's most successful builders and housing experts, all of them past presidents of the National Association of Home Builders. However, the contents are presented in language which is as easy for the layman to follow as the professional builder. It tells of the emergence of housing as a modern industry and the concurrent development of today's home builder.

Subjects covered include mortgage credit, the American housing inventory and production capacity, builder research, public relations and merchandising programs, the values of home ownership, urban redevelopment and what is being done to attack the city slum problem.

Also treated are the federal housing agencies, the government's role in housing, cooperative and low-cost housing, public housing programs, building codes, housing and manpower in national emergencies, inflation, taxes and housing in Europe.

This book will fill a much-needed gap in the present limited bibliography of housing, according to NAHB. In addition to general discussions of the subject matter, many figures from governmental and other authoritative sources are included.

From all angles—performance, price, upkeep and operating costs—the new Muller Plaster and Mortar Mixers hold first place. The Muller Patented Paddle Shaft Seal is guaranteed for the life of the mixer. Larger drums, power throw-out and other new features give top efficiency.
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MARCH 1954

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215
roof slab for garage

I plan to build a garage which will be attached to my two-story brick veneer home. I plan to build the garage of concrete block and want to place a concrete slab over the garage as a roof. There are, therefore, a number of questions that I would like to ask of you.

How thick should the garage roof slab be? What size and what spacing should I use for reinforcing bars? What is the best mix to use? Do I need any support for the slab other than the concrete walls? Should I tie the garage and the house together?

E. W. G., Wexford, Penn.

Do not tie the house and garage together. Butt the walls to maintain independent action particularly with regard to footings. The footing loads of the present building are unknown.

Here are the recommendations for the construction of the slab:
1. Use a 1:3:4 mix for the slab. (Use only enough water to make the concrete workable.)
2. Make slab four inches thick. Use 25 reinforcing bars and place them nine inches apart, bending them alternately.
3. No lintel is required over the garage door for support because the roof slab is spanning in that direction.
4. Use six inches of concrete for garage floor slab over fill. No reinforcing bars would be required for the floor.

Wilbur Tuggle, Structural Engineer

Redwood was used as exterior siding for a house. The siding was finished with oil, was sanded and given two coats of hot linseed oil. The eastern and western exposures are fading. Is there any way of making this finish permanent so it will not fade or darken? A shiny finish, such as varnishing would give, is not wanted.

G. R. S., East Jewett, N.Y.

All woods change in color to some degree when exposed to sunlight. The fading which you have noted on redwood siding coated with oil is a natural change of color produced by sunlight on the wood. It would have occurred even though the two coats of hot linseed oil had not been applied. Later you will note that this fading or change in color will darken more and more and become a pleasing, almost red mahogany color.

G. R. S., East Jewett, N.Y.
needs sound deadener

I have a two-story hotel of frame construction. Subfloors are laid over 2x10 joists and the finish floors are oak. What is the best method of insulating against the sound made by guests on the second floor so that guests on the first may not be disturbed?

L. S. E., Livingston Manor, N.Y.

The normal method is to use sound deadening material on top of the subfloor with wood sleepers over it. The finished floor is laid over the sleepers. This method, however, is not most satisfactory.

A plaster ceiling suspended below ceiling joists is a better method, but more expensive than the one above. This is done by using a system of suspended hangers, a stock item used by the U.S. Gypsum Company in its recommended practice for such ceilings. (See illustration.) For this method, clips are attached to joists. The clips suspend beneath the joists and to them is attached metal lath. The surface is then plastered.

One of the greatest problems of deadening sound in floors is that the nails used to secure finished and rough floors to ceiling joists are direct conductors of sound. Until a definite break is made in the construction elements, it is impossible to eliminate the noise.

basement effloresces

When I built my basement three years ago, I did not waterproof it. Last winter was very wet. Efflorescence of alkali on the basement walls was the result. What can be done? Will washing the walls with water take the alkali out?

C. E. B., Camas, Mont.

The existing efflorescence can usually be washed away by scrubbing with a 10 per cent solution of muriatic acid and water. Further difficulties may be avoided by liberal application of a good penetrating silicate water repellent.

Protection Products Mfg. Co.

window, door frames for cavity walls

I would very much like your advice on details of window sills, jamb or head sections for the framing of the window and door openings in walls of double-wall tile.

J. E. M., St. Paul, Minn.

You, no doubt, have reference to a cavity wall consisting of two four-inch thicknesses of brick or tile with two inches of air space in between. If this is true, then the normal type of door and window frames can be placed in the wall openings without difficulty. In other words, the cavity area would receive the normal windbreak of the double-hung frame. Then a brick mold can be inserted at the intersection of the brick jamb and the windbreak. Placing of the frame would be typical. The same arrangement also applies to doors.

Remember!

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Right! West Coast Hemlock should never, never be confused with Eastern Hemlock. West Coast Hemlock (Tsuga heterophylla) is an entirely different species. TREE LIFE West Coast Upland Hemlock, grown only at high altitudes on western slopes of the Cascade Mountains, is a superior wood for many uses—the finest type of Hemlock grown! Check its features!

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During a recent 6-year period, 78 per cent of all buildings over 19 stories high erected in the United States were equipped with Cast Iron soil pipe for plumbing drainage lines. Those who invest millions of dollars in great commercial buildings demand the durability, dependability and economy of Cast Iron—the pipe that lasts for centuries.

Home buyers should enjoy the advantages of Cast Iron Pipe, too. They want to avoid the risks of inconvenience and costly repairs of plumbing drainage failure. It is easy to do by using Cast Iron soil pipe in house construction for waste pipe lines and house sewers.

Substitutes are available at a lower price. But no home buyer wants substitute material when he realizes the "high cost of a low price." He wants Cast Iron—the pipe that lasts for centuries.

Woodward Iron Company does not manufacture pipe, but we supply leading Cast Iron Pipe foundries with high grade foundry pig iron from which pipe is made.

Woodward Iron Company
WOODWARD, ALABAMA

Above: Industrial Trust Building, Providence, R. I. Below: Tudor City—40th to 44th Streets—New York City

checking chimney leaks

I have trouble with a leaking chimney particularly after a two- or three-hour rain. The chimney is made of common brick to the roof-line and face brick from the roof-line up. It is corbelled slightly in the attic. The chimney has been flashed three different times and I have had a cap installed over it, yet it still leaks considerably.

W. A. S., Southfields, N. Y.

About the only advice we can give you (not having seen the chimney) is in the form of recommendations for checking possible trouble spots. The first place to look is at the flashing between the roof-line and the masonry chimney. For example, the mastic seal should be carefully checked. All nail heads should be sealed. Check for ruptured flashing seams and joints which might be caused by either the settling of the house or of the masonry chimney.

Check the brickwork itself. It is highly unlikely that moisture is coming through the face brick themselves; therefore, check the joints between the brick for cracks. If necessary, the joints should be waterproofed. If the joints are in a bad condition, cut them out and tuck point with fresh mortar. Check the chimney cap to be certain that it sheds rain water and, if necessary, the top should be beveled to aid in its shedding of excess moisture. Without first having seen the chimney it is impossible to give more definite corrective measures.

Structural Clay Products Institute
about nails for siding

Are cement-coated nails (dipped in glue) satisfactory for putting on asbestos-cement siding? The siding will be placed on a side of the building subject to driving rains in the winter. My neighbor and I have a difference of opinion. I contend that the glue will wash off in a short time leaving just rusty nail heads. He disagrees. We would appreciate your views on the subject.

R. L. P., Pullman, Wash.

You are correct in your assumption that the cement coating on nails used for attaching exterior siding will disintegrate within a short period of time. Such a nail will have a tendency to rust and stain the asbestos siding. In time, the nail itself will disintegrate.

All of the leading manufacturers of asbestos shingles supply rust-proof nails with their product. These nails are made from solid aluminum, stainless steel or cadmium-plated bronze. Few asbestos companies supply a galvanized asbestos siding nail. Of course, a galvanized asbestos nail is much superior to a cement-coated nail in resisting attack by corrosion.

For both the galvanized and the cement-coated nail, the coating on the head of the nail is damaged extensively when the nail is driven. In this way, oxidation of the underlying metal is permitted.

wants information

Where can I obtain a table or slide rule showing roof pitches on all types of roofs, then giving these pitches converted into degrees?

R. P., St. Louis, Mo.

There is a book called "Architectural Graphic Standards" by Charles George Ramsey and Harold Reeve Sleeper containing a wealth of information on roof details of all kinds. It includes a chart of roof slopes in run and rise, pitches and degrees. You can use this as a basis for your computation to determine the various cuts of rafters you may need.
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AMERICAN BUILDER
several proposed labor law changes will affect builders adversely

By John F. McCarthy
Attorney at Law

President Eisenhower's labor law proposals include several suggestions to the Congress for liberalization of the National Labor Relations, or Taft-Hartley, Act in favor of labor and at the expense of the building industry. Three of these suggestions are discussed in this article. Builders should study the President's proposals and give their elected representatives in the Congress the benefit of their views for the proper protection of their legitimate interests.

The building industry more than any other has been plagued by the so-called secondary boycott. This usually is a strike or refusal to work with certain goods or materials to force the employer to cease doing business with a particular firm or to cease handling a specific product. This practice, if it affects interstate commerce, is prohibited by the present provisions of the Taft-Hartley Act. These provisions require the National Labor Relations Board (NLRB), where a preliminary investigation shows reasonable grounds to believe that a secondary boycott affecting interstate commerce exists, to obtain an injunction against this practice from the appropriate federal court.

The President proposes that in secondary boycott cases the application by NLRB for an injunction shall be discretionary with that body. He further suggests that the Act be amended to exclude from the concept of a secondary boycott any strike against (1) an employer who is performing “farmed-out” work for another employer whose workers are on strike, or (2) an employer on a construction project who, together with other employers, is engaged in on-site work.

As we have observed, the building industry has been the particular butt of secondary boycotts. Any liberalization of the law concerning them, as suggested by the President, should be opposed and defeated.

The President has noted that in the amusement, construction and maritime industries, employment often is temporary or intermittent. He therefore recommends that in those fields employers be permitted to enter so-called prehire agreements with the unions. Whatever may be the merit in the suggestion of the President, it must be accompanied by amendments to the Act regulating the union's prehiring practices. In the construction field some of the greatest abuses occur before any employer-employee relationship is established. For example, a union may refuse to assign any workers, or at least any competent workers, to any employer in retaliation against the employer's alleged grievous conduct.

The present law makes both employers and unions responsible for the acts of their agents. The President recommends that the older traditional common-law rules of agency again be made applicable. Thus inevitably there would arise the problem of whether a specific act originally was authorized or subsequently was ratified. This often presents a difficult problem of proof. The responsibility of unions long has been a problem. Any suggestion such as the present proposal of the President, which makes them less responsible for their members' acts, should be opposed and defeated.

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**COMPARISON OF LIGHT PASSAGE**

<table>
<thead>
<tr>
<th>Loss thru Lens A</th>
<th>Loss thru Lens B</th>
<th>Loss thru Lens C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>LIGHT LOSS WITH UNCOATED LENSES 43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIGHT LOSS WITH COATED LENSES 20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Donald F. Coenen
American Builder
as associate editor

Donald F. Coenen, whose editorial experience in the construction field has won him a wide acquaintance-ship among home builders, has joined the staff of American Builder as associate editor.

Until last December 15, he had been affiliated for more than a year with the National Association of Home Builders as editor of its monthly publication, the Correlator, in Washington, D. C. For five years prior to that, he was managing editor of Realty and Building, weekly real estate and construction news magazine published in Chicago.

Early in 1946, Coenen began post-war employment with the Chicago Journal of Commerce, then owner of Realty and Building. He spent five years in the army, rising in rank from private to major. Much time was spent in key Quartermaster Corps posts at Baer Field, Fort Wayne, Indiana. At the end of the war with Japan, he supervised separation processing at this base. He is now an active reserve officer.

A 35-year-old Milwaukeean, Coenen was graduated in 1940 from the School of Journalism at Marquette University. During school days, he served as a Milwaukee Journal copy boy and worked in the university print shop. After graduation he was a reporter for the old Milwaukee Post and engaged in consumer research for the Journal.

Coenen is married and has one daughter, 10. He has just purchased a new home in Chicago's Northwest Side area. His father is a small volume home builder in West Allis, Wisconsin, a Milwaukee suburb.
A salute to those who made it possible

Another builder speaks his mind about Fenestra Windows...

Mr. Ferd E. Gast (holding plans) and Mr. A. A. Francis of Gast, Francis & Wilson, well-known Missouri builders, talk Fenestra Ready-Trimmed Casements with Mr. M. F. Holmberg of Sears & Roebuck, Fenestra Distributors. All pictures are of Mr. Francis’ home in the Fieldcrest Development.

Here are the three-light-high Fenestra Casements Mr. Gast praises in the third paragraph of his letter.

We have only this to add... the modern streamlined beauty of Fenestra Steel Windows adds a whale of a lot of sales appeal to your houses. For full information on Fenestra Ready-Trimmed Casements, Screens, Storm Sash, Interior Doors, Sliding Closet Doors and other famous Fenestra Residential Building products (and Fenestra Super, Hot-Dip Galvanizing), see your dealer, call your local Fenestra Representative or write to Detroit Steel Products Company, Dept. AB-3, 2260 East Grand Boulevard, Detroit 11, Michigan.

*®

Mr. Ferd E. Gast
A. A. Francis
J. F. Wilson

Gast, Francis & Wilson
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CLAYTON 6, MO.

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Yours very truly,

GAST, FRANCIS & WILSON
Mr. Ferd E. Gast

Mr. Ferd E. Gast (holding plans) and Mr. A. A. Francis of Gast, Francis & Wilson, well-known Missouri builders, talk Fenestra Ready-Trimmed Casements with Mr. M. F. Holmberg of Sears & Roebuck, Fenestra Distributors. All pictures are of Mr. Francis’ home in the Fieldcrest Development.

Here are the three-light-high Fenestra Casements Mr. Gast praises in the third paragraph of his letter.

∗ Your need for residential windows, casings, screens and storm sash that were designed for each other—that could be installed literally in seconds—that would add to the sales appeal of your homes, encouraged us to develop our present Fenestra Residential Steel Window line.

Fenestra RESIDENTIAL STEEL WINDOWS

MARCH 1954
5 Contractors tell why they make higher profits with American

NEW YORK. "My 12 men demand American machines," says Alfred Dumaresq, of Lindenhurst, Long Island, in business 19 years. "With American Machines the sandpaper seems to last longer. I just purchased my 9th American Machine as I want only American Machines and supplies. Super 8 is tops!"

RHODE ISLAND. "Three generations of my family have continuously used American machines," says Robert Lamoureux of Woonsocket. "A good measure of our success is due to dependability and efficiency of American machines to American Floor Finishes and to American's prompt service."

TENNESSEE. "I prefer American to any other equipment," says J. Kirby Carter of Nashville. Mr. Carter started his own flooring company nine years ago. From a one-man operation, he now owns 31 pieces of American equipment, has 7 trucks and employs 25 workmen. He sands floors and also installs floor coverings.

FLORIDA. "American Machines are toughest and fastest sanding machines I have ever run," says Ralph Coleman of Jacksonville. "Any floor contractor can get more dollar value out of the operation of American equipment than any other machines."

PENNSYLVANIA. "Using American Machines from start to finish for five years," says Howard R. Snyder, of Hanover. "With the speed and efficiency and precision of American Standard 8 and 12, I accomplish finest quality work with minimum effort."

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Modernization of this structure required floor plan changes, the addition of a new wing, and relaxing of the street front. The result is a skillful blending of old and new elements without departing from the original architectural pattern.

The entrance features a wide glass area with stone piers at sides, and an extended circular canopy flush with cornice line above. This canopy is supported by four five-inch round columns of #10-gauge steel tubing.

Doors are surrounded with a molded wood architrave, capped with a broken pediment. The deeply molded profiles of frame, pediment and doors are well adapted to the general character of the entrance detail. Stone planters on each side of the doors complete the entrance assembly.

All glass in windows, circular bays and entrance is set in standard-type steel sash applied to a two-inch channel frame at head and jamb of special openings.

A four-inch steel H column is imbedded three feet into concrete below floor line at entrance door mullions. These columns extend the height of mullions and across the head of opening to provide rigidity for the door frame.

SEE WHAT I MEAN, JOE?—THAT EXHAUST FAN IS PRETTY POWERFUL!
preparing the house for SUMMER COOLING

by S. Konzo
Professor of Mechanical Engineering
University of Illinois

PART I

The purpose of this and the next article is to present a few of the more important factors concerning home-cooling devices that are of direct interest to the home builder. What can the builder do to provide a house best adapted to summer cooling? What is possible in the way of a real air conditioning job for the home? What about the average home owner who cannot afford complete mechanical equipment? Perhaps some of these questions can be answered without presenting too many technical details.

The House Should be Protected from Sun

Anyone who has opened up an automobile sitting in the sun has experienced the oven-high temperature within the car. The obvious explanation is that solar energy passed through the car windows was absorbed by the interior furnishings and eventually resulted in heating of the air. In other words, the car was a solar heat trap. To a lesser extent every house is also a solar heat trap: solar energy can pass through windows but the energy in the heated air cannot readily escape to the outdoors. The first lesson that every architect and builder must learn about making homes more comfortable in summer is to shield the house from the sun, especially windows which permit ready one-way passage to solar energy.

An examination of the sources of solar input to a house reveals that the following components need special attention:

1. Windows should be shaded, especially those on the east, southeast, southwest and west walls.
2. Ceilings should be protected from high temperatures.
3. Walls should be protected, especially those on the east, southeast, southwest and west sides of the house.

The magnitude of solar energy is much larger than is generally appreciated. For example, a 20-square-foot surface which faces the sun squarely will receive about 6,000 Btu's per hour. In other words, the energy received by the 20-square-foot surface is of the same order of magnitude as the capacity of a small room air conditioner. Fortunately, the cooling load on a 20-square-foot surface of glass, wall or ceiling is not as large as the example might indicate because of the following factors:

1. The surfaces of a building do not face the sun squarely, and are usually at an angle with the direct rays.
2. Part of the solar energy is reflected from the surface of the wall or window.
3. The solar radiation can be blocked before it strikes the building walls or windows.
4. The heated air resulting from the absorption of solar radiation can be replaced by ventilation air.

The trick in obtaining a small cooling load consists in utilizing each of these possible methods for reducing the solar energy input to the house.

Reducing Solar Radiation Through Windows

The most vulnerable part of the house as far as summer heat gains are concerned are the windows and glass block walls.

1. North windows do not present any problem, even though the sun may shine on them at a low intensity during early morning and late evening hours.
2. South windows are relatively easy to handle by means of roof overhangs, as shown in Figure 3.
3. East, southeast, southwest, and west windows are

Simple Method for Determining Overhang Needed on South Wall to Cut Off Summer Sun from Windows and Walls

For Latitude of

<table>
<thead>
<tr>
<th>Overhang</th>
<th>Overhang</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 degrees North</td>
<td>0.37 Height</td>
</tr>
<tr>
<td>30 Overhang</td>
<td>0.48 Height</td>
</tr>
<tr>
<td>35 Overhang</td>
<td>0.59 Height</td>
</tr>
<tr>
<td>40 Overhang</td>
<td>0.71 Height</td>
</tr>
<tr>
<td>45 Overhang</td>
<td>0.85 Height</td>
</tr>
<tr>
<td>50 Overhang</td>
<td>1.02 Height</td>
</tr>
</tbody>
</table>

EXAMPLE. For latitude of 40 degrees North, height of shadow desired is 6 feet.

Overhang needed is 0.71 x 6 or 4 1/2 feet.
difficult to shade completely at all times of the day.

No single solution for shading windows is available for all houses. The following list of shading devices may suggest the treatment to be used for any specific installation:

<table>
<thead>
<tr>
<th>Method of Shading Windows</th>
<th>Effectiveness in Reducing Solar Heat Gain to Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shade trees</td>
<td>Variable</td>
</tr>
<tr>
<td>2. Louvered walls and fences on east and west of building</td>
<td>Variable</td>
</tr>
<tr>
<td>3. Awnings</td>
<td>65 to 75 per cent</td>
</tr>
<tr>
<td>4. Louver-type insect screens</td>
<td>25 to 50 per cent</td>
</tr>
<tr>
<td>a. for sun at low altitudes</td>
<td>55 to 75 per cent</td>
</tr>
<tr>
<td>b. for sun at 20- to 40-degree altitude</td>
<td>65 to 75 per cent</td>
</tr>
<tr>
<td>c. for sun at altitudes greater than 40 degrees</td>
<td>78 per cent</td>
</tr>
<tr>
<td>5. Outside Venetian blinds, slats at 45 degrees</td>
<td>70 to 70 per cent</td>
</tr>
<tr>
<td>6. Inside Venetian blinds, slats at 45 degrees</td>
<td>15 to 25 per cent</td>
</tr>
<tr>
<td>7. Inside roller shades, fully drawn</td>
<td>25 to 35 per cent</td>
</tr>
<tr>
<td>8. Inside roller shades, half drawn</td>
<td>10 to 20 per cent</td>
</tr>
</tbody>
</table>

Note: Lighter colored shades and blinds are more effective than darker colored equipment.

**Protecting Ceilings from High Temperatures**

The roof can serve as a sun shade. The energy of the sun is intercepted by the roof, which will both reflect the radiation as well as absorb it. Obviously the more radiation that is reflected from the roof surface, the less radiation is absorbed by the roof material. The following table gives the ability of various surface finishes to reflect solar radiation:

<table>
<thead>
<tr>
<th>Surface</th>
<th>Percentage of Solar Radiation Reflected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Black non-metallic surfaces</td>
<td>5 to 15 per cent</td>
</tr>
<tr>
<td>2. Dark paints (red, brown, green) red brick and tile</td>
<td>20 to 35 per cent</td>
</tr>
<tr>
<td>3. Yellow and buff brick and stone</td>
<td>30 to 50 per cent</td>
</tr>
<tr>
<td>4. Whitewash, white paint, light cream brick and tile</td>
<td>50 to 70 per cent</td>
</tr>
<tr>
<td>5. Dull brass, copper, or aluminum; galvanized steel, polished iron</td>
<td>35 to 60 per cent</td>
</tr>
<tr>
<td>6. Bright aluminum paint, gild or bronze paint</td>
<td>50 to 70 per cent</td>
</tr>
<tr>
<td>7. Polished brass, copper, Monel metal</td>
<td>50 to 70 per cent</td>
</tr>
<tr>
<td>8. Highly polished aluminum, tin plate, nickel, chromium</td>
<td>60 to 90 per cent</td>
</tr>
</tbody>
</table>

In the case of plank-type roof, when solar energy cannot be reflected and will be absorbed as well as transferred to the room below, the use of a reflecting surface finish is recommended. This might consist of light-colored rock chips or gravel, or even a white-wash treatment.

For reasons of appearance or availability of materials, it will not always be possible to use a light-colored or metallic reflecting roof surface. In other words, a fairly large proportion of solar energy will be absorbed by the roof structure. Under certain conditions it is possible to design a roof for either:

1. A pool of water on top of a flat roof. This will require special waterproof treatment of the roof to maintain a depth of water of, say, two inches during the entire summer. The problem of maintaining a supply of water as well as preventing the formation of scum and algae does not make this scheme practical for most home applications.

2. A spray of water on the roof surface. This is more effective in a dry, hot climate. Provisions should be made to dispose of the water that drains off the roof.

Neither scheme is suited for extensive applications to homes, particularly since ordinary roofing materials may not be well adapted to constant soaking with water.

The problem resolves itself, therefore, in permitting a large proportion of solar energy to be absorbed by the roof, but preventing the heat from penetrating through the ceiling. The best way this can be simply accomplished is to ventilate the space between the roof and the ceiling. If the attic cannot be properly vented, the ceiling surface may give a panel heating effect to the room below. Some of the common methods of attic ventilation in use are as follows:

1. Place large screened louvers at both gable ends to
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CONSTRUCTION MACHINERY COMPANY • Waterloo, Iowa

summer cooling

(Continued from page 227)

permit the passage of air through the attic.

2. Install a continuous soffit ventilator, with, say, a two-inch-wide opening, to permit air to enter the attic space at the eaves. The heated air in the attic should then be vented through ridge ventilators, gable louvers, or even a chimney vent.

3. For flat roofs or shed roofs, air should be permitted to enter the ends of the joist spaces above the insulation and travel to the higher end. A slight pitch in a flat roof is desirable to promote this gravity circulation of heated air.

4. Where difficulty is encountered in providing for an exit for the heated attic air, it may be necessary to use mechanical ventilators which will collect the air at a central point and discharge it to the outdoors.

5. In all cases the ventilation air should travel above the ceiling insulation. If the space is properly ventilated and attic temperatures can be kept reasonably low, the heat will not be stored in the insulation to be released at night into the rooms below.

Reducing Heat Flow through the Walls

The amount of heat transfer through the walls of a house will normally not be as large as that through windows and ceilings. Nevertheless, the principle of shading the wall is just as important as in the case of windows. Other means of reducing the heat flow through walls consist of:

1. The use of light-colored paint.
2. The use of roof overhangs on the south to shade walls as well as windows.
3. The use of screened porches on west and east to keep the sun from striking the house walls directly.
4. The use of adequate insulation to delay the passage of heat as well as to reduce its magnitude.
5. The use of walls with considerable mass, such as a brick veneer wall with an air passage between the bricks and the sheathing.

Considerable emphasis has been given to construction details, since full-scale mechanical refrigeration is relatively costly and should not be considered except for houses that are prepared for it. It does not make sense to allow solar heat to pour into a structure and then install oversized mechanical refrigeration equipment to counteract solar effects. Equipment is available for residential service that will provide a cooling effect equivalent of 2 tons to 7½ tons of refrigeration capacity. At current prices in the neighborhood of $400 per ton of capacity, it will pay the home owner to spend a little more on the house in order to reduce the initial installation cost of the cooling equipment as well as the yearly operating cost.

The current trend towards sprawled-out, one-story, ranch-type homes is contrary to the design principles enumerated for reducing the cooling load. The more spread out the house is, the greater becomes the problem of reducing the heat flow from outdoors to indoors. The most severe problems are those encountered with the ceiling of one-story houses, and the large picture windows that face east or west. In the future, when cooling the home will be as important as heating the house, the builder and architect should give serious consideration to some of the items summarized here.

AMERICAN BUILDER
a proving ground for new ideas—
U.S. Gypsum’s 6 ‘Test Tube’ Houses

The United States Gypsum Company’s “Research Village” is a test tube project of six houses to be built in Barrington, Illinois, by the Maxon Construction Company of Chicago. Its objective is to provide project builders of small or medium-sized houses with ideas for more attractive and saleable houses. By duplicating in part or in whole these new ideas, builders around the country should gain a strong selling edge in the competitive market that lies ahead.

Although “Research Village” was conceived and developed by the U.S. Gypsum Company, it actually is being carried out by 12 of the most prominent architectural and builder representatives in the country. This group was divided into six builder-architect teams to achieve the following:

1. Contribute new design and construction ideas, particularly for the project home builder.
2. Create new uses for building materials.
3. Create more livability, comfort, safety, and value for the home owner.

To assure the best results, advisory panels were set up. One consisted of architects L. Morgan Yost, John Root, and Richard Bennett, all of Chicago; another represented the National Association of Home Builders; and the third, the U.S. Gypsum Company.

When the invitation to participate was extended by these panels, 36 architects responded. Six were selected, together with their builder teammates, from as many climatic regions.

The first meeting held by the panel members, the contributing architects and builders concluded that a research village was not only desirable, but it was long overdue. The architects felt that:

(Continued on page 230)
a proving ground
for new ideas

(Continued from page 229)

(1) Such a project, with each architect from a separate region responsible for the design of one house, would convey in one location the design influence of every region of the country, yet show how design need not be a barrier to construction in one climate area, such as Chicago.

(2) Since the architects would be designing houses to be built adjacent in the same project, the competitive spirit would motivate the best efforts each could contribute.

The U.S. Gypsum Company exposed their entire line of building materials for the architects' study, although they insisted they were not to be used unless they offered the best possible solution to the architect's problem. Out of this meeting, however, this company already has started several research projects, based on product needs expressed by the architects.

The contemplated plans call for breaking ground in the early spring and having the houses completely finished by early fall.

The thinking of the builders with regard to the designs and ideas submitted, was expressed by one of the NAHB panel members with: "Gentlemen, these are the kinds of houses we will be building ten years from now."

---

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---

Roof slab is supported by columns independent of the exterior walls. This permits continuous window fenestration in the wall. The cantilevered roof slab makes possible wide overhangs.
Plan contains 1,624 square feet of floor area. The bedrooms and play-utility room are grouped around bath and half-bath which are close to the kitchen. The entrance door in the center of side wall divides the living room into two groups, one for conversation, the other for a TV area.

A. Quincy Jones, Jr., Archt.
Los Angeles, California

Joseph Eichler, Builder.
Palo Alto, California

HOUSE NO. 2: Advantages of this design, says Jones, are: “flexibility, high fire resistance, and quick construction.” Metal roof decking over steel roof trusses are supported by structural columns. Lateral load is carried independent of all partitions.

This house features the use of outside patio enclosures for added privacy. Long, low roof over steel joists serves as ceiling. Steel decking is used for fences.

Plan contains 1,395 square feet of floor area and is laid out on a seven foot module. House can be turned in any direction and is designed so carport can be placed on any side.

(Continued on page 232)

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that has the Lifetime SHAMPOO SPRAY!

Introduced last Fall in the Better Homes & Gardens “Reader’s Choice” home erected by prominent builders all over the country, the “Lifetime” won immediate and enthusiastic acceptance! Easy to install using standard diverter valves or separate fixtures. Stainless steel and chrome, beautiful and inexpensive, $13.50 (suggested retail). Sold through plumbing and heating wholesalers and dealers only. Write Dept. A-2 today for plans of installation and literature.

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CHURCH SCHOOL NURSE SHOP REST ROOM

FOR ALL CASES

 Americ a n Bu i l d e r

a proving ground

(Continued from page 231)

Harris Armstrong, Archt.

Kirkwood, Missouri

Don Drummond, Builder

Kansas City, Kansas

HOUSE NO. 2: Plan contains 1,174 square feet of floor area. Privacy, both indoors and out, are offered by careful placing of glass areas. "There really isn't a front to it," says Drummond. "That's what makes it so interesting."

The extra large patio adjoining the living-dining area adds living space at a minimum cost. Open grille in roof over entrance passage provides extra daylight to living room.
for new ideas

Hugh Stubbins, Jr. Archt. Lexington, Massachusetts
Leonard Frank, Builder, Hempstead, New York

HOUSE NO. 4: The following ideas help sell, according to Leonard Frank: "The bedroom area is separated from service and living: children can go in and out of the recreation room without disturbing any other part of the house." House appears spacious because of sliding wall panels in front bedroom.

This house offers a new approach to the split-level arrangement by placing the living and service areas on different levels. Sliding doors of living room provide access to outdoor garden.

Plan contains a total of 1,582 square feet of floor area, which includes both levels. The house offers an abundance of living area with the formal portion at grade and recreation area one half flight down. Three bedrooms are located on upper level.

Section shows how living, sleeping and dining areas are separated, obtaining maximum usable floor space with split-level arrangement by placing living and service areas on different levels.

(Continued on page 234)

MR. BUILDER:
End irritating after-sale metal window service calls. Make homeowners YOUR BEST SALESMEN .... WITH

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ALCROSIUM METAL ALLOY
LIFE-TIME WEATHERSTRIP

*Aluminum-Magnesium-Chromium

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No asbestos or slow burning wire required
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ORDER FROM YOUR JOBBER—or WRITE FOR LITERATURE and COMPETITIVE PRICE LIST.

ATLAS ELECTRIC PRODUCTS CO.
319 Ten Eyck Street, Brooklyn 6, New York

(Continued from page 233)

HOUSE NO. 5: “Our objectives were to provide some measure of privacy for each member of the family,” says the architect. This was achieved by dividing the house into three zones. In this way the master bedroom separates children’s area from the living room, and the kitchen is in center point for housewife supervision at all areas.

Wide window areas overlook garden and patio. Carport is connected to house by roof which extends over walk, making it an integral part of the house.

Plan contains 1,089 square feet of floor area. Rooms are centered around a “mechanical core” which serves both kitchen and baths. Lowered ceiling in bathroom makes the area above available for the installation of an air conditioning unit.
for new ideas

HOUSE NO. 6: "Split level houses will gain in popularity because of the large number of teen-agers who want space for their own activities, which is so easy to obtain with this type of house," says Simms, the builder who co-operated with Coddington in designing this home. Supervision of all activities is easily controlled by the housewife from her position in the kitchen.

This split-level house takes full advantage of a sloping lot, featuring a patio on the lower grade, front entrance at the intermediate level, and a kitchen "housewife supervisory" area on the top level. Structural steel frame of basic house is exposed along side walls.

Plan contains about 1,680 square feet of floor area which includes both levels. The area normally used for basement can be effectively used as a recreational room and study—or for an extra bedroom—on grade level. House features a four-passenger compartmented bath.

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You'll be amazed at the low cost of installing this fireplace and chimney unit in any home—small or large, old or new. This full 30" fireplace is far more economical than ordinary bricked-up types. It installs easily even on wood floors and needs no clearance from combustibles because the clearance is built in. Not just a fireplace form—not an auxiliary heater—the Majestic Thulman Fireplace is a completely self-contained, all-metal unit, easy to install, efficient in operation, durably built to last a house time.

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- Weight distributed on three rungs.
- New, rail-type jack (right) uses side rails of ladder for extra safety.

Write for Catalog M: complete information on all “Trouble Saver” Scaffolding Accessories.

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Start now to benefit from the extra sales appeal of saying “my home includes a Scotts lawn.” Spring is a very favorable seeding time, so don’t delay seeing your local Scott dealer or writing our turf specialists for recommendations and prices.

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**NAHB Research**

**air conditioning**

Austin, Texas, is destined to become this nation’s “nerve center” for residential air conditioning.

Here, slender, energetic architect-builder Ned Cole, as project director, is working tirelessly to lay the foundation for the first co-ordinated effort of air conditioning producers and home builders to find answers to residential air conditioning problems.

“I can’t publicize too many of the details at this time because we still are in the process of negotiating contracts,” said Cole in a recent interview. “However, we are most happy with the unprecedented response of air conditioning producers, home builders and other interested groups.”

Sponsored by the National Association of Home Builders, the Austin project, known as “Research Village,” was conceived last year in the minds of the nine trustee members of NAHB’s Research Institute. In a few short months here is a rundown on the scope and preliminary progress of the Institute’s first major, long-range research activity.

Twenty-one manufacturer-home builder teams already have consented to participate in “Research Village,” and this is likely to expand to 25. Originally, only 14 houses of varying design and air conditioning equipment were contemplated, but the unexpected interest on the part of air conditioning equipment producers and local Austin builders justified raising our sights, Cole explained.

Purpose of the project is threefold:
1. Collect technical data for submission to the Federal Housing Administration, Veterans Administration, and other lending agencies. This data should serve as a standard for appraisal of air conditioned houses.

---

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236 AMERICAN BUILDER
Institute broadens study project

2. Develop construction details necessary for the economical use of air conditioning.

3. Promote greater consumer knowledge and interest in year 'round air conditioning.

Research will proceed in three phases. The first, technical, will be conducted by a mobile laboratory of the National Warm Air Association, in cooperation with the Department of Engineering Research of the University of Texas. The second phase, medical research, and third, psychological, will be conducted by the University of Texas' Medical Department.

Other groups co-operating with NAHB's Research Institute include the U.S. Public Health Service, U.S. Weather Bureau, American Refrigeration Institute, National Mineral Wool Association and Structural Clay Products Institute.

Civic interest in the project has been amazing, said Cole. An Austin developer sold the land for "Research Village" at one-half of its market value. Even though ground has not been broken, 13 of the 21 houses already have been sold, three to builders themselves. The Mayor of Austin will proclaim an Air Conditioning Week.

Cole said traffic in his office had reached such proportion that a more suitable arrangement was necessary. The Austin Home Builders Association responded to the need by building a house adjacent to the project which will be sold by the association after it no longer is needed for project office purposes.

The research project site will be divided into 25 lots, averaging 80 by 120 feet. Since the site is square, houses will face in all four directions.

On the edges of the project, negotiations already are underway between air conditioning manufacturers and builders to erect other houses for additional testing purposes. Cole said. The research site itself is well located, and is adjoining on one side by a beautifully wooded subdivision of high priced houses.
"Service-Master saves me up to one hour of service time every day"
We are planning our new home and would like to use a floor-type radiant heat, but we also want a basement. We desire wood floors throughout without the necessity of a self-supporting concrete slab.

Could we notch the floor joists and run copper tubing in loops underneath the subfloor? We thought that we could use a reflective-type insulation to keep the biggest percentage of heat in the rooms above and in this way make use of the heat loss into the basement to heat the basement.

**How much heat loss?**

Would there be enough loss of heat through the copper pipes even though they were not enclosed in concrete? If not, what could be substituted in the place of concrete to transmit the heat from the pipes by conduction to the subfloor above without increasing the expense and too great an additional weight?

We have also considered using 1/4-inch plywood and aluminum foil over the tops of the joists and 1x2 strips between the pipes to carry the main subfloor. What is your recommendation?

J. A. L., Seneca Falls, N. Y.

Installations similar to the one you suggest have been proposed many times. Many heating contractors have given them careful consideration. They have pointed out that there are many problems that would come up if an installation such as you propose were used.

**Wood Insulates**

Double wood flooring offers relatively high resistance to the transmission of heat. In this respect, wood acts primarily as an insulating material. Therefore, to get and keep a floor surface temperature sufficiently high to satisfy proper heating conditions, experience shows that high temperatures and sometimes excessively high ones would have to be maintained on the underside of the floor. Conventional floor coverings would aggravate the situation and offer greater resistance.

(Continued on page 240)
Important new features, combined with advantages proven by thousands of users, add up to more production for your digging dollar! The Sherman Hydraulic Power Digger is designed and built for that wide range of job requirements beyond the economical use of hand labor and below the efficient use of larger equipment. Yes, between the smallest and largest jobs, you'll find there's always a place for your Sherman Power Digger! Ask your nearby Sherman dealer for an on-the-job demonstration today. Write for free literature, Dept. T-19.

Floors May Crack
High temperatures must be maintained underneath the wood flooring to assure transmission of heat upward to the room in adequate amounts. This raises the question as to the possible effect on the flooring itself. Wide variations in moisture content of the wood between the on and off heating seasons will inevitably occur, with the likelihood that wide cracks in the finished flooring due to shrinkage will result in the heating season.

Floors May Creak
Passage of the copper tube in loops through the floor joists will be a potential source of creaking noises. A temperature change of 100 degrees Fahrenheit will produce an expansion or contraction of approximately 1/8 inch per ten feet of copper piping run. It can be seen that the temperature variations that will occur between periods when the circulator is operating, or not operating, will cause the tube to shift position with respect to its supports and create noises that will be readily transmitted through the flooring.

Tubing Should Be Embedded
In spite of its high conductivity, the use of copper tubing suspended in the air for the purpose of heat transfer is not recommended because of its low emissivity. Put in other words, copper will do an excellent job of conducting heat from the water within the tube to its outer surface. The smoothness of its exterior surface, however, gives it very poor radiating qualities. For this reason, concrete or plaster are dense mediums that will conduct the heat from the copper tube to the surface of the concrete floor slab or plastered ceiling surface which do possess high radiating qualities. This statement is true regardless of the kind of piping material used.

Use a Ceiling Panel
If you want to use wood floors throughout and want to avoid the
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Symons Forms can be erected and stripped faster, are safer, require a minimum amount of waling and bracing, and produce better looking walls.

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<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item</th>
<th>Cost</th>
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<tr>
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<td>Short Connecting Bolts</td>
<td>$32.76</td>
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<td>22</td>
<td>Long Connecting Bolts</td>
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<td>544</td>
<td>Wedges</td>
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<tr>
<td>1200</td>
<td>Steel Strips</td>
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<td>927</td>
<td>Stop Plates</td>
<td>39.88</td>
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<tr>
<td>8</td>
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<td>4</td>
<td>7' Outside Corners</td>
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<td>Total</td>
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<td>$223.56</td>
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</table>

Take advantage of Symons Engineering and Sales Service. Send in the plans for your next job and get complete layout and cost sheet which will show the number of standard panels your job requires, as well as the number and size fillers and corner pieces needed, plus all form hardware necessary. Our Catalog F-9 will also be sent upon request. Symons Clamp & Mfg. Co., 4261 Diversey Avenue, Dept. C4, Chicago 39, Illinois.

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Average weight of 90° porch column is 125 lbs.

Always specify single or 90° corner columns when ordering.

**PRICES**

12° 90° corner columns:
- 7° — $26; 7 1/2° — $30; 8° — $32
- Single 12° panels: 7° — $17; 7 1/2° — $18; 8° — $19

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FAIRLESS HILLS, Pennsylvania

Fence combines panels of both wide and narrow grooved fir plywood, applied to redwood frames

This attractive fence for a terrace uses a new building material developed by Western fir plywood manufacturers. Called Texture One-Eleven, the new product is 5/8-inch exterior fir plywood manufactured in panels with 100 per cent waterproof glue. The panels are deeply grooved, and come in two widths, 16 inches (16 3/4-inches overall) and 32 inches (32 3/4-inches overall). Grooves in the wider panel are spaced 4 inches o.c. Those in the 16-inch width are spaced 2 inches o.c. The panels come in 8-foot and 10-foot lengths, and shorter lengths are also available.

This fence uses both sizes, applied to frames built of 2x4 redwood. Post lengths are 3 feet, and the wider frames are 593/4 inches. Two of the 32-inch panels of Texture One-Eleven, with the shiplap ripped off on opposite sides, overhang this width sufficiently to cover the 2x4's of the adjoining narrow sections, thus tying the two sections together. Width of the narrow frames is 27 1/4 inches. Height of all sections from top to bottom of bottom rail is 64 inches.

The Douglas Fir Plywood Association, Tacoma, Washington, is the sponsor for the development.
Constructing narrow frame. Width is 27½ inches. Height is 64 inches.

Nailing together one of the wide section frames of 2x4 redwood. Width is 59½ in.

Applying narrow panels of Texture One-Eleven to a part of the terrace fence.

tile drainage information

"Why Drain Land" is the title of an eight page booklet which describes and illustrates in detail the reasons for tile drainage and underground irrigation. It enumerates the benefits which may be derived from draining land or using a subsoil irrigation system. A list of governmental agencies where financial aid and technical assistance can be obtained is included. Copies of the booklet are available free to drainage contractors upon request to Gar Wood Industries, Inc., Customer Service Dept., Wayne, Mich.

MARCH 1954

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add beauty—save money

In Novafold you have top-quality, imported bamboo, carefully processed and assembled by American methods. Mildew- and warp-proofed inner-core bamboo is assembled with Seine cord, self-lubricating Nylon slides and specially designed American hardware for long life. After more than 82,000 opening and closing cycles, independent laboratory tests revealed no visible wear or weakening of materials. Novafold, on straight or curved track, saves space over swinging doors — compresses to 10% of its total expanse. Its ventilated closure permits air to circulate — prevents mildew with slab heating. Novafold Window Drapes screen sun's glare — pass cooling breezes. Novafold is available in Natural and in nine standard colors; in sizes up to 16' wide, 12' high. Yet Novafold is far less expensive than any other folding door or room divider. Novafold comes complete in every detail — finished in the color you specify — "custom tailored" to your job. The enameled steel track, screwed to the top of the opening, completes the installation in 5 minutes' time. There is no floor guide. In new construction — no added cost for furring, trim, roughing or extra hardware.

May we send you illustrated literature and specifications? Please address your inquiry to Dept. 38.

Molded Plastic Clip — locked to bamboo — assures perfect accordion folding.

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look what you get...in newly styled

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style...Today's trend toward dramatic use of color and texture provides an important role for panel doors. Newly styled fir panel doors offer refreshing relief from the monotony of flat surfaces. The new wide molding becomes a frame for exciting decorative treatments that add colorful deep-shadow accents—a definite sales feature in any home you build.

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economy...New fir panel doors offer custom features at competitive prices. Compare them for style...compare quality...compare dollar for dollar price—then specify new fir panel doors. Call your regular supplier, or write Fir Door Institute, Tacoma 2, Washington.

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FIR PANEL DOORS

FDI*This grade-trademark on the edge of a fir panel door signifies that the door has been independently inspected and approved in accordance with strict industry standards. It is your assurance that the door will meet exacting U.S. Commercial Standards.

*FDI

Building front presents a wall of glass;

louvered window wall meets heat and glare problems

The office frontage of the Robertson Square building in the Decorators' Row area of Los Angeles is made of louvered windows which form an integral element of the building's design. The structure faces west, so the architect's problem was to admit light into the building without excess heat.

Robert E. Faxon, AIA, the building's architect, stated that he used these louver-type windows "to solve the problem of afternoon sun and heat, while utilizing the vertical and horizontal rhythms of the six-inch glass strips to add to the beauty of the basic design."

A further advantage of using louvered windows in this building was the simplicity of their installation. There was no need for extensive carpentry and plastering. No multiple window openings were required. The hardware uprights bolt into the narrow vertical girders. Glass louvers were inserted into the uprights, and clips, closed over the edges, secured them. No putty was used.

Easy maintenance and replacement will furnish future economies. Both sides of the glass louvers can be washed from the inside of the building, and in case of accidental breakage, louvers can be replaced from the inside.

Data courtesy Sun-Sash Co.

Close-up of building front; open louvers provide floor-to-ceiling ventilation

AMERICAN BUILDER
TRADE-INS are good for higher price market

Rollin E. Meyer & Son, builders and developers in the San Francisco area, think that the market for houses in the higher price bracket has not been exploited, and that the way to do it is to use trade-in selling. Meyer outlines the following case history of a recent new house sale through trade-in, which illustrates the method:

The new house built by Meyer was priced at $65,000 and was sold to a family which had a house in another area, which Meyer took in for $40,000. Before doing so, however,

Trading in old house for a new contemporary model is part of selling campaign by Rollin E. Meyer & Son for their tract near Hillsborough, California, featuring houses at $37,500 and up

Meyer called several realtors who specialized in property in that area. Combining his own appraisals with those of the brokers, it was decided that the old house would sell quickly at between $36,000 and $39,500. “Analyzing their appraisals and knowing our maximum allowable margin for the trade, we were able to give the owner the $40,000.”

Now the purchaser of the $40,000 house moved from a house on which Meyer allowed $19,000 toward the purchase of the first house in trade. This amount was based on appraisals from competent brokers familiar with the area, and upon close study of the sales and listings within the same block, through the multiple listing service.

“The second house ultimately sold for $20,000, thus allowing us to realize our intended profit on our new house.”

MARCH 1954

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Prospective home buyers will sell themselves on the quality of the homes you build when they see they have been completely weatherstripped, and when you tell them of the needless heat loss and discomfort it prevents. Actual tests show (University of Minnesota Institute of Technology) the air infiltration is 6 TIMES LESS through weatherstripped windows than non-weatherstripped windows; which means an average savings of approximately 24% in fuel costs. Also that a weatherstripped home means clean, comfortable living in every room—that’s vitally important to their families’ health and well-being.

The metal weatherstrip that is installed should depend mainly on two factors: reputation of the product and reputation of the manufacturer. Members of the Weatherstrip Research Institute possess both—a reputable product, and all are reputable, long established companies. Remember these facts when considering metal weatherstrip for the homes you build.

For complete facts on the economic value of weatherstrip, send for Bulletin No. 35—“Air Infiltration Through Weatherstripped and Non-Weatherstripped Windows,” published by the University of Minnesota Institute of Technology—no charge or obligation.

WEATHERSTRIP Research Institute
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how to install terne metal chimney flashing

One of the most critical spots in the construction of a roof is the chimney flashing. This point is especially vital when a chimney straddles both slopes of a roof.

Continuous flashing of terne metal can be installed on such a chimney, avoiding stepdowns and eliminating most of the seams.

After the roofing pans have been turned up to form the base flashing around the chimney, and the corners closed off with corner patches, the roofer uses a quarter-inch grinding wheel in an electric drill to cut a half-inch groove at a point 4 1/2 inches above the roof line.

The cap flashing is then fashioned to go all around the chimney. It is cut and bent to fit into the groove in the brick, stone or block of which the chimney is made. When the cap flashing has been inserted, it is wedged into place by driving masonry nails into groove above it.

The finished flashing is caulked with some suitable compound, giving a flexible, weatherproof flashing that considerably enhances the appearance of the house.

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NAHB plaque awarded homemakers’ magazine

The President’s Plaque “for distinguished reporting of home building news in 1953 by consumer magazines” was presented by retiring NAHB President Emanuel M. Spiegel to “Living for Young Homemakers.” Mrs. Edith Brazwell Evans, editor of the publication, received the award at a general session of the 1954 NAHB convention in the Hilton grand ballroom.

The occasion marked the first time that NAHB had so honored a consumer publication. Members of a public relations committee headed by Leslie Hill acted as judges.

During the past year, “Living for Young Homemakers” selected several homes it felt were well constructed, well designed and well priced, and assigned its staff decorators to color scheme and decorate them to enhance their features. Among them were seven houses in Columbus, Ohio; four in Tyler, Texas; three in Houston, and individual homes in Los Angeles, Minneapolis, Milwaukee, Dayton, Chicago, Louisville, Lafayette, Indiana; Racine, Wisconsin; Schenectady, New York; Brookville, Ohio, and Jackson, Mississippi. Reports from the builders benefiting from the service indicated their homes became more saleable and reported a substantial volume of sales.

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Each home is presented in a two-page spread, with a drawing of the front elevation and description of the house on one page and a detailed floor plan on the facing page.

In addition to the house plans, the book presents seven practical steps for the potential home owner's guidance in considering the purchase of a home. Standard working blueprints prepared by expert draftsmen in the architect's office are available for each of the houses shown in the book. They are reproduced in the standard builders' scale of 1\(\frac{3}{4}\) inch to one foot.

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