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EDITORIAL

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SEPTEMBER 1952
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SEPTEMBER 1952

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Show customers how it works, and this automatic door bottom sells itself. It's the perfect answer for all drafty doors — inside or outside! Completely solves the old problem of clearing rug or carpet every time door opens. Nu-GARD is beautifully designed with smart, silvery-satin finish and easily installed. Will not rust or tarnish. Furnished in 28", 32", 36", 42" and 48" lengths. May be shortened approximately 2". Packed in individual cartons.

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There is a New Building Market

A

SOUTH African visitor to Chicago recently expressed amazement at the contrasts the city offers in housing. He noted everything from modern palaces to “pig sties,” and ascribed the latter to the fact that the city has been so busy growing that it has had no time to concern itself with the problem of decay. Given time to visit other cities, larger and smaller than Chicago, the South African would have noted the same condition. It is one of which all Americans are acutely aware, and about which most of us express concern. With few exceptions, however, all we have done is express concern. It is now apparent that public housing and federal grants for slum clearance and rehabilitation are not the answer.

There is, however, an answer, and there is an economic as well as a social reason to formulate and apply the answer. Until ten years ago there were no private agencies in existence capable of handling the problem in our cities. Now there are more than 200 local chapters of NAHB. Each of these has performed yeoman service to home builders and the public in handling the vexing problems of the postwar housing shortage, and at the same time fighting off the threat of socialized housing. With the growing decline in need, a decline that can be expected to continue for several years, it now becomes necessary for these NAHB chapters to concern themselves, in the interest of their members and the public, with the development of a new market for home building. If this is not done the industry will find itself in serious trouble. The new market is at hand, and with shortages in veteran and low cost housing taken care of, local NAHB chapters may and must convert concern about sub-standard housing into action to correct it.

The same can be said for the regional retail lumbermen’s associations, whose members serve principally the rural areas as housing headquarters. There are rural and farm slums as well as urban slums. While the dealer associations have been in existence for more than 50 years, they, like the more recently organized builders’ associations, have had to be more immediately concerned with growth rather than redevelopment.

Now we have the condition of a home building industry geared to produce about one and one-quarter million new housing units a year, and a need market for the next several years of not more than about 800,000 units. Excellent salesmanship might create demand for another 100,000, but that still leaves a gap of 350,000 between total market and production potential. The gap easily can be bridged if organized home builders and retailers will take the Brockbank program as outlined in the July issue of American Builder, use it as a basis for procedure, and in close cooperation with local civic officials, develop a new and vast redevelopment and remodelling market. Here is one of the greatest opportunities ever offered any industry for both profit and public service. There need be no slump in the market for building materials and services in the five years ahead if the opportunity is recognized, and organized builders and retailers approach it intelligently.
REGULATION X CONTROLS on housing credit probably will be lifted late in September. Government spokesmen are confident that “adjusted” housing starts in the June-August period will be below the 1,200,000-per-year rate.

STARTS IN JUNE were an estimated 10 per cent below the required rate. The Defense Production Act provides that if the number of homes started during any three consecutive months is below a seasonally adjusted annual rate of 1,200,000 units, then the President shall initiate a period of “credit control relaxation.”

DURING A PERIOD of “credit control relaxation,” government credit rules cannot require downpayments in excess of five per cent of the transaction price. This would, in effect, bring an end to controls over mortgage credit — something homebuilders have been seeking for many months.

SEASONALLY ADJUSTED annual rate of housing starts in June was 1,063,000 and in July was 1,088,000, the Bureau of Labor Statistics reported. For both months the adjusted annual rate was below the 1,200,000. If this situation prevails in August, Regulation X will end not later than October 1.

THE BUREAU OF LABOR STATISTICS has the job of estimating the rate of housing starts on which credit controls will be based. The Federal Reserve Board and HHFA will jointly announce the beginning, or termination, of a period of relaxed credit control.

JULY HOUSING starts were estimated at 104,000 by the Bureau of Labor Statistics. This figure includes 102,400 private and 1,600 public units. The Bureau also revised the April housing starts figure downward from 108,000 to 106,200.

THE ADMINISTRATION is not at all pleased over the way Congress weakened its authority over real estate credit. President Truman advised Congress in his mid-year Economic Report that power to regulate mortgage credit “should be restored as soon as it is feasible ... to do so.” The President said authority to control this credit is "essential" if the stabilization program is to succeed.

CREDIT CONTROLS on commercial construction may also be lifted by the Federal Reserve Board. The Defense Production Act has no mandatory provisions on this type construction, but many expect the reserve board to let up on commercial building credit when it relaxes controls on new residential structures.

FNMA is ready to begin issuing advance commitments to buy FHA-insured and VA-guaranteed mortgages covering defense, military and disaster housing. The agency will also purchase such mortgages over-the-counter.

AUTHORITY FOR FNMA to make advance commitments expires June 30, 1953. The agency has $1,152,000,000 of advance commitment authority, of which $252,000,000 has already been committed. The remaining $900,000,000 was added by recent legislation.

THIS NEW AUTHORITY for advance commitments is expected to speed up defense housing by facilitating the flow of mortgage money for such housing. Builders have complained loudly that a mortgage money shortage has been the real bottleneck for defense housing.

RESULTS OF THE LONG STEEL STRIKE will be felt throughout the remainder of this year. Henry H. Fowler, administrator of NPA, thinks it may be April 1, 1953, before the steel supply is back where it was before the strike began. Tight controls on steel will continue.

SELF-AUTHORIZATION of steel for home construction is still permitted. No further relaxation in present quotas is expected before January. Nevertheless, some industry spokesmen are of the opinion that the anticipated steel shortage will not hold up housing and other light construction.
BUILDERS CAN SELF-AUTHORIZE 2,300 pounds of carbon steel (no structural) for each dwelling unit with a steel water distribution system. If copper water pipe is used, a builder is limited to 1,950 pounds of carbon steel (and no structural).

NPA HAS INCREASED the amounts of copper and aluminum which may be self-certified for most types of construction. The agency also revoked its order M-74. This order, among other things, prohibited manufacturers from using copper to make downspouts and gutters, ornamental metal work, unit heaters, gratings, drains and similar products.

M-100, THE HOUSING REGULATION, has been changed as follows: For houses with steel water distribution systems, builders may now self-authorize 275 pounds of aluminum and 200 pounds of copper and copper-base alloys per dwelling unit. For houses with copper water distribution, a builder may self-certify 275 pounds of aluminum and 400 pounds of copper and copper-base alloys. These changes become effective August 4.

OTHER MODIFICATIONS permit an additional 200 pounds of copper per unit if a forced hot water heating system is used. If a radiant heating system is installed, a builder may use an additional 500 pounds of copper.

UP TO 50 PER CENT of the copper and aluminum permitted for new construction can be self-certified for use in alterations, additions or extensions to existing dwelling units. Also, NPA has revoked Section 5 of housing order M-100. This section prohibited the use of copper for decorative purposes and in gutters, downspouts and the like, when fabricated on the job site.

SMALL COMMERCIAL CONSTRUCTION, in which self-certification is permitted, shares in the more liberal quotas of copper and aluminum. Self-authorization of 2,000 pounds of aluminum and 1,000 pounds of copper per project per quarter is now permitted. This compares with the previous limit of 1,000 pounds of aluminum and 750 pounds of copper.

STEEL THAT CAN BE SELF-AUTHORIZED for commercial construction remains unchanged, i.e., five tons of carbon steel per project per quarter including up to two tons of structural but no wide-flange beam sections or columns.

NO SELF-AUTHORIZATION is permitted for recreational and amusement projects. Plans to allow limited self-certification for this type construction were dropped as the steel strike developed — and such plans probably won't be revived before next January. The only let-up to date is one which permits the use of aluminum as a conductor of electric current in recreational and amusement construction.

MULTI-UNIT DWELLINGS, such as apartment houses, are not affected by the increased self-certification quotas of copper and aluminum. Family housing larger than four-unit size is constructed by permit rather than by self-certification.

NINE CATEGORIES of "small business" (eight employees or fewer) remain subject to wage and salary controls, despite an "exemption" in the Defense Production Act. Included among the nine are "enterprises in the building and construction industry."

CONGRESS ADDED the "small business" exemption when it extended the Defense Production Act. But it added this loophole: The President may exclude certain types of business or occupations if their exemption from control would be "unstabilizing" with respect to wages or manpower. This is what caught the "building and construction industry."

BUILDERS WILL BE ALLOWED to pay "premium" wage rates to key employees if the new Wage Stabilization Board adopts recommendations of its predecessor. Before going out of business on July 29, the old board recommended that builders be allowed to follow the historic pattern of incentive pay and premium rates for employees with "special qualifications" or "special responsibilities." This recommendation, which was backed by home builders, is subject to approval by the new board.

WAGES OF UNION WORKERS in construction increased 2.6 per cent in the second quarter of this year, the Bureau of Labor Statistics reported. The wage scale of unionized building trades workers averaged $2.24 per hour as of July 1, the bureau estimated. This is a 23 per cent increase since the Korean war started.

HUGH ASKEW of Oklahoma City has been appointed assistant commissioner of FHA in charge of field operations. Mr. Askew, with the agency for 17 years, will direct FHA's 137 field offices. He succeeds Herbert C. Redman, who is entering private industry.

SEPTEMBER 1952
There's Profit in Remodeling

During the last five years the public has spent an average of $8.3 billion each year for new dwellings and alterations to residential units. There has spent an average of $867 million for additions and alterations to residential units. This is about ten dollars spent for remodeling for each hundred dollars of new residential construction. The remodeling market offers opportunities in the next few years for an even greater volume of business for builders, at a good profit.

The problem of large numbers of poorly arranged, inadequate, rundown houses has always been with us. A brief tour of any community will show dozens and hundreds of them. At the same time the public is becoming better educated and demands higher living standards.

This is proved by the fact that half a dozen national magazines concerned with house decoration and improvement number subscribers in the millions. Adding fuel to the fire is a recent "Consumer Report" which is a buying guide for hundreds of thousands of home owners and prospective home buyers. The Report contains a 20-page article on "Faults To Look For In Buying An Old House."

The Faults Enumerated range all the way from stairs that are too steep, through poorly arranged kitchens, rotting window sills, and evidence of inadequate insulation. The public is advised to spend at least an hour and a half measuring and probing with yardstick and knife before buying an old house.

This will prompt home owners to eliminate the faults in their houses before offering them for sale. It will breed sharp home buyers who will carefully examine old houses, as well as new ones, before buying. Under the provisions of open-end mortgages, financing for additions and alterations can be easily and economically arranged.

The only reason that more of these new builders are not doing, is that there are few builders who actively promote it. There are few who are prepared to offer constructive advice on the overall problems which confront the home owner in bringing his house up to par.

The Opportunity for Builders who specialize in remodeling service is even greater now because of the fact that the population of the United States is on the move at the fastest pace in history. A recent Census Bureau report shows that 31 million people moved to different houses in a one-year period. This means that one out of five families is likely to move in a single year. It is estimated that only about 30 percent of families are permanently moored to one place. The rest will most likely move within a ten-year period.

An owner who wants to sell a house with numerous faults is faced with having it on the market for a long time and getting hundreds or even thousands of dollars less for it than he would if it were in better condition. The new buyer of an old house with numerous faults is a logical prospect for a program of rehabilitation and modernization.

Remodeling needs to be aggressively sold because it competes for the consumer's dollar with a great variety of desirable items—automobiles, house furnishings, television, vacation trips, and others.

Another Opportunity for remodeling exists in the conversion of large dwelling units into two or more smaller units. Although no one knows exactly how many conversions are made each year, a Housing and Home Finance Agency survey shows that it is possible that the rate is running from 200,000 to 300,000 units per year. That means that for each 100 new dwelling units built, possibly 20 or 30 more are added to the supply through conversions. In Baltimore and Norfolk, the cities surveyed, it was found that one out of each 200 dwelling units has been converted into smaller units in each of the last three years. The average cost per converted dwelling unit was $1,200 in Baltimore and $1,000 in Norfolk.

HHFA reasons that the conversion rate may be about the same in other newer fast growing areas, such as Los Angeles and Dallas, which have a much smaller proportion of older houses than the survey cities. This is due to the pressure of housing demand and the fact that lower-income buyers of new houses in these newer communities may have found it necessary to augment their incomes by subdividing their living quarters.

Ace in the Hole. Remodeling is the builder's ace in the hole. Marriages have decreased 39 percent from the peak of five years ago. A drop in real estate activity usually follows a drop in the marriage rate. It is therefore expected that there will be some lessening in demand for new houses in the next few years. Families who are not able to afford a new home may prove a valuable source of modernization business.
SAVES INSTALLATION COST . . . One-piece door leaf and factory-assembled hardware permit substantial savings in installation time. Only 30 minutes required to install 8’ or 9’ Canopy Door (45 minutes for 8’ or 9’ Receding Door) with capable workmen and prepared opening.

SAVES FIRST COST . . . STRAND is the world’s largest manufacturer of metal residential Garage Doors. Low first cost is the result of standardizing on the manufacture of 5 models: 8’ x 7’ Receding (track) and Canopy; 9’ x 7’ Receding (track) and Canopy; 16’ x 7’ Receding (track) only.

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Order from your dealer, or mail coupon for information and dealer’s name.

STRAND GARAGE DOOR DIVISION
Detroit Steel Products Company
Dept. AB-9, 2543 E. Grand Blvd.
Detroit 11, Michigan

Please rush full information about Strand All-Steel Garage Doors for 9’ x 7’, 8’ x 7’, and 16’ x 7’ openings.

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CITY ____________________________________________ STATE ____________________________
California Architects Use Plywood Shear Walls

Architects Smith and Williams, Pasadena, Calif., are making use of plywood shear walls in many of their current homes to permit use of large glass areas on exterior walls. Box-girder type shear walls compensate for loss of rigidity and also permit great freedom in placement of nonbearing interior partitions.

The shear walls are carefully engineered to handle the wind and seismic loads which might be encountered. Calculations are based on the weight of the house, exterior surface area and floor area. Studs 2x4, 2x3 and 1x3 are used depending on strength requirements. According to the architects, plywood is the only material which can be used satisfactorily with such small studding.

In the photo above, shear wall is at right; it is the only one in this particular home which uses 2x4 studding.

Where the shear wall is on the inside, PlyPanel grade plywood is generally used. Exterior plywood is used for the occasional short shear wall that is on an outside wall. Nailing is important and proper nail placement must be calculated; usually it is on six-inch centers. For and batten siding ... flush surface ... or cut in third or half additional information on shear walls and panel widths and applied as extra-wide lapped siding. It can be other plywood use-data, write Douglas Fir Plywood Association, Tacoma, Wash.

Plywood Shapes Unusual Concrete Roof Frames

Plywood-formed concrete frames were used to replace conventional posts and roof trusses to achieve an unusual degree of interior flexibility in the Fred Meyers Burlingame Shopping Center Building, Portland, Oregon. Photo shows frames viewed from roof; vertical haunches project down through the roof to ground. Trussed wood joists are surrounded from tie-beams secured to the frames. Because the frames are a definite architectural feature, concrete had to be smooth, fin-free. According to Leslie E.

Beautiful Adaptability, Economy-Get All 3 With Plywood Siding

Of all siding materials, Exterior plywood is the most adaptable to various design treatments. It can be used to create board and batten siding ... flush surface ... or cut in third or half panel widths and applied as extra-wide lapped siding. It can be used in combination with other materials such as brick or masonry to achieve interesting texture contrasts.

And of all quality siding materials, Exterior plywood is least expensive. Least expensive in two ways: first, Exterior plywood actually costs the same or less per square foot than other quality materials; second, plywood's large size and easy workability speed work, cut labor and application time and costs up to one-third!

Exterior plywood siding is durable, too. It won't shatter, split, or puncture. And the completely waterproof adhesives used between plys are more durable than the wood itself!

Douglas Fir Plywood

*PlyShield® is the siding grade of waterproof-bond Exterior-type plywood. One side is of highest appearance; for economy, limited defects are permitted in back. For use as siding, gable ends, etc. Other Exterior grades with 2 faces of highest appearance are available for single wall partitions, fences, etc.
Poole, engineer in charge of construction, plywood offered the simplest, least expensive method for obtaining the smooth surfaces. In fact, because of its smooth, neat appearance, the concrete required no further finishing once forms were stripped. Exterior PlyForm panels were re-used up to eight times in forming the five frames. The building was designed by Engineer Leslie E. Poole; contractor: H. M. Hocken, Portland.

**Portable Units Help Solve Schoolroom Shortage**

To solve pressing classroom shortages due to shifts in population, school systems in many communities are turning to portable classrooms as a quick and economical solution. In Tacoma, Washington, 60 are used by the city's schools. Thirty-five are of lightweight plywood construction; ten were built last year by E. Goettling & Sons, general contractors, from revised designs by Mock and Morrison, architects.

"We've been using plywood for four years," says James Hopkins, assistant superintendent of schools in charge of construction. The portable schoolrooms are fully as well built as the average house and we expect them to be good for 50 years. Plywood construction is lighter and gives maximum bracing strength—a must in movable buildings."

Each building is 24'x36'. Plywood is used for subfloors, roof sheathing, paneling, built-ins and exterior siding. Modular design, based on standard plywood panels, helps speed work and cut costs. plywood not only makes a sounder, tighter building, but it presents a clean, modern appearance—a far cry from the unpleasant "temporary look" of other similar structures.

**Design Portfolio Available**

A portfolio of prize-winning designs for plywood built-ins is now available to architects, designers and builders. The booklet contains over 50 designs judged best in the "Better Living Home" architectural contest. For free copy write Douglas Fir Plywood Association, Tacoma 2, Wash.
new low-cost plywood panel captures all of nature’s rustic beauty

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

WedgeWood is produced in two types... Burly and Knotty, each with a distinctive character. The rich texture and character marks create unusual color effects when painted. Subtle or dramatic two-toned effects can be obtained by applying light paints on dark or dark paints on light. Use WedgeWood for dramatic interior styling in homes, offices, stores, cocktail lounges, etc.

See WedgeWood at your lumber dealer’s or write on your letterhead for WedgeWood folder. Georgia-Pacific Plywood Company, 617-9B North Capitol Way, Olympia, Wash.
A Crosley-equipped kitchen speaks louder than words... sells your homes more persuasively than the most persuasive “real-live” salesman! It’s understandable, too, when you consider how well-known and popular Crosley Kitchen appliances really are!

Here are just a few of the Crosley products that can add “sales-appeal” to the houses you build: Shelvador® Refrigerators, Electric Ranges, Automatic Dishwashers, Wall and Base Cabinets, Range and Refrigerator Pantries, Sinks and Electric Food Waste Disposers and Shelvador® Freezers.

When you’re showing your houses, be sure to take your prospects in through the back door... straight into the Crosley Kitchen. Then, while Mrs. Prospect is busy admiring the Crosley products, remind her husband that these appliances can be included right in his package mortgage.

Attention Architects! When you draw up plans, specify and recommend Crosley products. They’re most adaptable... most acceptable!

Free Booklet available to builders and architects. For information or booklet, write: Builder Sales, Crosley Division, AVCO Manufacturing Corporation. 1329 Arlington St., Cincinnati 25, Ohio.

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Let me Tell You Why

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- Assures more durable installations... saves expensive "call backs"
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16 Molded Tile Pieces—Tilemaster’s 16 molded tile pieces for complete grouted installations, eliminates metal or rubber substrates, does not require cement... many repeat business... and is a money maker.

Many Brilliant Colors—A complete range of Solid, Stripes, Electric Tones, Pantone® colors... give complete flexibility or a matching or complementing color.

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SEPTEMBER 1953
Why you should know about this ballcock:

This new ballcock is typical of the extra quality you get in Eljer Fixtures and Fittings. It was designed and perfected to operate quietly and efficiently under extremes of high or low pressure and it does just that in assuring trouble-free performance. No other ballcock has so many desirable features.

Snap-action shutoff provides instantaneous closing without water hammer, assures longer seat life, maintains constant water level, even after years of service.

Extra quality is built into all Eljer Fixtures and Fittings. That's why it's good business to install Eljer. You don't lose time and profits handling complaints. You add to the good reputation of your business.

For complete information, see your Eljer Distributor or write Eljer Co., Box 192, Ford City, Pa.
Question of Adequate U. S. Housing
Now Squarely up to Truman: NAHB

Calling Regulation X "the greatest obstacle to home ownership ever faced by prospective buyers," the National Association of Home Builders says it is now up to President Truman to determine whether home buyers must pay large or small downpayments.

The statement refers to Congress' recent extension of the Defense Production Act in which it passed on to the president the question of continuing the larger downpayments now required under the controversial credit regulation.

NAHB president Alan E. Brockbank said President Truman could make a lot of home-hunters happy by taking off Regulation X, under the powers given him by Congress.

"I hope the president has a ready answer for those thousands of veterans, low-income families and defense workers who need housing desperately but can't buy solely because of Regulation X," Brockbank said.

This legislative fiasco means simply that home buyers have been double-crossed, in my opinion."

Brockbank said the question of adequate housing for Americans is now in the lap of the chief executive and his housing aids, who "can turn the housing valve on or off."

"It is our hope that he will immediately take off all credit controls over buyers and let the industry get on with the job of building.

New Officers in California

Three New Men Named to NAHB Washington Staff

Two additions and a replacement for the Washington staff of the National Association of Home Builders have been announced by executive vice president Frank W. Cortright.

The new men are Jerry Madigan, field service director; Joseph R. McGrath, assistant legislative director; and Everett E. Revercomb, comptroller and assistant treasurer.

Madigan, former executive director of the Home Builders Association of Greater Cleveland, succeeds William Tobin who resigned. Last year, Madigan served as president of the NAHB executive officers council. He has also received recognition for helping to organize Cleveland’s “PERC”—Private Enterprise Redevelopment Corporation—which has become a model plan for urban redevelopment.

McGrath is a former Justice Department trial attorney. In his new duties he will aid both John M. Dickerman, legislative director, and Cortright.

Revercomb, formerly affiliated with the National Association of Radio and Television Broadcasters, takes over a fiscal post created by a reorganization of the NAHB administrative section. Mann O’Neal, formerly assistant treasurer in addition to her duties as editor of the group’s Correlator magazine, will now devote full time to the Correlator.

N. California Dealers Give Five-Day Materials Course

A five-day course in building materials, sponsored by the Lumber Merchants Association of Northern California, was recently completed in San Francisco by 80 students from yards in the area. The course was especially planned for retail dealer personnel without wide experience in merchandising the products they handle.

Instructors came from association staffs, manufacturers, distributors and builders. Emphasis was on the “over-the-counter” merchandising of the retail yard and on the end-use and application of products.

The association said it is preparing a synopsis of the entire program which, when published, will be made available to dealers who might like to use it in their own inter-company training.

Jerry Madigan

DEALER'S VIEWPOINT

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

Direct Sales Approach
Can Offset Volume Slump

Now that building materials sales have come down somewhat from the high level of recent years, a good many retail lumber dealers who never before have done so are planning to go out after sales instead of waiting for customers to come to them.

They realize that there is a tremendous volume of potential home modernization business awaiting anyone who does a first-rate selling job and then accepts responsibility for arranging in advance the details of the work to be done.

In the past, a lot of dealers have refrained from soliciting business from home owners, except through advertising, either because their normal retail function has kept them plenty busy or because they hesitated to take on new problems with which they were not intimately familiar.

They now realize, however, that to hold their volume up near the level of 1950 and 1951 something extra is needed. Advertising budgets will be stepped up also in some cases, but personal selling still is needed because other advertisers are spending large sums attempting to persuade home owners to spend their savings for purposes other than home improvements.

Although they will send their own salesmen out to sell home owners, many dealers will not attempt to act as contractor. Instead, once the customer has been sold, they will bring the customer together with one or more selected contractors in whom the dealer has confidence and then go on to help the owner arrange any necessary financing.

The well known fact that four out of five owners of older homes never have been approached by any contractor, builder, or retail lumber and building materials dealer seeking to sell them on improving or remodeling their homes gives a good indication of the potentials in this market.

There is good reason to believe that the already large volume of residential repair and modernization work could easily be doubled in most communities if one or more dealers were suddenly to undertake an aggressive selling program.

Millions of home owners could be persuaded to finish an attic room, put in a basement recreation room, install a modern kitchen, or undertake some other substantial improvement if someone showed them how to do it for a modest monthly outlay and offered to see that every detail would be handled for the customer.

Yet, without a direct sales approach, the majority of these home owners might wait several years or longer before they decided to do the same work of their own volition.

And in the meantime, many of them might have obligated their incomes or spent their savings for some completely different purpose.

The 10,000,000 homes which are in the neighborhood of 50 years old offer a rich market for dealers who are in position to take the owners by the hand and show them how to get greater comfort and convenience for a few dollars a month.

Publish Buyer’s Guide for Home Week

Capitalizing in a big way on national home week this month, the Long Island Home Builders Institute has prepared the entire September issue of Long Island Builder, its monthly publication, as a comprehensive home buyers’ guide.

The Long Island, N. Y., association will also mark national home week with guest appearances by members on several television programs and by the use of radio spot announcements, reports Frederick R. Gibson, president.

The institute plans to print 10,000 copies of the guide which it will distribute directly and through several banks as a result of inquiries received from banking officials. A follow-up press, television and radio publicity. Every institute builder member, Gibson said, will have the location, price and other pertinent information of his job operations in the listing, which will be presented alphabetically by towns. All other editorial content is scheduled to be specifically directed to the prospective home buyer market.

Last year, the institute issued a similar guide in pamphlet form, informally dubbed the “Sears-Ward catalog.” Distribution was then limited to 3500 copies, according to Gibson, who said it would have been greater “if we had been able to judge the tremendous interest it would create.”

AMERICAN BUILDER
New Officers Named by Materials Exhibitors

Donald M. Crooks of the Kochton Plywood and Veneer Co. was elected president of the Building Material Exhibitors Association at the group's recent meeting in Chicago. He succeeds Russell Dean of Bennett-Ireland, New 

vice president is Harold H. Whitehead, western division manager of the Flintkote Co. Richard G. Breeden, Jr., was re-elected secretary-treasurer. Dean, who had been IMFA president for two years, was awarded a plaque and other gifts. Making the presentation for the association was Earl Boyle of the Johns-Manville Sales Corp.

The meeting, the group's 13th annual, was held in the La Salle Hotel. Around 30 members were on hand.

Cortright's Column

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

New Government in November
New Hope for Home Building

On November 4th the people of this country will decide on the kind of government they want for the next four years.

The public has just seen for the first time the functioning of the political machine by which our Presidents are nominated. The miracle of television has given the public a liberal education in the inner workings of our unique, and not always admirable, system of selecting candidates and formulating national policies.

The home builders of the nation are particularly interested in the housing philosophy of all candidates for office, particularly the men seeking the office of President and positions in the United States Congress. Obviously, the convictions of those elected to the Congressional body are of primary importance since they can readily reject any proposals which may be made from the White House. One can predict at this time with safety that, regardless of whether the Republicans or the Democrats prevail, a powerful coalition between Republicans and Southern Democrats will be strong enough in succeeding years to resist the wildest proposals related to the problem of meeting the total housing need of the nation.

Looking back on the last eleven years, the policies of the White House and the Congress, insofar as housing is concerned, have been influenced each year without exception by a succession of crises. There has never been a time since Pearl Harbor when excuses to regulate and control the building industry have not been readily at hand.

During World War II and more recently the Korean War, the excuses have been shortages of building material, shortages of labor, and the threats of an undisputed inflationary spiral which has cut our dollar's value in half and doubled the cost of everything, including housing.

In the brief years between wars, the excuse for preferential treatment was available for our returning war veterans and for a return to the pre-war proposals of socialized housing for a selected few at the top of the lower income third of our people.

Starting next January with a new Congress and a new President regardless of party, we may look forward to the first free period in our housing economy in more than a decade.

We may hope that the demands of the armament program will be no greater in respect to building materials than at the present time.

We may hope that interest rates will be permitted to return to the normal status in which supply and demand regulate the cost of money.

We may hope that the worn out position that housing is inflationary will be abandoned and such restrictions as Regulation X will be promptly lifted and home buyers thereby permitted to buy on terms within their means.

In any event, regardless of the political climate which may prevail in 1953 and the years immediately thereafter, the industry's responsibilities are very clear and immensely important. Indisputably it is our job to make rapid strides in the direction of constantly better housing at constantly lower cost. Although our production and progress have been very great in the last ten years we must constantly set our sights on the higher target.

There is still room for much better community planning—for greatly increased use of architects which means better design—for increased efficiency through all modern techniques of construction—for much greater productivity on the job by labor—for more satisfactory and more constant supply of mortgage funds, and finally, although by no means the least important, a return to pre-war merchandising methods.

An awakened and enlightened industry has been studying all of these things and applying them at a good rate. Organized builders in more than 200 cities have made tremendous strides in all of these things just as their official spokesmen on the national level have learned to do their job with statesmanship and courage.

All in all it is an encouraging outlook regardless of the majority vote in November. We can hope that a new president and a new congress will give home building a full opportunity to function to its maximum capacity for the first time in many years.
"what a wonderful way to be welcomed...!"

by warm, friendly
Mosaic Carlyle Quarry Tile!

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

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

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

For quick facts, contact our nearest office. For helpful literature on the many other types of Mosaic Tile, write Department 35-5, The Mosaic Tile Company, Zanesville, Ohio.

*Abrasive Body is available in one color only—Navajo Red.
This beautiful entryway will keep its "welcoming"
good looks indefinitely ... it's weatherproof,
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Specifications: Mosaic Carlyle Quarry Tile in Navajo Red.

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NOW! Cash in on the nationwide boom in Exterior Color...

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**ASBESTONE Chroma-Tex**

Please send me samples and full information on new **CHROMA-TEX** Sliding Shingles.

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Else — for 30 Years
CHROMA-TEX SIDING SHINGLES have a deep, natural-looking texture. Color is two-toned—dark in the valleys, light on the ridges—for a pleasing new kind of decorating effect that lends itself perfectly to modern exterior decorating schemes. Made of asbestos-cement, Chroma-Tex Siding Shingles are rock-like in their ruggedness—fireproof, weatherproof, rot-proof, termite-proof. They need no painting, no preservative treatment, no maintenance of any kind.

SIDING SHINGLES

New deep-grain texture! New color harmony!

Same lifetime durability! Same low price!

✓ Put more color, more style, more SELL into every home you build — at no increase in cost.

✓ Give home buyers the rich, textured effect of the costliest siding on the market — for the same price as regular asbestos shingles.

✓ Use the 5 appealing CHROMA-TEX colors to style every exterior with true "decorator harmony."

ASBESTONE — Rugged as the rock it's made from

ROOFING AND SIDING SHINGLES	WALLBOARD	CORRUGATED ROOFING AND SIDING

PHEASANT BROWN

MELLOW IVORY

POPLAR GREEN	DUSTY CORAL	TWILIGHT GRAY
Reveal 20,000 More Texans Are 'Ruled' By Lumbermen

To the long list of Texas lumbermen serving as civic leaders, published in previous issues of the American Builder, Gene Elerside, executive vice president of the Lumbermen's Association of Texas, has added three more, all controllers in their respective cities.

They are Elinor Cade, Foxworth-Gallagher Lumber Co., Henrietta; W. N. Garbade, Garbade Lumber Co., Shiner; and Bob Home, Rockwell Lumber Co., Plainview. Combined population of the towns is 41,294.

Ohio Builder Meeting Set

The ninth annual convention and exposition of the Ohio Home Builders Association will be held at the Sheraton-Gibson Hotel, Cincinnati, November 24-25. Convention chairman and secretary-manager, respectively, are Raymond D. Sharp and A. H. Falarce.

National Coverage Goal Of Wood Window Group's Quality Seal Program

Plans to expand the quality seal program of the American Wood Window Institute to cover the entire country took definite shape at the institute's recent membership meeting in Memphis. The plan, when leading organizations in the millwork industry voted to designate AWWI as the industry's "Seal of Approval" group.

Besides AWWI, other groups jointly promoting the industry's merchandising program are the National Woodwork Manufacturers Association; Woodwork Jobbers Service Bureau; Ponderosa Pine Woodwork Association; and the Southern Sash and Door Jobbers Association.

The AWWI quality seal identifies wood window units meeting the group's minimum specifications. A prototype of each unit bearing the quality seal must have been tested and certified by AWWI.

Named to head the institute for 1952-53 were H. C. Garbol, St. Louis, president; W. A. Compton, Shreveport, vice president; M. C. Davidson, Houston, Texas, treasurer; and Erle Racey, Dallas, Texas, secretary-manager.

NATION-WIDE MERCHANDISING of wood windows is planned as representatives of leading industry associations meet in Memphis. Here are (from left) Michael Rich, builder, who purchased the wishing well; Carmen C. Vendettis, builder of the well and a director of the association; Miss Helen Carter, accepting the check for Zen Zen Hospital; Bert Pasquale, Pool Vent Metal Waving Co.; and Roy D. Chivers, Erie Bond Stone Co.

Pinning the Past Presidents

FORMER PRESIDENTS of the Home Builders Association of Metropolitan New Jersey receiving diamond-studded association lapel pins as a token of appreciation from the membership. Richard D. Hudson of Montclair, president, made the presentation at the June 10 meeting in Mountainside, during which the Past Presidents' Council was organized as an advisory group. From left are Willard E. Goss, Summit; Henry J. Shaheen, Cranford; Arthur H. Padula, Newark; Lloyd P. Bremer, Millburn; President Hudson; Fred Nadel, Summit; and I. Samuel Sadowski, Newark. One other ex-president, Walter J. Harring of Madison, was not present.

Hospital Benefits from Erie Show

MORE THAN $500 went to Erie, Pa., hospital from donations and sale of wishing well exhibited at recent home show sponsored by Home Builders Association of Northwestern Pennsylvania. At presentation ceremony are (from left) Michael Rich, builder, who purchased the wishing well; Carmen C. Vendettis, builder of the well and a director of the association; Miss Helen Carter, accepting the check for Zen Zen Hospital; Bert Pasquale, Pool Vent Metal Waving Co.; and Roy D. Chivers, Erie Bond Stone Co.
Big, Little or In-Between... They all report the same!

**RUSCO OFFERS MORE VALUE... RUSCO CUTS BUILDING COSTS**

A Fully Pre-Assembled Window Unit

Factory-Painted, Hardware Attached—All Ready to Install in Window Opening!

**GLASS • SCREEN**

**BUILT-IN WEATHERSTRIPPING**

**INSULATING SASH* **

**WOOD OR METAL CASING**

**... OR STEEL FINS**

*OPTIONAL

Glass and Screen Inserts easily removed from inside for convenience in cleaning. The Rusco removable sash feature has tremendous appeal as a convenience and safety feature.

Glass and Screen Inserts easily removed from inside for convenience in cleaning. The Rusco removable sash feature has tremendous appeal as a convenience and safety feature.

**RUSCO Galvanized Steel PRIME WINDOW**

**THE F. C. RUSSELL COMPANY • CLEVELAND 1, OHIO • DEPT. AB92**

**IN CANADA: TORONTO 13, ONTARIO**
Mortise for strike can be made quickly, easily... strike provides for possible door sag later

When NATIONAL LOCKset is being installed, there's no time wasted in trying to make a "tricky" mortise. Mortising is clean-cut and simple... free from the danger of splitting and splintering. • The strike is designed with extra top-to-bottom clearance for engagement of latch. NATIONAL LOCKset strike assures a snug fit which keeps door tightly closed... and yet it provides an adequate degree of vertical tolerance should door-sag occur at a later date.

You'll be money ahead with America's outstanding lockset value

Sold only through jobbers

distinctive hardware... all from 1 source

NATIONAL LOCK COMPANY
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**Profitable Butt Hinges by NATIONAL LOCK**

**Regular Butts**
The popular regular BUTT HINGE; also available in half surface type. A quality item proved in the field by "the man on the job". Packed one pair with screws in a rugged, easily handled box. A steady sales producer.

**Round Cornered Butts**
Same high quality as the Regular Butt Hinge. Has added feature of ¼" radius round corners. Eliminates hand mortising. Saves time and costs. Available in two sizes—3½ x 3½" and 4 x 4". Neatly and conveniently packaged.

**Template Butts**
For use with steel frames and either steel or wood doors. Machine screws furnished for steel frame—steel door installations; both machine and wood screws supplied for steel frame-wood door combinations. Available in the three most popular sizes—3½ x 3½", 4 x 4" and 4½ x 4½".

NATIONAL LOCK Regular Butts, Round Cornered Butts, and Template Butts are available in all standard finishes... ball tip or button tip... loose pins. NATIONAL LOCK Butts are always uniform in size, conveniently, attractively packaged and profitable to sell. Ask your jobber for complete details or write for Builder's Hardware Catalog.
Plenty of Brick
Sir: In your July issue under the article, “Here’s the Home Building Picture Across the Nation,” we have taken particular interest in comparing our area with the survey across the nation. We note that “face brick shortage of 50 per cent at Spokane, Washington, is the only problem noted at the moment.” As our firm is one of the clay products manufacturers in the Spokane area, we are wondering where the statistical information came from that listed the shortage. I have checked with the other manufacturers in this area and found that they have ample stocks of brick for immediate delivery. Our picture shows that at the present we can deliver many house lots complete direct from stocks. At this writing, there is an over-abundance of brick for this area.

Jack E. Colwell,
Sales and Operations Manager,
Washington Brick & Lime Co.,
Spokane, Washington

They Liked the April Catalog-Directory
Sir: This letter is late, but I do want to congratulate you on the wonderful Buyers’ Guide which you got out. It is jam-packed with reference data that will be valuable to the industry in general. Simply add my appreciation to the thousands of other letters which you should receive.

Grover A. Godfrey, President,
National Home Shows, Inc.,
Dallas, Texas

Sir: Let me say that I like your Catalog-Directory very much. Trying to improve on it would be “gilding the lily.”

Jack Sieburt,
Long Branch, N.J.

Speaking of Paint...
Sir: I have just read the third installment of your series of articles on paint and would like to comment on one or two statements appearing in the article.

In the second paragraph (April issue, p. 63) you state that “since the lead is omitted the TZ paint is not so durable as other types.” I doubt if there is any proof of this and would point out that for a number of years several of the very largest paint manufacturers have been making their first grade outside house paints, both tints and whites, of the so-called TZ type. These companies could not afford to risk their reputation by offering as a first-line product one of known inferior quality.

The second comment concerns the statement “If (TZ type) is used as white paint only and, if tinted, will fade badly and in most tints will lose its resistance to hydrogen sulphide.” I can assign no reason for the latter half of the statement since the only component of the usual white house paints as made today that will darken with hydrogen sulphide is lead and its absence in no way affects the ability of the TZ paint to stay white if attacked by hydrogen sulphide. As for a TZ paint fading when tinted, this occurs only if improper white or colored pigments are used, or if they are present in improper proportions.

I consider that your article has gone a long way to set up correctly the facts about paint—this very complicated and controversial subject of many facets—and I would be complimented for your successful presentation. I believe, however, that the above comments are more nearly in line with the thinking of most of the leading paint technologists of the country.

I would appreciate it if you would publish the above in your Letters to the Editor.

L. H. Trott,
Assistant Manager,
Technical Service,
The New Jersey Zinc Co.,
New York City

Flat Top Garden Apartments
Sir: I was very much interested in the article in the July issue of your magazine featuring the flat top garden apartments designed for a development in Sacramento, Calif.

If there is additional information available on this apartment plan, I would appreciate having it.

Wm. H. Roberts,
Elgin, Illinois

Jere Strizek, Inc., Sacramento, Calif., would doubtless be glad to answer any further questions about the development on Marconi Ave.—The Editor.

Worth Waiting For
Sir: Thank you for your prompt action on my complaint of late American Builder. But I am ashamed—the same day I mailed my complaint

(Continued on page 40)

AMERICAN BUILDER
Reinforced monolithic slab construction — The Milcor Solid Partition is a steel-reinforced vertical slab of plaster, 2" thick. Milcor Metal Lath serves as plaster base — reinforces the partition horizontally and diagonally.

Only 3 units needed to support the metal lath — Slotted ceiling runner, standard 1/4" cold-rolled channels and easy-to-use Milcor Housing Base or slotted floor runners,

Practical advantages — (1) Quick, simple erection; (2) Saving of floor space; (3) One-hour fire rating; (4) Reduced sound transmission; (5) Resistance to impact; (6) Reduced dead floor load; (7) Unexcelled sanitation; (8) Adaptable to metal or wood trim.

Check the branch nearest you regarding deliveries of components for Milcor Solid Partitions.
HOW TO PICK THE RIGHT HEETAIRE
for every room
You Build or Modernize

The FOUR FACTORS to be considered in choosing specific HEETAIRES for specific jobs are:

1. Size of Room
2. Exposure of Room
3. Use of Room
4. Climate

These four factors — size, exposure, use and climate — are the keys for selecting the specific HEETAIRES and temperatures necessary to heat any room.

In general, wattages per cubic foot determine the size of HEETAIRE recommended — but these wattages vary according to heat loss in the room (wall, window and door exposures) and according to the outside temperatures (e.g., more wattages per cubic foot are necessary in New York State than in Tennessee). In addition, the use of room to be heated determines the temperature desired and the type of HEETAIRE recommended — radiant (infra-red) heat, or heated air. Radiant heat is recommended for rooms where the primary objects to be heated are people (Series 200, 230, 240); heated air is recommended where general temperature levels are to be maintained (Series 210, 250).

Series 210 and 250 HEETAIRES are recommended for both supplementary and general heating.

FREE! Write for the copyrighted
“A Guide to Quick Heating”.

Tested and listed under reexamination service by
Underwriters’ Laboratories, Inc.

MARKEL • LA SALLE
ELECTRIC PRODUCTS, INC. PRODUCTS, INC.
151 SENECA ST., BUFFALO 3, N. Y.

Letters . . .
(Continued from page 38)

both the April and May copies arrived. I can see why that April copy was late, and it certainly was worth waiting for. I sent you notice the same day rescinding my complaint, but you apparently had taken care of the matter.

Enclosed find $5 to extend my subscription. I expect you to subtract from this for the duplicate copies you sent. I gave the duplicates to other builders, as I know they will appreciate the best magazine in the field.

Thomas C. Robinson,
Minneapolis, Minn.

Praise For Indianapolis Slum Clearance

Sir: I wish to congratulate you on your story in the July issue on the slum redevelopment program being carried on in Indianapolis. I recently became acquainted with this and think it is an excellent program. To some extent this is what we were trying to shoot at in a general way at our spring meeting of the Lumber Dealers’ Research Council in Washington.

C. A. Thompson,
Champaign, Ill.

Sir: Please accept my very sincere congratulations on the very fine July issue which has just come across my desk. I was especially interested in your two-page spread on private slum redevelopment progress in Indianapolis. Keep up the good work.

Conrad “Pat” Harness,
Public Relations Director,
National Association of Home Builders,
Washington, D. C.

American Builder in the Schools

Sir: Your splendid magazine comes to my drafting room regularly each month. I use it as a reference and textbook since it contains so much authentic architectural information, I also use the blueprints enclosed in each copy as an instructional medium for my architectural drafting students.

One student selected “Blueprint House No. 47,” in the October, 1950 issue, and drew it with some modifications and slight changes. He did such a splendid job that my department head strongly recommended that the drawings be entered in the

(Continued on page 42)
I have modern ideas...
so my range must be electric!

Modern homes appeal to me, especially when they are designed for efficiency. That's why I prefer an Electric Range—because it belongs in my new home, and because with it I can cook and bake with a saving of time and effort!

"The Electric Range fits very definitely into our all-electric Cliffwood project," says MR. NOBLE S. CLAY, Pittsburgh, Pa. builder. "Modern' is the theme of our development, and we find that most home buyers go for contemporary design. The Electric Range is a very definite part of it—and everybody wants the electric convenience features. When it comes to cooking, they've learned that the Electric Range can mean good meals with little work, at low operating cost—and a cool, clean kitchen. It's really modern cooking equipment."

Builder Clay practiced electrical engineering for 16 years before entering the building field, so he knows why electrical convenience can make the homemaker's job easy and pleasant. He applies his knowledge in the kitchens of his houses, too—so the range—of course, it's ELECTRIC!

These homes are fitted to the hilly landscape of suburban Shaler Township, of basementless design, of stone and brick construction. There is structural economy and saving on grading costs. They sell in the medium price brackets—from $13,500 to $18,500, equipment included.

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

ADMIRAL - COOLERATOR - CROSLEY - DEEPFRIEZE - FRIGIDAIRE - GENERAL ELECTRIC
GIBSON - HOTPOINT - KELVINATOR - MONARCH - NORGE - PHILCO - WESTINGHOUSE
Letters...

(Continued from page 40)

Industrial Arts Award Contest, sponsored by the Ford Motor Company. I want to inform you that we have sent these drawings to Detroit to compete against other such drawings done by students in schools throughout the United States.
A. C. MacDonald, Van Nuys High School, Van Nuys, Calif.

Consider the Built-in Fan
Sir: You fellows certainly did a wonderful job on the built-in fan article in your July issue. I want you to know how much I appreciate the effective manner in which it was handled.

National Home Week Contest
Sir: Does the American Builder plan a National Home Week promotion contest such as that for last year? Also, on page 108 of the July issue, two manuals on planning Home Week promotions are listed. Are these available?
Winchell A. Royce, Garden City, N. Y.

In reply to question one, the answer is yes. We are holding a 1952 National Home Week contest. Full details appeared in the August issue. We are glad to send copies of the two booklets on "How to Plan a Successful National Home Week," one for builders, the other for lumber dealers.—The Editor.

Thank You
Sir: I wish to thank you for your two checks for ideas which I submitted to your "How To Do It" column in the American Builder.
I would at this time like to take out a one-year's subscription to the magazine for which I am enclosing a money order.
I think your magazine is a very alert, informative organ and your subscribers who submit ideas really enjoy seeing their ideas put into print truly and clearly, as yours are.
Fred B. Chott, Cicero, Ill.

Letters to the Editor should be sent to 79 W. Monroe St., Chicago 3, Ill. Your comments are invited.

AMERICAN BUILDER

Let's face it! Up to now, hardwood floors and radiant heat just haven't been able to live happily under the same roof. You know the problems. Unsightly cracks during the heating season, due to shrinkage. Bulges from expansion due to summer moisture.

Now Parkay comes up with the happy solution—Gothic Oak hardwood flooring. This wood has the quality of changing less dimensionally than our other flooring woods. Applied directly to the concrete with Parkay Adhesive, Gothic Oak will vary the least dimensionally during these alternate periods of dry heat and excessive moisture.

You get a beautiful floor in the bargain, too. Gothic Oak's rich, brown color extends throughout its full thickness. Factory finishing protects and accentuates its natural beauty. Gothic Oak ready-finished hardwood flooring is available in 8" x 8" units (illustrated above) and 12" x 12" units made up of four 6" sections. Both are 5/16-inch thick and have beveled edges.

Write today for new free bulletin on Parkay Gothic Oak for radiant heat service. Parkay, Incorporated, 5000 Crittenden Drive, Louisville 9, Ky.
Better Values—Quicker Sales

YOU can build longer-lasting value—enduring beauty, stronger sales appeal—into your new homes by reinforcing all concrete construction with American Welded Wire Fabric.

This modern prefabricated reinforcement binds foundation, basement, walls and floors into a solid unit, which resists excessive settling. The common causes of cracked plaster are controlled, thereby minimizing the danger of dampness and seepage, warped floors, sagging baseboards and other damages that would, in time, detract from the appearance and dollar value of your homes.

Also in terraces, sidewalks, curbs and driveways, the many small, closely spaced steel members of U-S-S American Welded Wire Fabric minimize the effect of crack-causing stresses and strains, prevent unsightly fissures and breaks, hollows and bulges. That means your homes and their surroundings continue to look their best for years, without undue expense for maintenance and repairs.

Send today for illustrated folders which show how American Welded Wire Fabric reinforcement builds more sales appeal into concrete homes of all sizes and types. Address requests to American Steel & Wire Division, Room 846, Rockefeller Building, Cleveland 13, Ohio.
NEW SHERWIN-WILLIAMS PRODUCTS
FOR DRY WALL FINISHING
FASTER...PERMANENT...BETTER-LOOKING

SILICON JOINT FILLER: Ready-to-use . . . eliminates wasteful joint cement mixing. Works easily . . . requires minimum sanding! This filler adds tensile strength to joints.

SILICON STIPPLE TEXTURE: Brush, roll, trowel it on—then stipple. Possible to get a variety of tough, permanent finishes that hide imperfections.

SILICON MIX: Add to primer and finish coat for sand finish. Consists of specially prepared silica beads that stay in suspension. For best results use in QUALI-KOTE!

QUALI-KOTE WALL PAINT: Fast drying, washable, provides a vapor seal. Adds the final touch of beauty to your dry wall job. Available in an array of colors and white!

THESE SHERWIN-WILLIAMS PRODUCTS
SAVE MOTIONS, MIXING, MONEY!

- Hide joints and nailheads permanently
- Save time and labor
- Eliminate waste
- Do away with joint shadows

Now you can recommend and use dry wall construction and be sure of a good finished job that will stay beautiful! Five years of research—two years of tests—have proved the Sherwin-Williams Dry Wall Finishing Systems superior! When used as recommended over properly prepared surfaces, these systems provide a permanently sealed joint . . . a durable, washable wall coating in your choice of textures . . . plus a variety of beautiful colors.

For high-quality, dry wall finishing methods, call your Sherwin-Williams representative today. He's listed under PAINT in your classified phone book.

For a copy of our booklet, "Sherwin-Williams Dry Wall Finishing Systems", write . . .

THE SHERWIN-WILLIAMS CO.
101 Prospect Ave., Cleveland 1, Ohio
FOR EASY CONTROL, SURE-GRIP HANDLE IS KEPT MINIMUM DISTANCE FROM BLADE. IT'S CLOSE TO CENTER OF GRAVITY FOR GOOD BALANCE.

HUSKY DIE-CAST ALUMINUM HOUSINGS GIVE LIGHT WEIGHT PLUS DURABILITY. MAN-SIZE SHOE GIVES FIRM SAWING PLATFORM.

STATIONARY UPPER BLADE GUARD IS DESIGNED SO BLADE MAY BE WATCHED FROM EITHER SIDE. DIRECTS AIR FLOW SO SAWDUST IS BLOWN CLEAR OF GUIDE LINE.
ELECTRIC WALL INSERT HEATERS

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

ALSO PORTABLE HEATERS & FIREPLACE LOGS

Specify SHEPLER for YEAR 'ROUND COMFORT...

RADIA VENTILATING exhaust FANS
HIGH QUALITY • LOW COST
Because they are designed to meet any installation requirement or space limitation, RADIA ventilating fans for kitchens, bathrooms, TV or other rooms have been the choice of leading architects, builders and homeowners for over 31 years! Ceiling, wall, duct, chimney fan types, in many styles, sizes and outputs. Automatic, pull-chain or remote control operation. Chrome, white, Durenamel or cost aluminum polished grilles.

SEND FOR NEW COMPLETE CATALOG

RADIA Automatic CEILING TYPE FAN

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

SHEPLER Manufacturing Company
1229 GOEBEL STREET
PITTSBURGH 33, PA.

ON and OFF the RECORD

SLUMS—Many observers including American Builder have always maintained that the slum problem could be solved quickly and easily by enforcing local ordinances. National Association of Real Estate Boards which has taken the same stand is now engaged in a campaign to enforce laws locally. Realtors in 111 cities in 32 states are campaigning militantly.

EXAMPLE—Corpus Christi realtors found that they needed enforcement rather than new laws. Using radio, press, speakers before civic groups and caravan tours through neglected areas, they got enforcement that led to more than 1,200 law actions and 100 complete demolitions. Numerous similar results are on record since the campaign started.

NAREB SURVEY—It showed that in 251 cities reporting on housing law enforcement, city ordinances were not being enforced in 58 per cent of the cities before the campaign began.

REINFORCEMENT—With such a good start on the part of the realtors, the task of eliminating slums could be expedited greatly with reinforcement from builders and retailers. A united industry demanding enforcement could eradicate slums quickly.

PUBLIC HOUSING—50,000 units were authorized for 1952. President Truman requested an authorization of 75,000 for 1953. Congress set the maximum at only 35,000, and wrote an important rider.

THE RIDER—It is to the supplemental appropriations bill, and reads as follows: "No part of this appropriation (HHFA) may be used for administrative expenses or to pay salaries to any employee within the Public Housing Administration or for any other purpose so long as that agency proceeds with any public housing project after such project has been rejected or previous approval thereof cancelled by the governing body of the locality by resolution or otherwise or by public vote, and the governing body has tendered the United States full reimbursement of Federal funds advanced on such project prior to such cancellation and a release from all obligations incurred under such project."

PROBABLE RESULT—It is believed that the rider will stop FHA from going ahead with a project after it has been rejected locally.

LOS ANGELES M.D.'S—Los Angeles County Medical Association recently issued a bulletin headed, "Socialized Housing is Our Battle Too." It makes three statements then elaborates on them. They are:

1. "proposed housing measure presents a challenge to the medical profession."

2. "The campaign to convince the public that the program provides slum clearance for the needy is completely false."

3. "Socialized housing endangers our democratic processes as much as socialized medicine."

Score one for the M.D.'s. It's up to the housing industry to reciprocate in kind.

RETAIL MARKUPS—A recent survey conducted by the Ohio Association of Retail Lumber Dealers reveals that the average markup on cost by Ohio lumber dealers was 37.5 per cent in 1951. It was 40.1 in 1949 and 38.4 per cent in 1950.

PROFITS—The same survey shows a net before taxes of 6.9 per cent in 1951. This is practically the same as the 1949 figure of 6.8 per cent. Both are considerably less than the average net of 8 per cent in 1950, the largely to an increase in volume of 28 per cent over 1949.

TREND—In general, the survey discloses increasing competitive pressure, a leveling off of sales volume, but a considerable improvement in managerial efficiency.

COST IS COST—We heard a story the other day about an Indiana polis roofer who responded to the frantic appeal of a home owner to come quick and fix a leaky roof. The roofer quickly dispatched a truck with a driver, a roofer and a helper to the scene of the leak. When the crew arrived they found the trouble to be only the owner's failure to close an attic window during a driving rain-storm. The crew closed the window, and the roofer sent the owner a bill for $18, clearly specifying that he charge was for closing an attic window. Owner kicked, roofer filed a lien on the property. Finally, the owner saw the light, paid the bill, and subsequently did business with the roofer. It pays to stick with your guns when you are right.

HERE'S ANOTHER—Friend of ours with a new automatic shift automobile couldn't start it one morning. Called a service station, and got... (Continued on page 48)
FOR WALL AND CEILING CORNERS AND JOINTS WHEREVER PLASTER IS APPLIED...

Keymesh-

NARROW

NEW...ECONOMICAL SOLUTION TO AN OLD PROBLEM!

Pre-formed for Corners...lies flat, too...while Keymesh-NARROW is purposely supplied pre-formed for corners, it still lies flat in the roll and when applied on flat surfaces. It forms easily for corners by merely flexing the cut piece...holds its shape or can be re-shaped if desired. Its narrow width and low cost permit a fast, economical reinforcing job on any location where interior plaster is used...and helps prevent future crack troubles!

SAFE HANDLING...IMPROVES BOND AND REINFORCEMENT

Keymesh-NARROW will not injure the hands, because the smooth selvage edges eliminate this hazard. It's galvanized against rust, too. And, the open mesh permits the brown coat to flow through and around the mesh giving a generous bond of plaster to rock lath, insulation lath, etc., embedding the steel wires...thus making a strong, reinforced section where needed...with an even base for the second coat...and a firm, smooth finish!

SIZED RIGHT...FOR EVERY PLASTER REINFORCING JOB

Keymesh-NARROW is manufactured in 150 foot rolls in several widths. For corners and joints it is made in 4", 5" and 6" widths, 1" mesh, 18 gauge...4½" and 6" widths, 17 gauge. For joints, also in 6" by 1" mesh, 20 gauge. For reinforcing above large windows and openings, 12" with 1" mesh, 20 gauge is recommended. Keymesh is also available in 3 and 4 foot widths for easy overall lathing reinforcement practice.

KEYSTONE STEEL AND WIRE COMPANY
Building Materials Division Peoria 7, Illinois

KEEMESH • KEYMESH-NARROW • TIE WIRE • WELDED FABRIC • NAILS KEYSTONE NON-CLIMBABLE FENCE • KEYSTONE ORNAMENTAL FENCE

WRITE FOR PRICES AND OTHER INFORMATION ON KEYMESH PRODUCTS
On and Off the Record
(Continued from page 46)

prompt service. Service man checked connections, found everything OK. Looked at shift panel, and discovered that friend had lever in "O" position—no start. Shifted lever to "N", and asked for two dollars. Friend was so embarrassed he tipped serviceman two dollars in addition to fee, and said he hoped the experience would remind him to put the damn lever at "N."

NO COMPLAINTS—Since the New Jersey VA adopted its compulsory warranty procedure throughout the state last March 1, it hasn't received a single complaint from a new home owner, reports John S. Wright, executive director of the New Jersey Home Builders Association. This speaks volumes for the plan, which was drawn up by builders themselves and okayed by VA.

LOS ANGELES TIMES—This metropolitan daily recently carried a full-page advertisement entitled, "Is Indecision Robbing You of a Home of Your Own?" The ad cited ten facts in support of home purchasing now. Since most metropolitan dwellers carry important real estate and home builder advertising lines, many of them might be interested in a similar house ad of their own, particularly in connection with national home week. Why not ask your local newspaper editor?

RIGHT TO STRIKE—Guarantee Survey of the Guaranty Trust Company of New York asks the question, "Will Labor Yield a Cherished Right?" It then says, "By organizing and bargaining industry-wide, labor unions in essential industries may be risking the right to strike because the impact of a strike on the entire national economy becomes socially intolerable."

MONOPOLY—"Experience," continues the Survey, "is making it increasingly clear that labor monopoly is as inimical to free enterprise as any other kind of monopoly. Again after 62 years the nation is facing the necessity of choosing between regulated monopoly and free competition. In the Sherman Act the vote was cast for free competition." Monopoly is never good for anyone, including the monopolists, and the time is drawing near for an equitable solution of the labor monopoly.

BRAB—That's Building Research Advisory Board—has completed a year-long study disclosing numerous conservation measures which, if stated would make significant savings in material and other costs.
Nation-wide survey answers a question important to YOU

**Question:** Which vinyl-asbestos flooring Wins the greatest User Preference?

**Answer:** ARISTOFLEX

Here's why

Can be installed on, above, or below grade This is possible because Aristoflex is vinyl-asbestos from top to bottom with no felt backing. It is tough, durable, flexible. So, you can specify Aristoflex as a multi-purpose flooring, ideal for practically all installations.

Rich, new CORONATION COLORS

The bright, sharp colors of Aristoflex are outstanding. Colors and marbleization go clear through each tile. Aristoflex maintains its sparkling beauty for years and years. You must see samples to appreciate the superior colors of Aristoflex.

Greaseproof

Greases, bleaches and turpentine cannot deteriorate Aristoflex. It is really greaseproof. And Aristoflex cleans easily — never needs waxing. It's smooth, non-porous surface sheds dirt, wipes clean with a damp mop.

Unchanging Quality

Aristoflex is made from carefully selected and tested raw materials. It is manufactured under a rigorous method of control that assures a uniform high standard of quality. You can always specify Aristoflex with full confidence that it will meet your most exacting requirements.

LOW COST

Standard-gauge Aristoflex is comparable in price to greaseproof asphalt tile, yet it is far superior. Thus, you can give your clients the many advantages of modern vinyl-asbestos flooring at a price that meets the requirements of even low-budget projects. Aristoflex is also available in the 1/8" heavy-duty thickness.

Keeps installation costs at a minimum

Aristoflex requires no special cements, ordinary asphalt tile adhesives do the job. And standard-gauge Aristoflex cuts clean with a torch. It lays in tightly, immediately, because of square corners, clean edges and flexibility. Installation is fast and easy, cutting labor costs.

Resists acids, alkalis, petroleum, fire

A high percentage of those questioned reported this resistance a prime factor in the wide acceptance of Aristoflex among builders and home owners alike. More and more users are demanding this and the other inherent characteristics of vinyl-asbestos in the floors they buy.

Resilient -- Good Sound Absorption

Because Aristoflex is resilient underfoot it is comfortable and quiet to walk on. These properties make Aristoflex especially desirable for institutions and office buildings.

Mail coupon for Details!

**MASTIC TILE CORPORATION OF AMERICA**

Dept. 59, Newburgh, N. Y.

Send specifications data and complete details about low-cost MASTICO ARISTOFLEX vinyl-asbestos tile flooring

**NAME**

**FIRM**

**STREET**

**CITY**

**ZONE**

**STATE**
How an Attic Was Transformed into Luxury Living Space

This unused attic area was quickly converted into an attractive bedroom, den, study or child's room.

Before remodeling the space was used for the storage of a miscellaneous assortment of odds and ends. This same space is shown in its completed form as a combined bedroom and study. Walls and ceiling are finished in insulating board plank, with accent areas such as the egg-crate arrangement of shelves on both sides of the couch, book shelves and built-in desk finished in pine trim to receive paint.

A number of interesting features that save space were introduced. The slope of the roof permits a portion of the couch to roll back into the unused space, thus affording comfortable seating space until the bed is pulled out at night. The table top has the same form as the egg-crate shelves. The top is hinged at the bottom of the shelves and swings up into a closed position when not in use.

All walls and ceilings are insulated with double-thick (Continued on page 52)
Why does "rain" often form inside roof spaces of a crowded store or school? (pages 19, 32)
Why does moisture gather on a water-and-vapor-proofed concrete floor? (page 32)
Why is it wrong to vent cold roof spaces to a warm inside space? (page 33)
Does a concrete floor slab lose heat only at the edges? (page 40)
Do "dead air spaces" exist with respect to heat flow? (page 16)
Why do metals radiate and absorb less heat than wood, plaster, rockwool? (pages 13, 46)
Why replace low-conductive air with denser materials of greater conductivity, i.e. ordinary insulation. (pages 11, 13, 14, 29)

The answers to these and numerous other problems of heat and vapor flow are found in the pages of the Revised Fifth Edition of
SIMPLIFIED PHYSICS of Vapor and THERMAL INSULATION
By Alexander Schwartz

Written in simple language easy to understand, yet accurate and complete enough to gratify the scientist. Crammed with information the engineer, architect, public official, builder, contractor, insulator, heating installer, need. Hundreds of universities and technical schools use previous editions as a text. 56 pages of Facts, Figures, Charts, Illustrations, and Explanations of Heat and Vapor Flow; Vapor Permeability; Condensation; Dry Rot; Conduction and Density; Convection; Radiation and Emissivity; Reflection and Absorption. Suggests solutions and illustrated techniques for practical problems of insulation installation, condensation, protection against heat loss or intrusion, radiant heating; cold storage.

For The First Time
TABLE OF ABSORPTIVITY AND EMISSIVITY OF MATERIALS
Plus, Revised and Amplified, the Famous CHART OF THERMAL INSULATION VALUES

These 2 charts are indispensable to anyone interested in building and heating. THE VALUABLE MANUAL IS FREE! Just fill in the coupon below.
blanket insulation. Metal clips are secured to inside face of studs and to furring strips nailed to ceiling joists. These clips hold plank facing tightly to framing without being exposed in the room.
Shawcrest Park homes feature 8-cu ft. Westinghouse Refrigerators, Speed Electric Ranges, Dishwashers, Laundromats, and Clothes Dryers (all included in the purchase price of $14,250 for a 3-bedroom home). Builders: Shawcrest Builders, Inc., Morris M. Shore, President.

... of course, it's electric!

... Says Experienced Morris M. Shore, Prominent Long Island, N. Y. Builder

“My experience in home building during the past 18 years has proved to me the value of supplying homes with the best available electric appliances, as well as the highest standard construction materials.

“This policy has become more important during the past few years because of the increasing demand by home purchasers for complete kitchen and laundry equipment, as part of the basic dwellings.

“In my new Shawcrest Park home community—which opened this July in Wantagh, L. I.—I have used Westinghouse Refrigerators with Freeze Chests, Dishwashers, Electric Ranges, Laundromats® and Clothes Dryers. This resulted in an unusual amount of interest among homeseekers.

“I chose Westinghouse Appliances because of their durability, reliability of service, competitive price, quick delivery and immediate repair insurance by local service bureaus.

“I also find that home purchasers are familiar with the Westinghouse name and will ask for it more often than any other brand.”

If you, Mr. Builder, are looking for a sure-fire merchandising and sales program for your homes, look to Westinghouse. Contact your Westinghouse Distributor or write direct.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division • Mansfield, Ohio

A FULL LINE OF ELECTRIC APPLIANCES, MODELS AND SIZES

FROST FREE® • VENT FAN • LAUNDROMAT® • DRYER • ELECTRIC DISHWASHER • WATER HEATER • WASTE-AWAY® • RANGE

* T. M., U. S. Patent Issued: Nos. 2,459,173 and 2,324,309

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

SEPTEMBER 1952
TECHNICAL GUIDE
for Builders and Craftsmen

Cupola for Garage Roof

This cupola is designed for use on the roof of a ranch-type house having a 5-12 pitch or better. Placed over the garage portion of house it helps to break up the long, plain roof surface. The water table should be kept as low as possible to just clear the ridge board of shingles. The four hips are cut plumb like commons against a 2x2 inch pole.—J. G. Caldwell, San Mateo, Calif.

A One Man Method for Dry Wall Application

The sketch, left, shows a method for applying dry wall panels on a ceiling with the aid of a simple jig. The jig is made of a number of 1-inch thick boards of sizes as indicated in the sketch. Each frame is secured to studs at ceiling line and butted against bottom plate at floor. Frames are placed about five feet apart. Sheets of material are placed on the frame and lifted into position at ceiling line.—R. H. Williams, Salisbury, Vt.

How to Adjust Power Saw for Special Work

Often when attempting to saw 3/8 inch from the end of a stud or rafter the sawed edge becomes jammed in the guard.

To prevent this condition, loosen the screw as illustrated, insert a short length of wire, one or two inches long; drill 1/8-inch hole in the lower end of the guard. Pull guard back, insert wire in hole, complete saw cut and return to original position.—Andrew J. Fauke, Dyersville, Iowa.
Our houses are selling fast, Bill, and I think Kentile throughout is one reason why. I think so, too. I've learned it pays to use quality products that customers recognize, yet are priced where they can afford them.

The outstanding durability of colorful Kentile is well known to both builders and buyers...makes homes look better...last longer...sell faster

Kentile helps sell small homes faster

Prospective buyers see and are sold by the beauty of Kentile Floors...know all about the extra years of service...the easy-cleaning advantages. Builders know that Kentile lowers construction costs...raises quality. And, both buyers and builders know that the nationally-advertised name is a plus selling point for resale as well as original purchase.

Kentile goes down speedily, economically...over any smooth, firm, interior surface...even below grade over concrete in direct contact with the earth. Once down, Kentile's wide range of modern colors are part of the floor for its long life...they can't wear off because they go clear through to the back of each tile. Find out how Kentile's many advantages can be brought to work for you...whether in new construction or remodeling. Contact the local Kentile Flooring Contractor or any of the conveniently located offices listed below.

KENTILE  
The Asphalt Tile of Enduring Beauty

KENTILE  KENTILE  KENTILE  KENTILE

SEPTEMBER 1952
The Only Completely New Saw is the Revolutionary Delta 12"-14" Radial Saw

Only the Delta can give you all the advantages of 360° "Turret" Action!

Some Radial Saws Have a Solid Arm

These saws have a stationary arm that pivots 360° around the support column. Advantage—the saw can be placed against the shop wall, saves floor space. Disadvantage—the arm projects beyond the front of the table, interferes with the operator on many cuts. In addition, the saw pivots away from the work and off the table, limiting miter and productive capacities.

Some Radial Saws Have a Sliding Arm

These saws have a sliding arm that also pivots 360° around the support column. Advantage—the arm is out of the way on most cuts, work table is clear. Disadvantage—the machine requires twice the floor space and the operator must pull the entire arm. Like the solid-arm machine, the saw pivots away from the work and off the table, limiting miter and productive capacity.

Only Delta's Exclusive "Turret" Action, Above the Work Table, Permits Cutting in All Directions!

Delta's long-awaited new design brings you all the advantages of other types, and eliminates all of their disadvantages. It sets up against the wall in crowded shops, saves floor space, permits straight line materials handling. Work always moves on a level table.

The exclusive Delta 360° turret action enables you to pivot the arm parallel to the guide fence, provides a clear work table when needed. Most important of all, Delta's pivot action moves the saw toward the work, gives you full saw travel at any angle, allows cutting in all directions, right or left, above the table.

On any count, the new Delta is the most practical radial saw you can buy.
on the Market Today

Once again, DELTA does it first! An all new, completely redesigned machine which offers more than any comparable model in value, service, flexibility, safety and long life. Compare these exclusive features with any other radial saw in the same price field.

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How would you do it?
Ideas for the man on the job

Concrete Blocks in Assorted Sizes

The sketch indicates a form for making cement blocks in assorted sizes. Blocks of this size often come in handy on jobs where the block of standard size is too large or too small.

The form will provide blocks in four different lengths and in two widths. The form can be built according to the builder's needs.

The wood frame is constructed of 1x4's, and the dividers between blocks are made up of 26-gauge galvanized sheet metal with the ends set in saw cuts in the 1x4-inch frame. The frame is nailed to a metal bottom.—Arthur N. Nelson, Kansas City, Mo.

Car Jack Used for Clamping

Here's how to adapt the car bumper jack to serve as a clamp to hold freshly glued parts together. A notched block, preferably of hardwood, is bolted to the top of jack. Base may be used as a stand or it may be removed when it is unnecessary.—Os Johnson, Spokane, Wash.
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How would you do it?

Ideas for the man on the job

To Cut a Taper on Table Saw

Mark the board on which the work is to be done. Tack straightedge parallel to mark with the straightedge guiding work along the rip fence. — Werner Kraatz, Santa Cruz, Calif.

How To Make a Convenience Outlet Template

Instead of trying to cut holes in gypsum board to fit convenience outlet boxes as indicated on sketch at (A), it will be easier and quicker to cut holes for the same as shown at (B). The finish plates are 2½ x 4½ inches so they will cover. — J. G. Caldwell, San Mateo, Calif.

Level Made from Plywood

A simple level may be made from ½-inch plywood. A carpenter's square is used in marking a center line as guide for plumb bob. Before marking, reverse position of level to check line. A small hole is bored near top of line for fastening plumb bob. — Arthur N. Nelson, Kansas City, Mo.
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How would you do it?
Ideas for the man on the job

Jig for Fitting Shingles on Gable

This jig will save much time when marking the angle cuts on asbestos shingles. The bottom 2x4 shall be four feet long with the upright member one-half the length of the other. These are braced with a 1x4 which represents the pitch of the roof. To mark off shingle, make a pencil mark where cut is to be made and then move the shingle along the bottom 2x4 until the mark lines up with the upper edge of the 1x4 member. Care must be exercised to see that the first shingle is nailed on perfectly level.—Herbert E. Fey, New Braunfels, Texas.

Weatherstripping Garage Doors

Sketch above indicates two methods of weatherstripping upward-acting garage doors. This makes for a better and tighter fit and also cuts down excess friction from stop pressing on face of door.—Paul R. Kersten, Greensbury, Pa.

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SEPTEMBER 1952
How to Build a Watertight CONCRETE BASEMENT WALL

In most sections of the country an overwhelming majority of home owners want a basement—and they want it watertight. Remember, it costs far more to repair a leaky basement than it does to build it watertight in the first place. Leaky basements do more than annoy and inconvenience home owners; they also discredit the builder. Here's how to build a watertight basement wall with concrete masonry.

1. Build cast-in-place concrete footings at least 16" wide and 8" thick. Make sure they are carried to firm soil below the frost line.

2. Using mortar of good quality, place a full bed on the center of the footing prior to laying the first course of concrete block.

3. Lay succeeding courses of concrete block plumb and level, using horizontal and vertical face shell bedding as pictured above.

4. Apply mortar to vertical face shells of one end of next block to be laid in the wall and then press the block firmly into position.

5. Since the wall is only as strong and as watertight as the mortar joints be sure to compact all mortar joints with a jointing tool.

6. Use a solid top concrete block or fill the cores with concrete in the last course in the wall that will support the floor slab or joists.

7. Except in dry climate or well-drained soil lay drain tile around outside of footing and cover with 12" to 18" of coarse gravel.

8. Apply two 1/4" coats of portland cement plaster to earth side of wall from 6" above finished ground line down to the footing.

9. Brush 2 coats of hot bituminous material over plaster. Brace wall with first floor and connect drain tile to outlet before backfilling.

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**DRIVE-IN SHOPPING CENTER**

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**Arden Town Shopping Center in Sacramento, California used Zonolite plaster throughout... affords greatest possible fire protection. Plasterers save time in preparation and cleanup with Zonolite. No messy sand pile to slow up jobs.**

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**Parkview School, New Bedford, Ind. Use of Zonolite Acoustical Plastic in all classrooms, corridors and auditorium, combines maximum fire protection with 0.65 noise reduction, at rock-bottom cost.**

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**Charles J. Schuh Bldg., St. Petersburg, Fla. Architect Wm. B. Harvard adds insulation value, fire safety, sound control with Zonolite plaster on walls and ceilings, Zonolite insulating concrete on the roof, and Zonolite Acoustical Plastic on ceilings.**

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**Residence and Office, Johnson City, Tennessee. Zonolite concrete under radiant heating coils provides maximum heating efficiency, low heating cost for architect, Alfred H. Abernathy.**
Q: I'm disgusted. I want to use a fireproof sheathing next time. Any suggestions?
A: Certainly. Use one made of gypsum. Gypsum is rock—it cannot burn.

Q: What's it covered with?
A: A tough, heavy paper that's...

Q: Hold it! I've heard about that cover. They say that it can't be stored outdoors.
A: Outside storage on the job is no longer a problem. It was licked by modern research—like a lot of other old-time building material bugs. Today's gypsum sheathing is water-repellent—sheds water like a duck!

Q: How about the wind resistance?
A: Gypsum sheathing is tongued and grooved—locks together as tight as a drum.

Q: Can it hold building paper satisfactorily?
A: You won't even need building paper with it—unless a local building regulation requires it.

Q: How about wastage?
A: Little or none—because every cut-off piece, regardless of size, can be used. 1000 square feet of gypsum sheathing covers 1000 square feet of surface.

Q: Fireproof, windproof, waterproof—I suppose you'll tell me it's ageproof.
A: No, but I can show you letters from builders who have reported no deterioration or loss of strength of gypsum sheathing that was installed 25 years ago. And in the recent Topeka floods, gypsum sheathing was one of the few building materials that withstood devastation.

Q: Now what about insulation?
A: You'll get adequate insulation in most cases. Besides the amount provided by the gypsum sheathing itself, you must remember that you always use a finish too, like siding or shingles or brick. This combination, plus the air pocket between, provides good insulation.

Q: What size does it come in?
A: In the giant size—for large surface application—2' x 8', 1/2" thick. One man can handle a sheet with no trouble. It goes up fast, 16 square feet at a time; and easily—only 4 to 7 nails required; and it can be scored and snapped right on the studs.

Q: Any other features?
A: Gypsum sheathing won't warp, buckle or shrink. It defies dry rot, termites and other evils that vegetative building materials can't resist. You must remember that gypsum is not vegetable, but mineral. It's rock.

Q: It's everything I've wanted. Is it economical?
A: It's the least expensive sheathing on the market, as low as 50% less than other sidewall sheathing costs. This is a proved fact!

Q: I'm sold. Where can I get it?
A: Anywhere in America, because it's made throughout the country. And because it is manufactured under quality control, you'll never have the problem of various grades of gypsum sheathing. Every sheet is identical. Ask for it by this brand name—Weather-Shield Gypsum Sheathing, one of a great line of building materials produced by Certain-Teed Products Corporation, Ardmore, Pennsylvania.
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As many questions and answers as space permits will be published monthly in American Builder, under the head—“Ask The Experts.”

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**How to Extend the Life Of a Slate Roof**

My problem is extending the life of a large slate roof on a junior college building. I first thought of using hot pitch. What would you suggest? The building is quite old.

A. L. O., Cranford, N.J.

We recommend that you consult a competent and reliable roofer for a complete examination of the condition of the existing slate. If the slate has softened to the extent that it is in a scaly condition and is no longer solid enough to bear the weight of approximately 100 pounds, we believe that the only sage and economical solution is the application of a new slate roof.

If the slate shingles are still sound, we would recommend that they be brushed lightly with linseed oil which has been thinned with turpentine. Linseed oil will have a tendency to darken the roof and temporarily preserve the material. This, of course, is not permanent and within two or three years another application of linseed oil will be required.

We do not recommend the use of pitch or asphalt compounds as these materials have a tendency to harden and thereby close up the existing joints between the slates, which, in turn, damns off the natural flow of water.

North Bangor Slate Co.

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**Advice on Building Fixed Sash for Double-Glazed Window Wall**

I am a carpenter and builder and have received a great many helpful ideas from American Builder. I am planning to build a home using double glazing for window walls. I would use 2x6’s or 2x8’s for uprights and horizontal window members. The uprights are to take the place of studding. The outside panes would be held by glazing compound and the interior panes by wood stops.

Is this practical for Wisconsin climate? How much space should there be between the exterior and interior panes? What is the proper way to ventilate so as to eliminate condensation?

A. K., Reedsburg, Wis.

Your plan to use 2x6’s or 2x8’s for uprights and horizontal members for the window wall frames allowing the studs or uprights at the jambs to serve a dual purpose is excellent. Your method of applying the two thicknesses of glass, the exterior pane held by glazing compound and the interior pane by wood stops is also good. The distance between the two thicknesses of glass should not be less than one inch. This method of window construction can be used in any climate.

To make the space between the two thicknesses of glass effective as an insulator, it should be sealed as tightly as possible. The infiltration of air between the glass wall will cause condensation. This is the very thing that you are trying to avoid in applying double glazing.

It would be advisable to provide for ventilating sash in the unit. With a series of units alongside of each other to form a window wall, one of the sash in each unit should be hinged at the top to swing upward, either out or in. This is called the hopper type. Swinging the sash out forms a canopy and prevents rain from entering the room when the sash is open. This is the preferred method.

---

**Calculations on Rafter Lengths and Cuts**

I have a hip roof to cut, the length and width of which may vary but the pitch is 8/12. I would like to have you show me the mathematics involved to calculate the length per foot of run of the main rafters, the hip or valley rafters, the jack rafters, cripple rafters and how to get the side cut of jack rafters, hip rafters and cripple rafters.


The answers to these questions and many others relating to lumber framing problems, rafter lengths and cuts are contained in the American Builder booklet titled “Construction Lumber.” This is a reprint of articles which have appeared in past issues on this subject. The booklets are available from American Builder.

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**Suggestions for Solution to Moisture Condensation Problem**

During the summer of 1951 I built a house with gypsum board interior wall finish, reflective moisture barrier paper on the inside of the studs, building paper and asbestos shingles on the outside. Interiors of all the rooms are painted with rubber base paint.

As the winter months advanced I found that I had a very serious problem with condensation on all of the windows and on the outside walls of the northwest and southwest bedrooms. I put storm sash on all windows except the bathroom downstairs and the two bedroom windows upstairs. One of the rooms upstairs is finished and there is no trouble with condensation on the walls there but the unfinished room collects moisture which forms as frost and ice on the nail heads and boards. When this thaws out, it drops in water form to the floor. I lowered the window about two inches but...
that does not take care of the matter unless the connecting door to the other room is left open.

There is a space gas heater, vented, in the living room, an unvented gas refrigerator, an unvented apartment size gas range, an unvented top gas hot water heater and an unvented bathroom wall gas heater. Also, the closet under the stairway has an open ceiling.

The dehumidifier being used collects about two quarts of water on cold days. I notice an increased amount of humidity on wash days as it does not seem to have any way of escaping.

I wonder if the situation could be helped by removing the gypsum board and replacing it with board without the rubberized paint. At the same time we could investigate the reflective moisture barrier paper to see if it is loose enough to allow moisture space and if not replace it with batt insulation.

C. M. N., LaPlata, Mo.

The fact that you have condensation on all of the windows indicates that the relative humidity within the house is excessive. Such excessive humidity usually indicates a source of moisture other than living habits, which must be located and eliminated. If the house is of basementless construction with a crawl space, the uncovered earth beneath the house would contribute a great deal of moisture. This moisture comes to the surface in winter and is evaporated as water vapor. If there is a concrete basement, there may be moisture in the concrete even though it appears dry. A rubber mat or a piece of linoleum laid on the concrete floor for at least 48 hours would indicate by the amount of moisture underneath it, whether you are getting moisture from this source.

The reflective type of material used in the walls is also a good vapor barrier when it is properly stapled at top, bottom and all sides. In the attic we suggest that lovers be installed at each gable end, as recommended in the September, 1950 issue of American Builder or in the HHFA pamphlet, "Condensation Control." These sources also indicate corrective measures for minimizing moisture to allow moisture space in crawl spaces or damp basements beneath the house.

We note that you have quite a number of unvented gas appliances. One of the products of ignited gas is water vapor. These appliances may contribute an amount of water vapor to your interior areas. The remedy is to find some way to vent these to the outside. On wash days special care should be taken to see that the house is especially well ventilated. A booklet titled "Preventing Damage to Paint in Your Home Involves Knowing Moisture Vapor Controls" suggests ways and means of regulating indoor humidity by periodic ventilation.

We do not recommend removal of the gypsum board and replacement with another unprinted board. The rubberized paint is an excellent vapor barrier. This, with the other barrier you have used should keep the excessive humidity from entering exterior walls and doing extensive damage.

National Mineral Wool Association

Uncovered Earth Under House May Cause Paint Peeling

I find a great number of houses where the paint has come off the siding in patches. The houses in question are old houses that have no storm sheathing and the siding is applied directly to the studs. The walls have been filled with blown mineral wool insulation.

Does this mineral wool cause moisture to condense or is it possible that rain can be pulled in under the siding laps and cause the boards to become damp and make the paint peel? The paint peels off during the winter months and poses a problem for spring painting.

E. A. R., Guthrie, Kentucky

An extensive case of paint blistering was discovered in the Knoxville, Tenn., area. Investigation disclosed that practically all of the houses, whether insulated or not, had paint blistering which was caused by uncovered earth beneath these houses. In wet, rainy winters, the moisture rises to the surface of the ground and evaporates to form water vapor. This water vapor is pulled up into the exposed wall cavities or into the interior of the house, if the wall cavities happen to be blocked off with vapor barriers. Many of these houses were tight, unventilated units, and this tremendous source of water vapor added to that generated by living habits presented a very serious moisture problem.

If such is the case, a very simple remedy would be to cover the earth with 55 pound roll roofing lapped at least three inches. This will prevent the evaporation of water vapor from the earth and reduce the high humidity conditions which exist in houses having this crawl space trouble.

Insulation should be no more blamed for a condensation problem than any other part of the construction of the house. This includes windows, foundations, damp basements, uncovered earth, weather strips, storm sash or the paint. Troubles from excessive moisture may occur in a home with or without these materials when the following steps are not employed to control moisture:

1. Locate the source of moisture that is causing the trouble and eliminate it or correct it so that it will not add water vapor within the home.

2. Isolate the entrance of water vapor into exposed walls, floors and ceilings by the use of vapor barriers. These may be good paper vapor barriers in new construction or certain types of paints, such as enamels, aluminum, or rubber base in at least two coats.

3. To accompany both of the other suggestions, steps to regulate the humidity within the home must be taken through applying the principles of regulated ventilation.

National Mineral Wool Association

Put Felt Over Plywood Before Hanging Wallpaper

We have a customer whose house was built about 12 years ago. It was dry-built with plywood on the inside walls. When the house was decorated the painter put felt over the plywood and then wallpaper over that. They now want to redecorate and will have to remove the felt when removing the wallpaper. Is it necessary to put felt over the plywood before putting on new wallpaper?

W. J. D., Columbus, Wis.

We recommend that 3/4-pound felt be applied over the plywood before wallpaper is hung. This has been found to be the most satisfactory solution to prevent any cracking or peeling of the paper at the panel joints. It also reduces grain show-through in the paper. After the paper has been removed the panels should be primed with an oil paint to reduce any grain raise from water in the paste, although this is not absolutely necessary. The 3/4-pound deadening felt or, if preferred, blanket wallpaper stock, should be hung with ordinary wheat flour paste to which is added a gelatine size. Butt and roll the joints and then hang wallpaper in accordance with standard procedure.

The felt may be omitted if the joints are taped and the panels are primed. With paper hung directly over plywood panels, the grain may show through to some extent. Where this is not objectionable, a harder wall finish is obtained.

Douglas Fir Plywood Association
Trim Finish Now Has "9 Lives"

Extra lives are added to the finish of Chromedge extruded aluminum moldings by B & T's rigidly controlled Chromalite process. The rich deep-toned luster of Chromalite is "locked" into the surface of the metal itself—it can't rub off in black streaks, and isn't affected by ordinary household cleaners and chemicals. Homeowners prefer it!

"Painless" Sink-Framing Methods

Get Better Results at Less Cost

Putting a frame around a cabinet-top sink used to call for "blood, sweat and tears." Now it's easy for any mechanic to do a first-rate job quickly with either of two new frames.

One is the Chromedge Sink-Lok frame, offering advantages that sound like a mechanic's dream:
No bolts or screws are fastened through the counter.
The sink-well hole can be cut straight through the counter—no mortising!
The frame supports the sink—no sink-mounting lugs needed!
No special tools are needed.
The frame overlaps coverings a full 1/4"—anchors them down!
Coverings don't have to be cut to exact dimensions.
Frame and sink can be removed easily for sink repairs, without damaging the covering.
Chromedge Sink-Lok frames are made for flat rim sinks of any size, to fit counter-and-covering thicknesses from 3/4" to 1 1/2".

Another cost-cutting Chromedge frame is the Tap-N-Rol. It features what might be called an "open" lip recess for the sink-top covering.
In other words, Tap-N-Rol frames have a vertical leg which is simply "folded" down tightly over the edge of the covering to finish the job. Special grooves in the securing flange "trap" waterproofing around the edge of the covering as the lip is bent down, assuring a permanently tight seal. Chromedge Tap-N-Rol frames come in all sizes, to fit various coverings.

Your Chromedge Dealer Has All The Answers

See your Chromedge dealer today for all of the best answers to metal retaining shape needs—for building and remodeling.
"I pay Only $2.10 a mile to run my F-1 Pickup"

says Richard K. Gilbert,
Denver, Colorado

"The Economy Run has really proven to me just how economical my Ford Truck is to operate with all types of loads and in all types of weather and roads," says Mr. Gilbert. Speaking of Ford power he adds, "My truck often has to carry material and employees to new, out-of-the-way houses on unimproved roads when other trucks can't make the grade." In the Economy Run his F-1 traveled 3695 miles and gas, oil and maintenance cost but $75.80 or only 2.05 cents a mile!

The famous Ford Pickup is but one of many models available. There's a Ford Truck tailor-made for your job.

Now! Up to 14% more Gas Savings
and more Speed Hauling power, too!

New LOW-FRICTION design in three new Ford Truck high-compression engines cuts friction loss!

Ford's LOW-FRICTION design cuts friction power loss up to 30% ! A new Short-Stroke principle reduces piston travel up to 20%—makes for longer engine life. New OVERHEAD VALVES give more efficient fuel feeding. New HIGH-COMPRESSION gives extra power on regular grade gasoline.

You can get new LOW-FRICTION design in three of the five great Ford Truck engines for '52. And you get more power than ever in the famous 239 cu. in. truck V-8 or the 254 cu. in. Big Six. See what's new in trucks at your Ford Dealer's!

DON'T GUESS! See just how little it can cost to run a truck in your kind of work. See the cost figures in this 144-page book showing results from the 50-million-mile Ford Truck Economy Run. See it at your Ford Dealer's!

FORD TRUCKING COSTS LESS
and FORD TRUCKS LAST LONGER!

Using latest registration data on 8,065,000 trucks, life insurance experts prove Ford Trucks last longer!
YOU'LL CATCH THEIR "AYES" WITH color

There's an extra bonus of eye-appeal and buy-appeal in Ruberoid Color-Grained Siding. For this asbestos-cement siding is decorator-designed in step with the modern trend to color. Whether it's new construction or a remodeling job, Color-Grained Siding will give any home a long-lasting coat of exterior beauty.

Builders all over the country have discovered the magical sales appeal of Color-Grained Siding. Home owners everywhere are enjoying the matchless satisfaction of lifetime protection in color...at greatly reduced maintenance costs.

Ruberoid has achieved the success of Color-Grained Siding by blending a rich shake texture with smart duo-tone shades. You can offer a choice of superb decorator colors to appeal to all tastes. And in multi-home developments you can plan an interesting variety that gives the appearance of custom design. If you haven't seen Color-Grained Siding yet, plan to stop in at your nearest Ruberoid dealers soon. He'll be glad to show you samples, quote costs and can probably direct you to homes in your own community where you'll find Ruberoid Color-Grained Siding "in action."

"Shadows" Help Sell Houses

Notice the rich, deep shadowlines that enhance the sidewalls in the photograph above. The secret is "ShadoWedge," a new undercoursing strip that gives Color-Grained Siding even more luxury. The 36" asphalt strips are tapered (1/4" thicker at the base) to thrust the lower edge of the siding shingle forward. "ShadoWedge" is easy to apply with a stapling gun over any sheathing material, eliminates need for sheathing paper and joint strips, gives added insulation, and provides a cushion for the overlapping course which minimizes breakage. Ask your Ruberoid dealer to show you "ShadoWedge," too.

The RUBEROID Co.

ASPHALT AND ASBESTOS BUILDING MATERIALS
KOHLER COSMOPOLITAN BATH combines fresh beauty, convenience, safety

The clean-cut design that gives the new Cosmopolitan grace of form and proportion also contributes to ease of cleaning, convenience and safety. A wide rim forms a useful bench, the end slopes for comfort, and the bottom is flat and wide. Kohler lavatories and other fixtures for bath and washroom match in style and quality.

The lustrous, glass-hard Kohler enamel is fused to non-flexing iron, cast for strength and rigidity.

The Cosmopolitan is available in the standard 5-foot length, and also 4 1/2 and 5 1/2-foot lengths. Width is 33 inches at center; height is 16 inches from floor to rim.

Chromium plated fittings include the Niedecken mixer, serving both bath and shower, for simplified control of water temperature.

Kohler Co., Kohler, Wisconsin. Established 1873
"Meet every need for automatic door closing . . .

with this Russwin Line

FOR SCREEN DOORS

This liquid door closer is comparable in quality of craftsmanship to the popular Russwin Surface Door Closer. It is compact, reversible . . . has a speed control adjustment. For smooth, dependable, long-life performance in high-frequency service, this liquid door closer is in a class by itself.

FOR SCREEN DOORS

The Russwin No. 5 Air-Controlled Screen Door Closer is specifically designed for residential service. It's made of wrought tubing . . . equipped with wrought brackets. Reversible for right or left hand doors. Application may be on outside, inside or between doors. Through trouble-free, long-life performance this Russwin Screen Door Closer is building hosts of satisfied customers.

FOR EXTRASPECIAL, HIGH-FREQUENCY SERVICE . . .

the Russwin "400" Door Closer is a logical selection. It is available as a Surface Door Closer or Semi-Concealed Door Closer. The "400" is the only door closer offering 4 combinations of speed control and "Silence" adjustment. It is made with one size of housing in five spring sizes. In strength of construction it has no equal. The "400" is a precision-made closer, designed to meet very exacting specifications.
Brixment meets new A.S.T.M. autoclave test!

At its meeting in June, the A.S.T.M. Sponsoring Committee on Masonry Cement recommended a new specification requirement for masonry cement — an autoclave test for soundness.

Sound mortar is essential for strong durable brickwork. To be sound, mortar must be free of constituents which may cause abnormal expansion after long exposure to weather.

Unsoundness in mortar material is readily detected by the autoclave test. This severe test rapidly accelerates the chemical reaction of mortar materials, and the slightest unsoundness is immediately revealed by excessive expansion.

Brixment more than meets the autoclave test. Therefore when Brixment is used, sound mortar and strong, durable brickwork are assured.

Louisville Cement Company, Incorporated Louisville 2, Kentucky
The Modern I
The simplicity of this one-panel design presents an opportunity for bold color treatments. Contrasting colors set off the panel, stiles and rails, producing a rich, three-dimensional effect.

The Modern II
The two panels and mouldings form natural color areas and allow a broad range of new decorative possibilities for doorways. Their smooth surfaces eliminate tricky brush work.

The Modern III
The three-panel combination of horizontal and vertical lines makes this design particularly versatile. It blends equally well with contemporary and traditional architecture and furniture styles.
Home-owners are on the lookout for those “extras” in home finishing that give them style, distinction and lasting pride. Now you can capitalize on this universal desire by including the modern beauty of G-P Decorator Doors in your plans. For remodeling schemes and new construction, these exciting custom-styled doors provide dramatic accents in traditional settings, harmonious unity in modern designs. And they lend themselves beautifully to unusual color effects through painting.

Low in price, there’s a complete range of sizes and grades for exterior and interior uses. See your lumber dealer or write for new G-P Decorator Door folder. Georgia-Pacific Plywood Company, 617-9C North Capitol Way, Olympia, Washington.

Available in either raised or flush moulding

GEORGIA - PACIFIC
PLYWOOD COMPANY

OFFICES OR WAREHOUSES IN: Augusta, Birmingham, Boston, Chicago, Cleveland, Columbus, Detroit, Lancaster, Louisville, Memphis, Nashville, Newark, New Hyde Park, New Orleans, Olympia, Orlando, Philadelphia, Pittsburgh, Providence, Raleigh, Richmond, Savannah, Vineland.

DOUGLAS FIR PLYWOOD • HARDWOOD PLYWOOD • GPX • SOUTHERN & WESTERN LUMBER • DOORS

SEPTEMBER 1952
Through these doors pass the most satisfied customers in the world ...

there's a trouble-free HASKO door for every opening

Where strength, beauty and durability are a necessity — there are Hasko Doors. The engineering features of balanced construction, gained in Haskelite's 27 years of wood lamination experience, insures you a door that is warp-resistant, has long life, and is of lasting beauty. You may buy cheaper doors, but none are more inexpensive in the long run than Hasko Doors.

The NEW READY HUNG door unit

Entirely Complete — Jamb, stop, trim, jamb, lock — everything installed — only 2 parts to handle. Install in 30 minutes using only hammer, nails and level.

Write today for catalog on any of the Hasko doors that interest you.

HASKO ROLLER DOOR — Another new Hasko packaged unit. Comes in single or multiple sliding door K.D. units. Can be easily installed in any rough opening in about a half hour.
DeWALT "3 adjustment action" helps you to build faster... at less cost!

You not only cut framing, jack rafters and bridging faster and more efficiently with a De Walt—but you can make 15 different cuts in less than 15 minutes!

Where most machines require at least 4 adjustments, DeWalt's "3 adjustment action" makes it possible to position the saw for any desired cut in seconds!

This flexibility speeds up cutting, reduces operator fatigue, and enables a De Walt to turn out as much work in ten minutes—as other machines will in fifteen.

DeWalt offers you unmatched precision, speed and versatility—you rip, cross-cut, plough, rabbet, tenon, bevel, miter and make many other cuts—a total of 15—in far less time than it takes ordinary saws.

DeWalt "3 adjustment action" saves you time... saves you money. See your DeWalt dealer or mail coupon below.

Economize by making your own cabinets, special trim or window frames. Cut costs by as much as $200 a house! It's easy—and you get perfect results every time.

Find out for yourself how DeWalt's "3 adjustment action" saves you time... saves you money. See your DeWalt dealer or mail coupon below.

DeWalt "3 adjustment action" helps you to build faster... at less cost!

DeWalt gives you 15 set-ups, 15 different cuts... in less than 15 minutes!

DeWALT POWER SAWS
DE WALT INC., Lancaster, Pa.
Subsidiary of AMERICAN MACHINE & FOUNDRY CO., New York

MAIL THIS COUPON TODAY!


☐ Please send me full details on the DeWalt Radial Power Saw Line.
☐ Please send me your informative "Saw Tips".

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ADDRESS ____________________________
CITY ____________________________ STATE ____________________________

SEPTEMBER 1952
Advance-Design

CHEVROLET TRUCKS

These
PLAIN HARD FACTS
are important to
economy-minded
truck buyers

Fact
No. 1

CHEVROLET LIST FOR LESS
First cost—the list price—is less for a Chevrolet than for any comparable truck capable of handling the same payload. Chevrolet's position as the world's largest manufacturer of trucks makes possible production savings that are passed on to you.

Fact
No. 2

COST LESS ON THE JOB
Proved Chevrolet truck features save money over thousands of miles. Time-tested Valve-in-Head engines, rugged hypoid rear axles, extra-sturdy channel-type frames, Flexi-Mounted cabs, Ball-Gear steering, Synchro-Mesh transmissions, all contribute to low operating costs with high dependability.

Fact
No. 3

EACH TRUCK TAILORED TO ITS JOB
Every Chevrolet truck is factory-matched to the job it's going to do. Tires, axles, frame, springs, engine, transmission, and brakes are right for the operating conditions and load. Whatever your job is, there's a Chevrolet truck to fit it.

Fact
No. 4

WORTH MORE AT TRADE-IN TIME
Chevrolet trucks traditionally bring more at resale than other makes costing about the same when new. Chevrolet trucks keep their value longer and give you real, substantial savings right up to the day you sell them. See your Chevrolet dealer soon.

CHEVROLET ADVANCE-DESIGN TRUCK FEATURES

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

CHEVROLET DIVISION OF GENERAL MOTORS, DETROIT 2, MICHIGAN

84

AMERICAN BUILDER
Roll Call for National Home Week
Shows Flags Flying in 32 States

In response to a survey made in June, the following chapters of the National Association of Home Builders replied that they were sponsoring observances of National Home Week in their Communities in 1952:

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Home Builders Assn. of Mercer County (Trenton)
Home Builders Assn. of Little Rock
Home Builders Assn. of Phoenix
Home Builders Assn. of Hartford County (West Hartford)
Home Builders Assn. of Fort Wayne
Marian County Residential Builders, Inc. (Indiana)
Home Builders Assn. of Sioux City
Home Builders Assn. of Des Moines
Home Builders Assn. of Sioux City
Associated Home Builders of Louisville
New Orleans Home Builders Assn.
Home Builders Assn. of Maine (Portland)
Home Builders Assn. of Maryland (Baltimore)
Home Builders Assn. of Greater Boston
Home Builders and Contractors Assn. (Springfield)
Master Home Builders Assn. of Worcester
Home Builders Assn. of Metropolitan Detroit
Grand Rapids Home Builders Assn.
Minneapolis Home Builders Assn.
Home Builders Assn. of Greater Kansas City
Home Builders Assn. of Greater St. Louis
Home Builders Assn. of Northern New Jersey (Hackettstown)
Atlantic Home Builders Assn. of New Jersey (Margate)
Here is a Harmonious Combination of Adobe, Glass and Brick

A massive wall of adobe brick, over 40 feet long, anchors this house designed by Roscoe L. Wood and built in Palos Verdes, Calif. It contains the fireplace and extends out to shield the lanai porch at the rear of the living-dining room. With the adobe are combined glass (for wall separating dining area and lanai porch), brick (in floor of dining area), and Plexolite, for roofing. This plastic roofing covers a rectangle left open in the roof over the fireplace, and covers the dining area and lanai porch. Drawing shows method of roof construction. Venetian slats are applied over the Plexolite to control sun penetration.
Saw Cuts at 30° to hold Aluminum Venetian Blind Slats

2"x2" - 5'-0" Long

Clear Mastic

5/16" Plastic Sheets lapped 2"

Flood Light

ROOF DETAIL FOR DINING AREA AND TERRACE

Well open to Skylight

Adobe Wall

Stone

Brick

Mahogany Veneer

Floor Line

Grade

Section
These Folding Doors Make Two Rooms of One

The living room end, designed to double as den, library or occasional guest room, depends for its success on the method used for closing off the space. Piano-hinged accordion doors in Philippine mahogany are soundproofed, and fold entirely out of sight into a wall cabinet when the space is used as part of the living room. As shown in the drawing, this space is separated from the main entry hall by cabinets. Door at left leads into a hall with a bathroom. The window wall has built-in planting boxes and cushioned window seats.

—from a house designed by Rosene L. Wood in Palos Verdes, Calif.
Here Are Compact Two-Compartment Bathrooms

Dividing a bathroom into two parts allows it to double for a powder room. This plan, by Roscoe L. Wood for a house in Palos Verdes, Calif., shows how the bathroom can be arranged to serve both the bedroom and the hall linking the bedroom with the main entry hall of the house.

Bathrooms and dressing rooms are neatly combined in the unit which serves the master bedroom of this house, occupying one end of the room. The usual medicine cabinet is missing. In its stead is a square mirror in heavy stainless steel set on the window ledge and lighted from behind. Cabinets are below sink in lavatory. Water closet is shielded by glass door. A circular heat diffuser is set in the ceiling with fan attachment which blows heat downward when fan is turned on.
COOKING PENINSULA, set at an angle, defines passage between kitchen and dining area. The range is a Western Holly table-top gas unit set in tile. Oven and broiler are recessed in wall. Note ventilating fan in ceiling.

**Kitchen for an Open Plan**

With the growing popularity of open planning in house design, the problem of how to handle the kitchen in such an arrangement assumes major importance. This unit, from a house designed by Roscoe L. Wood and built by the Palos Verdes Corporation near Los Angeles, solves the problem very well. No doors separate kitchen from living-dining room. The kitchen has been treated as much as possible in harmony with the living area.
CABINET LIFT swings food mixer out and up like a typewriter desk. This one is made by McMahon Bros. in Los Angeles.

GLAZED PHILIPPINE MAHOGANY cabinets do their part in tying kitchen in with living room. Include sliding glass doors. Walls and ceiling blend in color with general decorative scheme, and the floor of both kitchen and dining area is face brick in a terra cotta tone.

SEPTEMBER 1952

SLIDING GLASS DOORS and other features of cabinets detailed.
Low slung contemporary has two of the three proposed sections completed. House is 70 by 18 feet with a 30 by 20 foot two-car garage. Roofed auto pass-through ties house and garage together.

**This Contemporary Can GROW**

Budget minded prospects should be interested in this three-unit building plan.

House can be built in three sections: (1) Basic one bedroom area; (2) garage section and; (3) additional bedroom section.

Plans include a one or two bedroom addition.
Here is a house that should prove interesting to budget minded prospects, because it is expandable. A purchaser can build the basic plan and later add two bedrooms and a bath, and/or, the garage section. The house was designed by H. Roll McLaughlin for himself and built by Hugh Bremerman, Indianapolis builder.

Stubs for the later plumbing and electrical work are included in the 70x18-foot plan. The doorway to the left of the living room fireplace will be the entrance to the future bedroom section.

The house combines unusual materials in both the exterior and the interior. Brick, concrete block, and vertical redwood siding are used on the exterior, while brick, wood paneling, pine beams, and quarry tile are interior materials.

An interesting sidelight of the design is the sheltered motor pass between the garage and the basic house. The motor pass makes possible a large circular drive which lends itself to attractive landscaping.

Foyer entrance combines brick, wood beams above, and quarry tile floor. Note attractive planting.

Living room features oak paneling, beamed ceilings, and roman brick fireplace. Corner joint of the fireplace is interesting masonry construction. The herringbone design effects a good transition between vertical and horizontal roman brick.

Counter gate and louvered shutters separate dining room and kitchen. Sun room is at left.
Flat roof modern features large glass areas and light frame walls in post and beam construction.

House for Moderns Creates Home

A "House for Moderns," winner of a design contest, was the feature attraction at the 1952 Indianapolis Home Show. It is a modular planned flat-top, incorporating large glass areas and open planning. Sewell J. Mathre, Cranbrook art student, designed the structure.

Hoosier viewers were particularly impressed with the informal family activity area located in the center of the house. Here, the housewife can go about her daily chores and remain a part of the family group. The "In-Line" kitchen is a part of the activity room but separated from it by birch counter-height cabinets.

Utilities are housed in two cores. The first is a powder room and heater room combination. The walls of this unit separate the living-dining-activity rooms. The other utility core serves the main bath in the sleeping area. Its walls, in conjunction with storage walls, divide the sleeping area into three small bedrooms. Folding doors between the master bedroom and the activity room give the bedroom convertible uses. In defense of the small bed cham-

Two cores separate formal, informal, and sleeping areas. Open planning gives 1,400 square feet house a spacious feeling.

Artist's conception of the house gives a better view of the patio.
Show Interest

bers the designer theorized that all waking hours would be spent in the two living areas leaving the bedrooms for sleeping only.

Construction is a modified post and beam type. Posts are 4x6 fir placed 8 feet on center around the perimeter of the house. Roof joists are 2x12 placed 12 inches on center. The roof overhang is supported by 2x4 blockouts cantilevered back into the joists 24 inches on center, and faced with a 1x12. Between posts, light frame panels, insulated glass, or door and ventilating units complete the eight foot bay.

Judges for the Indianapolis contest included James T. Lendlrum, A.I.A., director, Small Homes Council, University of Illinois; Lloyd Vernon Moser, A.I.A., president, Indiana Society of Architects; M. L. Hall past president, Marion County Residential Builders Association; and J. F. Cantwell, managing director, Indianapolis Home Show, Inc.

Activity room-kitchen arrangement aroused the most interest

Below: a modernistic fireplace is a feature of the formal living room. The fireplace was backed-up to the powder-heater room core. Ceiling is plaster board, walls are pine paneled
This Home Has Quiet Dignity

THIS large two-bedroom house on a corner lot steers a steady course between advanced and conservative design, and in so doing has a quiet appeal which would attract most substantial buyers. Outstanding is the careful workmanship that has gone into it. Notice the brick work especially. The buff-colored Arkansas Roman brick accentuates the horizontal lines of the house and is laid so that the horizontal joints become a part of the over-all house design.

The entrance detail is unusually rich and well conceived, with planters, trellis, and low wall. Pleasant windows above the corner planter are for the dining area. Interesting also is the extension of the front wall to enclose a terrace off the living room at the side of the house. The house was built under the sponsorship of the Builders Association of Metropolitan Detroit for their 1952 Show.
Living room from fireplace wall. Electrical wiring features GE's remote control system. Main switch in the master bedroom controls exterior floodlights, entrance lights and kitchen plugs.

Breezeway is equipped with both jalousie windows and glass radiant heat panels, making it an all-weather room.

Basement recreation room is 32 1/2 by 13 1/2 feet, floored with asphalt tile, and has a natural fireplace of Crab Orchard Tennessee ledge stone. This room has a window ventilating fan.

Two lavatories are highlights in well-appointed bathroom.

Adapting a

Well-Liked Plan

The above design by Rudolph A. Matern, published in the *American Builder* of March, 1947, caught the eye of Alfred Huss, Pittsburgh realtor, who liked it so well that he used it as the basic plan for building his own home, shown below. Huss made a number of alterations, the two most important of which were change of roof line and exterior materials. He also changed the position of the garage.

The knob on which Huss built dictated dropping the garage to the basement level. This gave a large porch above, a level driveway from street to garage. Exterior materials are stone and knotty pine vertical siding. Huss included a third bedroom, which the original plan did not have, but followed the original in building a terrace and barbecue grill for outdoor living at the rear of the house.

For his house, Huss chose American Standard plumbing fixtures, Youngstown cabinet sink and cupboards, Corbin hardware, Sterling aluminum windows and screens, Chrysler Airtemp air conditioned gas furnace, Frigidaire electric stove and refrigerator, Frank Adams switch panel, J & L Junior beams, Crawford overhead garage door.
A National Home Week Demonstration House

ARCHITECT:
Victor Civkin, A.I.A.
Fairfield, Conn.

This house, known as the "Young America Home," has been planned to sell for approximately $20,000 including lot and kitchen-laundry equipment. It contains a living room, combination dining room and kitchen, two bedrooms, bath, porch, one car garage and expandable attic with space for two bedrooms and bath.

Early in July G.E. distributors had arranged for construction of 54 of the houses in 25 states. Individual builders erect and equip the homes at their own expense. It was expected that most of the homes started will be completed and open for inspection for National Home Week, September 14-21.

General features of the house, which contains approximately 1,100 square feet of living space on the first floor exclusive of breezeway and garage, will vary according to builder and locality. Optional features include sliding partitions, stall shower, studio ceiling in living room, fluorescent lighting and an outdoor barbecue. The house may be built either with or without a basement, and with variations in exterior treatment. As examples, the architect's plans show exteriors in both contemporary and southern colonial styles.

The dining part of the kitchen consists of a built-in wood cabinet containing space for serving trays and general storage for bridge tables, waste baskets, etc. This cabinet also provides storage space for an automatic ironer. The table, which is placed at an angle, is detachable so that it can be used in other locations. It is large enough to accommodate eight people. Table top and cabinets are covered with mahogany pattern Textolite.
LEFT SIDE ELEVATION

RIGHT SIDE ELEVATION

ASPHALT SHINGLE ROOF
WOOD GUTTER
10" RED CEDAR SIDING
COPPER LEADER
OVERHEAD DOOR
BRONZE SCREENS
FLOWER BOX

FRONT ELEVATION
SCALE: 1" = 1'-0"

REAR ELEVATION

ASPHALT SHINGLE ROOF
GUTTER

FACTORY-SEALED DOUBLE GLAZED 11½ X 58

DOTTED LINE INDICATES ROOF FOR COLONIAL DESIGN
ALTERNATE PLAN OF FRONT
FOR COLONIAL ELEVATION
SCALE 1" = 1'-0"
Quantity List of Materials

For American Builder Blueprint House No. AB 183

Victor Civkin, Architect

General Information

<table>
<thead>
<tr>
<th>Material</th>
<th>Area</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>House — Type</td>
<td>1,282 sq. ft</td>
<td></td>
</tr>
<tr>
<td>Cube</td>
<td>30,768 cu. ft</td>
<td></td>
</tr>
<tr>
<td>Garage — Area</td>
<td>276 sq. ft</td>
<td></td>
</tr>
<tr>
<td>Cube</td>
<td>3,036 cu. ft</td>
<td></td>
</tr>
<tr>
<td>Porch — Area</td>
<td>254 sq. ft</td>
<td></td>
</tr>
</tbody>
</table>

Excavating

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trench for foundation</td>
<td>213 lin. ft</td>
</tr>
<tr>
<td>Chimney and column footings</td>
<td>116 cu. ft</td>
</tr>
<tr>
<td>Excavation for basement</td>
<td>390 yds</td>
</tr>
</tbody>
</table>

Cement Work

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations</td>
<td>1,187 cu. ft</td>
</tr>
<tr>
<td>of poured conc. + 650 sq. ft</td>
<td></td>
</tr>
<tr>
<td>Concrete work</td>
<td>1,269 sq. ft</td>
</tr>
<tr>
<td>Thickness</td>
<td>4 in.</td>
</tr>
<tr>
<td>Sidewalks and Terrace Bluestone</td>
<td>800 sq. ft</td>
</tr>
<tr>
<td>Anchor Bolts</td>
<td>50½ x 10”</td>
</tr>
<tr>
<td>Waterproofing</td>
<td>1,400 sq. ft</td>
</tr>
</tbody>
</table>

Masonry

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brick</td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td>116 sq. ft wall fence</td>
</tr>
<tr>
<td>Window sills</td>
<td>8” thick</td>
</tr>
<tr>
<td>Chimney</td>
<td>400 cu. ft</td>
</tr>
<tr>
<td>Flue lining (Vitra Tile)</td>
<td>2—12” Dia</td>
</tr>
<tr>
<td>Cap</td>
<td>1—16” Dia</td>
</tr>
<tr>
<td>Fireplace</td>
<td>360 cu. ft</td>
</tr>
<tr>
<td>Thrust and Damper</td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4 Pcs. 4”x4”x1½” angles 12”</td>
</tr>
<tr>
<td></td>
<td>long Cantilever over Barbecue</td>
</tr>
<tr>
<td></td>
<td>Pit 30 Lin. ft. Pel. Slate Seal and Hearth</td>
</tr>
</tbody>
</table>

Iron Work

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural</td>
<td>450½” 8” t. b.</td>
</tr>
<tr>
<td>Lally columns</td>
<td>2—3½” diameter H. W.</td>
</tr>
</tbody>
</table>

Millwork

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows-Type</td>
<td></td>
</tr>
<tr>
<td>Casements and Fixed</td>
<td></td>
</tr>
<tr>
<td>Windows glazed including trim</td>
<td></td>
</tr>
<tr>
<td>2414—16””x48””—4</td>
<td></td>
</tr>
<tr>
<td>2442—16””x48””—1</td>
<td></td>
</tr>
<tr>
<td>1414—16””x48””—2</td>
<td></td>
</tr>
<tr>
<td>2313—16””x48””—12</td>
<td></td>
</tr>
<tr>
<td>2442—16””x48””—1</td>
<td></td>
</tr>
<tr>
<td>1—1”” Thermapane wood stepped</td>
<td></td>
</tr>
<tr>
<td>116½”’x58”</td>
<td></td>
</tr>
<tr>
<td>Exterior Doors</td>
<td>1—3½”x6”x8”x1½” slab door with plant on moulding</td>
</tr>
<tr>
<td>2—2½”x6”x8”x1½”’ glazed</td>
<td></td>
</tr>
<tr>
<td>Garage Door</td>
<td>1—8”x7” upward-acting sectional door</td>
</tr>
<tr>
<td>Exterior Millwork</td>
<td>1—Flower Box (L-shaped)</td>
</tr>
<tr>
<td></td>
<td>6 screens and 2 screen doors for porch</td>
</tr>
<tr>
<td>Interior Doors including jams</td>
<td></td>
</tr>
<tr>
<td>and trim</td>
<td></td>
</tr>
<tr>
<td>FLUSH DOORS</td>
<td></td>
</tr>
<tr>
<td>4—2”x6””x8”</td>
<td></td>
</tr>
<tr>
<td>2—2½”x6””x8”</td>
<td></td>
</tr>
<tr>
<td>1—2””x6””x8”</td>
<td></td>
</tr>
<tr>
<td>2—2½”x6””x8”</td>
<td></td>
</tr>
<tr>
<td>3—2½”x6””x8”</td>
<td></td>
</tr>
<tr>
<td>SLIDING FLUSH DOORS</td>
<td></td>
</tr>
<tr>
<td>4—2”x6””x8”</td>
<td></td>
</tr>
<tr>
<td>2—2½”x6””x8”</td>
<td></td>
</tr>
<tr>
<td>5X Panel — 1—2””x6””x8”</td>
<td></td>
</tr>
<tr>
<td>Special Interior Doors</td>
<td>1—10””x6””x8” Sliding Glazed</td>
</tr>
<tr>
<td>1—6””x6””x8”</td>
<td></td>
</tr>
</tbody>
</table>

Special Interior Millwork (Stairs) 1 Flight to 2nd Floor

1 Lavatory Cabinet
1 Set Kitchen Cases
1 Linen Case

Carpentry

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beams and Girders</td>
<td>3—4”x10”—18’</td>
</tr>
<tr>
<td>Outside Plates</td>
<td>3—2”x10”—14’</td>
</tr>
<tr>
<td>Joists</td>
<td>3—2”x10”—14’</td>
</tr>
<tr>
<td>Bridging</td>
<td>650 Lin. ft</td>
</tr>
<tr>
<td>Studding and Plates</td>
<td>55—2”x10”—16’</td>
</tr>
<tr>
<td></td>
<td>49—2”x10”—12’</td>
</tr>
<tr>
<td></td>
<td>14—2”x10”—14’</td>
</tr>
<tr>
<td></td>
<td>20—2”x4”—10’</td>
</tr>
<tr>
<td></td>
<td>50—2”x4”—12’</td>
</tr>
<tr>
<td></td>
<td>90—2”x4”—14’</td>
</tr>
<tr>
<td></td>
<td>15—2”x4”—14’</td>
</tr>
<tr>
<td></td>
<td>9—2”x6”—18’</td>
</tr>
<tr>
<td></td>
<td>6—2”x8”—20’</td>
</tr>
<tr>
<td></td>
<td>20—2”x8”—8’</td>
</tr>
<tr>
<td></td>
<td>32—2”x8”—14’</td>
</tr>
<tr>
<td></td>
<td>10—2”x12”—24’</td>
</tr>
<tr>
<td></td>
<td>2—2”x12”—12’</td>
</tr>
<tr>
<td></td>
<td>80—1”x6” Ribbon</td>
</tr>
<tr>
<td></td>
<td>2,000 b.f. 1” boards</td>
</tr>
<tr>
<td>Roof Sheathing</td>
<td>3,200 b.f. 1” boards</td>
</tr>
<tr>
<td>Side Wall Sheathing</td>
<td>2,600 b.f. 1” boards</td>
</tr>
<tr>
<td>Side Wall Materials</td>
<td>2,500 b.f. red cedar siding</td>
</tr>
<tr>
<td>Carpenter Stairs</td>
<td>2—2”x12”—14’</td>
</tr>
<tr>
<td></td>
<td>13—2”x10”—4’</td>
</tr>
<tr>
<td></td>
<td>2—2”x4”—10’</td>
</tr>
<tr>
<td></td>
<td>2—2”x4”—10’</td>
</tr>
<tr>
<td>Flooring</td>
<td>Hardwood—1,200 sq. ft. area to cover</td>
</tr>
<tr>
<td></td>
<td>Softwood—300 sq. ft. area to cover</td>
</tr>
<tr>
<td>Exterior Material</td>
<td></td>
</tr>
<tr>
<td>Soffits</td>
<td>1½” Exterior Grade Waterproof Plywood</td>
</tr>
<tr>
<td>Eaves</td>
<td>70 l.f. @ 36” wide</td>
</tr>
<tr>
<td></td>
<td>24 l.f. @ 48” wide</td>
</tr>
<tr>
<td></td>
<td>76 l.f. @ 24” wide</td>
</tr>
<tr>
<td>Porches</td>
<td>300 b.f. 1” Cypress D &amp; M</td>
</tr>
<tr>
<td>Insulation</td>
<td>2,000 sq. ft. for walls</td>
</tr>
<tr>
<td></td>
<td>1,300 sq. ft. for ceilings</td>
</tr>
</tbody>
</table>

Sheet Metal

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gutters</td>
<td>90 l.f. of gutter</td>
</tr>
<tr>
<td>Downspouts</td>
<td>52 l.f. downspouts</td>
</tr>
<tr>
<td>Flashing</td>
<td>and 1 roof drain</td>
</tr>
<tr>
<td></td>
<td>around chimney and</td>
</tr>
<tr>
<td></td>
<td>at parapet above garage</td>
</tr>
</tbody>
</table>

Roofing

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: Shingles</td>
<td></td>
</tr>
<tr>
<td>Built Up Roof</td>
<td></td>
</tr>
<tr>
<td>Area: 20 sq.</td>
<td></td>
</tr>
<tr>
<td>Area: 6 sq.</td>
<td></td>
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</tbody>
</table>

Interior Walls

<table>
<thead>
<tr>
<th>Material</th>
<th>Area to be covered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5,800 sq. ft. wall and ceiling area</td>
</tr>
</tbody>
</table>

- 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.

September 1952
Multi-Use Areas Bring Versatility To This House

Wide pass-throughs in kitchen provide view of adjoining rooms yet effectively block off a return view of the work center. Laundry threesome comprised of matching washer, dryer and ironer make snug fit between kitchen closets. Wide pass-through area to den eliminates crowded feeling.

Open planning plus multiple use of space equals extra livability in the home, and lots of it.

This formula, concocted by Louis J. Dracos, young West Hartford, Conn., architect, was demonstrated at the recent home show sponsored jointly by the Home Builders Association of Hartford County and the Hartford Times.

Of contemporary design, and containing about 1,285 square feet of floor area, the model house was constructed on the West Hartford Armory floor by association members under supervision of Joseph M. Howard. Instead of the usual one multi-purpose room it had three such areas. Cross traffic through rooms was eliminated. Most space normally devoted to vestibule and hall was arranged so that it added considerably to the size of small rooms.

The one obvious multi-purpose room in this plan is the space adjoining the kitchen and described as a den, play area or guest room. Hall space on one end adds 3½ feet to the length; a 6-foot wide pass-through to the kitchen flanked by walnut paneled cabinets further strengthens the impression of size.

The second and third bedrooms are actually one big room 24 feet long. This section of the house can be expanded and contracted with changing family needs by the operation of two large folding doors.

A third multi-use area is the 23-foot combination living-dining room. While many plans incorporate this space-saving feature, few provide substitute dining areas. This one provides a family dining space by taking unneeded space from the vestibule, as well as the den, both of which are practical substitutes because of the pass-through zones to each. With this flexibility, it is possible to have either a large living room or large dining room when needed. Multiple-use furniture emphasizes the whole effect.

The large glass area in the living room has two distinct functions: it increases the apparent size of the
Both sides of wood-paneled wall in den have built-in bookshelves. Spaciousness of the living room is strengthened by the heavy-beamed, sloping ceiling, high roman brick fireplace wall and the 6x8-foot picture window overlooking a 15x20-foot terrace. Ceiling beams project four feet beyond outside wall as cantilever for overhang above large window. Awning windows on front living room allow ample opportunities for furniture placement to take best advantage of view toward the terrace. Two-in-one arrangement features second and third bedrooms. When Modernfold door partition is opened, room is 23 feet long.

Floor plan indicates that space of 1,285 square feet is divided into five to eight rooms, depending on how you count. Deep carport has solid outer walls, plus enclosed storage areas in rear.

Space-saving doors play a prominent part in the design. The accordion-type is used not only to divide a long bedroom, but for kitchen closets, a bedroom closet and to close off the den. Hall doors to all three bedrooms are of the sliding type. Wardrobe style sliding doors are used on the 6-foot bedroom closets, as well as the closet at the entrance.

Among the most modern touches is the General Electric light-conditioning with remote control switches in all rooms. Reproduced on a slab in the Hartford area as it was on the armory floor, the house would cost about $22,000 to $24,000. Drakos estimated, depending on the value and size of the plot.

**BRAND NAME PRODUCTS USED**

(Partial List)

- Andersen casement windows
- Blackstone washer, ironer, dryer
- Crane bath fixtures
- Flame-Seat paint
- Formica counter top and vanity
- General Electric light-conditioning
- Holcomb & Hake Folder closet door
- Libbey-Owens-Ford Thermopane
- Modernfold doors
- Pittsburgh Twindow
- Sharwell bath enclosure, fluted glass panels
- Rolscreen Pella casement windows
- St. Charles cabinets
- Servel gas refrigerator
- Tappan gas range

**SEPTEMBER 1952**
Inside of doctor's private office is vertical grain prima vera wood pattern. Matching strips cover joints. Foyer wainscot is Verdi antique marble. Upper walls are plain light green. Matching door trim and moulding come with panels.

**Easy Maintenance Was the Requirement for This Small Clinic**

Seeking to avoid the interruptions caused by periodic redecorating of interiors, Dr. C. W. McNamara, Toledo, Ohio, specifies that his new clinic must be finished in such a way that redecorating would be minimized or eliminated.

To meet this specific requirement, the architect, Nelson E. Thal, chose factory-finished plastic-faced hardboard paneling for all the interior walls. Standard acoustical tile was used for the ceiling.

Colors and patterns of the paneling were varied to avoid any semblance of monotony. Partition walls of the clinic are cinder block with gypsum lath attached to 1x2-inch turbin strips, and paneling cemented to the gypsum lath. Exterior walls are the same construction with face brick on the outside. The cost of the walls was about the same as it would have been with plaster.

Now two years old, the clinic walls have proved to be satisfactory to the doctor, the architect and the builder.

Vertical section shows foundation, floor, wall, ceiling and roof construction.

Note central location of plumbing core for easy connection with laboratory and treatment rooms. Business office is located to serve patients as they leave.
Park Forest Shopping Center Proves Value of Good Planning

Park Forest, Illinois—one of the country's largest community-development projects by private enterprise—now has a population of 16,000 persons. Its 3,000 families have an average income of about $5,800. When completed, the town will have a population of 30,000.

When the project was inaugurated in 1947, the developers, American Community Builders, planned to harness the buying power of their new community. A full-scale shopping center was at the heart of the overall plan. The standard for planning a shopping center naturally had to be the serving of Park Foresters' basic needs in consumer goods and services. Equally clear was the truth that it would be impractical to build a center which included only the "necessities," because people who come to buy necessities will buy specialties as well.

So the Park Forest shopping center has been projected as a one-stop center which functions as a horizontal department store. Also, it was realized from the first that the shopping center's potential trading area did not begin and end with the town itself but spread out logically over a peripheral region comprising the whole south metropolitan area of Chicago. This is said to be the richest industrial area in the world, containing 1.07 per cent of the U. S. popu- (Continued on page 110)
Office of American Community Builders, Inc., stands at main entrance to shops, is nerve center for the whole community. Wide turnarounds enable cars to touch on the periphery of the center for passenger service, including store delivery to cars.

Builder’s objective was to create a center where people could buy in a domestic atmosphere of leisure, greenery, and safety. The low mass of the building emphasizes the human scale. So does the height of the canopied walks that link all stores.
The center's jewel is the Jewel Tea—an original interpretation by Loeb, Schlossman and Bennett of what a modern food supermarket should look like and be from the customer's viewpoint.

Parking direction is organized by islands located at ends of each row. Park Forest used the classical formula for establishing size of parking area: 3 square feet of parking for every square foot of store area.

Undercover shopping is made possible throughout by these canopied walks. Undercover shopping is made possible throughout by these canopied walks. whose construction is detailed in the drawing on next page.

Small, pleasant courts indent the buildings here and there, give mothers and children a shopping break.

Receiving compounds are big enough to accommodate trailer trucks. They are screened by corrugated Transite board. Shadow boxes, mounted on these walls, give eye-appeal with displays of merchants' notices.
(continued from page 106)

lation and growing at a rate much faster than the country as a whole. About 1,600,000 people live in it. Market analysis showed the builders that the completed shopping center should exert “snatch” on this region to a total of about $100,000,000 a year in gross sales. From the total Park Forest community itself—the center’s “franchise area”—analysis has indicated a yearly gross of $40,000,000 making an estimated yearly total of $40,000,000 for the center.

At present, 40 Park Forest supply and service organizations are in tenancy in the center on percentage leases. American Community Builders figures that the town’s present population of 16,000 needs from 65 to 70 stores, and when Park Forest is completed, its 30,000 inhabitants will trade in from 75 to 100 carefully assorted shops and services. About 20 per cent of the present sales volume is to out-of-area buyers.

What are the Necessities?

American Community Builders are building their center one phase at a time, naturally gearing the program to the stages of growth of the community. Their reason for beginning Park Forest by constructing the residential rental units first was to establish buying power as quickly as possible. Three thousand rental units were under construction, and the first 150 families had moved in, when ACB began building the shopping center late in 1948. The first store, a food market, opened the following spring.

Which units are “necessary” and which are “secondary” in an integrated shopping center? In answering this question, ACB points out that there is no absolute standard; every answer must be rooted in the known characteristics of the potential market to be served. For instance, a bank would normally be thought of
as a "secondary" service for a shopping center. But in Park Forest's case, the location of the new community has clearly indicated that a bank is a necessity.

With this word of warning on the exceptions which will always qualify any such listing, American Community Builders gives the following as the pattern of necessities and secondary units for the regional shopping center:

<table>
<thead>
<tr>
<th>Necessities</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>Moving picture house</td>
</tr>
<tr>
<td>Drugs</td>
<td>Bank</td>
</tr>
<tr>
<td>Laundry</td>
<td>Variety store</td>
</tr>
<tr>
<td>Cleaning</td>
<td>Clothing</td>
</tr>
<tr>
<td>Barber Shop</td>
<td>Furniture</td>
</tr>
<tr>
<td>Beauty Shop</td>
<td>Liquor</td>
</tr>
<tr>
<td>Post Office</td>
<td>Bakery</td>
</tr>
<tr>
<td>Shoe repair</td>
<td>Candy store</td>
</tr>
<tr>
<td>Hardware</td>
<td>Women's specialty shop</td>
</tr>
<tr>
<td></td>
<td>Delicatessen</td>
</tr>
<tr>
<td></td>
<td>Bowling alley</td>
</tr>
</tbody>
</table>

At the present stage, the Park Forest center includes specialties as well as necessities. The next section of the program will provide for a bank, a department store, more specialty outlets. The final phase will fill in and adjust with additional specialties, selected on the basis of unfolding need.

Only Five Years Ago

Five years ago, Park Forest was 2,400 acres of farm land lying 27 miles south of Chicago's Loop and two miles west of the industrial city of Chicago Heights.

In October 1947, American Community Builders, Inc., was organized by Philip M. Knutznick, former head of the Federal Public Housing Administration, and Nathan Manilow, one of Chicago's biggest builders. Another partner is Jerrold Loeb, of the Chicago architectural-engineering firm of Loeb, Schlossman and Bennett, planners of the new town.

The company's objective was to build a complete new community with full facilities for middle-income families and children, and to take advantage of the consumer buyer power which they would create. They elected to hold a permanent stake in the community by developing (1) rental units and (2) a shopping center which would serve the basic needs of the town, and more besides. Initial financing, from three insurance companies, amounted to $27,500,000, covered the rental units, and was the largest set of mortgages ever insured by FHA.

When completed, the Park Forest plan will have integrated into one

American Community Builders "Do's and Don'ts" For Planning a One-Stop Shopping Center

Use a building type that is as flexible as possible so that partitions can be put anywhere and facades changed easily.

Design the principal stores first. They will require special thought and treatment. The smaller units will fall into line.

Run the plumbing line for a building along the edge or down the center, so that it can be easily broken into for additional take-offs.

Including a sprinkling system for each unit may be more economical than not, as reduced insurance premiums may return the investment. Look into this.

Provide adequate drainage for storm water—it has to take care of parking area as well as buildings.

Most important color in a regional shopping center is green—the greenery of expansive landscaping and grassy shopping malls which encourage in the shopper a sense of leisure, comfort and safety.

Provide the necessities for the franchise area first.

Any secondary center which may be needed by the community, should be kept small. Project it on a bread-and-aspirin basis.

Don't expect to make the same return on every square foot of space in the center. Take a post office, for instance. You can't afford to build it, yet you must build it to provide the balance which an integrated center must have.

Don't try to copy the other fellow's center. You can't buy a solution, but must work out your own plan in terms of the market to be served.

Of this impressive complex, the rental units have now all been completed and leased, and there is a waiting list. About 1,300 homes have been built and sold to date; the churches and schools are well along; and the shopping center, which will eventually cover about 60 acres, is now about half finished, with its 40 tenants doing a monthly sales volume of around $700,000.

Typical house for single-family ownership has two bedrooms, is of native stone and brick on a lot 60 by 125 feet, without a garage, sells for $13,025 to $13,575. Included are gas-fired furnace, laundry tub, double-compartment sink with garbage disposal unit, and metal kitchen cabinets. All houses are insulated and windows have storm sash and screens. Houses with garages attached are priced at $15,000, have about 950 square feet of living space.
Builders' Department Highlights

Small Town Lumber Yard

This small town lumber company points toward builders' business. That is why a builders' department was planned as an integral part of the Morocco Lumber Company's new buildings. Here, local contractors can order and receive material without going through the regular retail sales room. The Indiana firm is owned and operated by J. A. Colbourne.

A 40'x34' foot area directly behind the main sales room has been set aside for builder selling. Stock items of doors and windows are located in the department for the builders' fast selection. Paint, hardware, nails, carriage bolts, screening, and roofing samples are a few of the items on exhibit.

A large L-shape counter dominates the 40'x30' foot retail sales room. Behind the counter are housed the sales and bookkeeping departments. Wall and island displays feature paint, hardware, and other retail sales merchandise. Many materials displayed on the island counters are high on the impulse buying agenda.

The exterior of the building is of yellow glazed brick highlighted by a pastel blue lower band of the same material. Large windows allow full view of the interior. The concrete floor has been covered with asphalt tile; walls and ceilings are plaster. Fluorescent fixtures light the building.

An "Honest John" policy is used in selling. Customers obtain material from the yard man and then report to the sales counter and are billed from their description. Miss Alice Garrard, bookkeeper, explained that very few losses are encountered.
You see it at a glance—the smart Ro-Way styling that blends so well with any type of commercial or industrial architecture.


And when you know that Ro-Way mortise and tenon joints are both glued and steel doweled . . . muntins, rails and stiles squared up with precision . . . sections rabbeted to assure weather-tight joints . . . millwork both drum and hand sanded . . . heavy gauge steel hardware both Parkerized and painted . . . then you know why Ro-Way overhead type doors are so long lasting.

Smart looking, smooth running, long lasting! That’s why Ro-Way is America’s most wanted overhead type garage door.

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WITH space such an important factor, individual bathroom facilities on the S.S. United States had to be limited to shower installations except in the deluxe passenger suites of this great ship.

After the most extensive and exhaustive tests by the naval architects, porcelain-enamel, formed-metal bathtubs produced by AllianceWare were installed in all of the ship's bathrooms that are equipped with standard size bathtubs.

These bathtubs not only provide the beauty and attractiveness desired in the bathrooms for such a splendid ship, but they also effected some considerable saving in dead weight because formed metal bathtubs have strong, rigid construction, but little dead weight.

Whether for a luxury liner, a luxury hotel or apartment, an extensive housing project, or the most modest home—the outstanding qualities of AllianceWare bathtubs make them preferred by many builders and architects from coast to coast.
"EVERYTHING HINGES ON HAGER!"
Time saved is profit made
with JAEGER-engineered machines

Mix more concrete in the time you save with a fast-charging, fast-discharging Jaeger:

5 to 7 seconds charging with Jaeger’s “Skip Shaker” loader, equally fast discharging with Jaeger’s bigger bucket and flight blades, shortens every mixing cycle, gains time for extra batches, bigger yardage every day you work.

No risk of “down time” either, in your busy season. Jaeger mixers roll on chilled Timken bearing rollers and tracks of high carbon steel machined true on the drum, with heavy duty automotive transmissions and bigger engines that have power to spare for years of reliable service. Sizes 6S, 11S, 16S. Also 31/2S tilter and non-tilt Auto-Loader with automatic-shaking batch hopper. Ask for Catalog M-10.

Pug-mill mix your plaster or mortar with a multi-blade Jaeger Power Hoe

31/2 and 61/2 ft. sizes — to fit your work. Both have real end-to-center pug mill mixing action with extra “wiper” blades at both ends of drum. Turn out smoother, even-tempered material that lays up easier, or sprays without clogging guns. Compact, easy to handle, but built to stand more years of pounding — have Timken bearing blade shafts with exclusive Jaeger leak-proof seals, heavy gauge drums, bigger engines, automotive transmissions. Send for new Catalog PM-2.

Jaeger Self-Raising Tower speeds placing, saves labor and accidents:

Assembled on ground, raised by its own power and easily moved as needed on its own skid base, this 1-ton Hoister tower eliminates hodders and scaffolding, operates either material cage or 14 ft. bucket. Standard height 37’, can be extended to 67’. Automatic safety device positively prevents falling should cable break. Get Bulletin HS-1.

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SALES, RENTALS AND SERVICE IN 153 CITIES OF THE U. S. AND CANADA

116
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Made of Ponderosa Pine—the wood that combines great beauty with lifetime durability.
Fit any style of home—contemporary, ranch house or traditional. Beautifully proportioned, the three equal panels create an effect of great distinction.
Precision made—clean, sharp detailing—satin-smooth finish.
Exceptionally easy to decorate—Ponderosa Pine surfaces take any stain, paint or enamel, including natural finishes.

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Right now you're probably planning your sales features for next year's houses.

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It's as easy as can be. The Weathermaker heats and cools through the same kind of ducts you'd use anyway for a forced warm air system. The only other things you've got to add are a little more plumbing and a little more wiring.

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1. You get more visitors. Year-round air conditioning is news! But only the Weathermaker Home makes full use of its air conditioning—to create an entirely new kind of house. Independent of ventilation! Free of old-fashioned restrictions!

2. You get a competitive advantage. No matter what the other builders in your territory offer, you top them! Because you can tie in with the Weathermaker Home idea, you can prove that the air conditioning pays for itself.

3. You make more sales. Imagine it's next summer. Outside it's hot as blazes. Inside your Weathermaker air conditioned Home is cool, cool, cool!

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Syracuse, New York

Please send me the full story on how the Carrier Weathermaker and the Weathermaker Home idea can add sales appeal to my houses.

Name
Street
City State

SEPTEMBER 1952
The world of color

Fundamentals on the nature of color and color harmony...
Systems to guide color selection

Chapter 7 in the paint series

Probably nothing is more subtle or important in modern sales engineering than color used to attract interest and influence decisions. The whole physical side of modern American life is conditioned by an increased awareness of what color can do when applied to every kind of an object, from a soap wrapper to a house.

The psychological aspects of light and color have become increasingly better understood. Researchers have established beyond any contradiction that it is human for people to like color rather than gray or black. It is known that, regardless of race, nationality, or creed, people like certain colors better than others. The most popular colors, for men and women alike, have been found to be blue, red, and green; the least popular are violet, orange and yellow.

Women lean toward tints and shades (modified colors) more than men do. Pure colors, as a general rule, are liked better than grayish ones (although they may be harder to live with), and light tints are more popular than deep shades. Rich, intense colors draw people more favorably when used in small areas.

This kind of knowledge can be used effectively in situations where painting and decorating are done to appeal to public taste, and an under-
FIG. 1: PRIMARY COLORS

FIG. 2: SECONDARY COLORS

FIG. 3: 12-COLOR SPECTRUM

The Color Families on the Color Wheel

Every color—including tints or tones of all colors—belongs to one of twelve color families. Achieving harmony in color combinations is a matter of understanding these relationships. The best way to get at it is to use that ingenious device, the color wheel. Isaac Newton designed the first such wheel in the 17th century. By means of it, the complete color spectrum is arranged in circular form.

In Fig. 1, the primary colors are put on the wheel. A primary color is a color in its purest state, without the addition of black or white or any other color.

In Fig. 2, the secondary colors are developed. Green, violet, and orange are formed by mixing equal parts of two primary colors.

In Fig. 3, the color wheel has been completed by the addition of the six tertiary colors. These are formed by intermixing equal parts of two adjoining colors (a primary color with a secondary color). The tertiary colors are yellow-green, blue-green, blue-violet, red-violet, red-orange, and yellow-orange.

Starting with yellow, which is the lightest of all spectrum colors, the colors on either side of yellow get darker in value as they approach violet, the darkest of the spectrum colors. This is called the normal spectrum value order, and this should not be violated when combining colors, or discordant color relationships will result. For instance blue-lightened with white and combined with orange would be discordant because blue's normal value is lower than that of orange.

The whole color wheel may of course be lightened in value to a higher key by adding the same amount of white to each color. So doing leads into the fascinating world of tints; rust, cocoa brown, lime yellow, buff pink, Wedgewood blue, etc, so much used in decoration.

Actually, the color wheel is like a wheel with a common hub of neutral gray. If all twelve spectrum colors were mixed together in proper proportions, neutral gray would result. The twelve spokes of the wheel, each representing one of the spectrum colors, range from neutral gray at the hub to full color at the rim, with varying degrees of chroma (or graying color) between hub and rim. If you mix colors together that are opposite to one another on the wheel you will get grayed tones; for instance, if blue is added to orange in varying amounts, or orange to blue, the result will be progressive graying of either the blue or the orange. As was stated above, this is a matter of reducing the chroma (or brightness) of the color, and can also be done by adding black and white to any color.

Using the Color Wheel

Harmonious color combinations can be selected by applying simple formulas to the color wheel. Chief among these are the formulas known as true complement, split complement, double complement, alternate complement, triad, and mutual complement. These are described in the figures on the next page. They are based on the underlying principle that contrast is the most favorable relationship of color. Colors opposite to one another on the color wheel are in perfect contrast, and are defined as "color complements." Blue is the color complement of orange, red of green, etc.

Response to color is a thing of the emotions, and this consideration is important in color selection. Briefly, psychological reactions to color can be summarized on the basis of the
FIG. 4—TRUE COMPLEMENT, for a 2-color plan. Colors across the wheel are harmonious. Choose the color that best serves as the dominating color for the room. Then use its complement for accent on details. Too much complementary color makes for monotony. Equal areas of contrasting colors are not pleasing.

spectrum colors, beginning with red as the most exciting color. Red-orange to yellow-orange represent various degrees of exciting and stimulating colors. Yellow is a color which is less stimulating but the most cheerful of all colors. The greens are progressively more serene in character. Blue is the most serene and soothing of all. In violet and purple are seated the more depressing colors. Emotional response to a color or tone is also very definitely linked to the degree of brightness or dullness of that color.

It is important, too, for the builder to be aware of sociological factors. For instance, from the sales angle it would be very unsuitable indeed to use Mediterranean colors on the exterior of a house built for sale in a Swedish neighborhood. Successful color selection for exterior surfaces also relates to suitability with architectural style. The color must express the character of the building.

FIG. 5—SPLIT COMPLEMENT, for a 3-color plan. Colors on either side of the complementary color provide harmonious contrast. Proper proportions of each color used would determine the success of the decorating scheme.

FIG. 6—DOUBLE COMPLEMENT, for a 4-color plan. Two sets of complementary colors are used. Remember that neutral colors may also be used with any color or combination. "Monochromatic" schemes can be worked out effectively in tints and shades of a single color.

FIG. 7—ALTERNATE COMPLEMENT, for a 4-color plan. Three alternate colors opposite a given color may be selected, as red, violet, and blue as alternate to yellow.

Lammon stone ranch house painted aquamarine or any other flashy "modern" color would be a flop, color-wise.

In selecting color for wall decoration, remember that it is difficult to make proper decisions if the basis for selection is simply a small chip of color or a small area painted experimentally to get the supposed effect. Remember that color intensifies with area and with reflection, and that a color appears more intense in a small room than in a large one. It will be more intense in a north room than in a south one, because the amount and quality of the daylight in the room always affects color. Remember that the brightness (chroma) of a color will seem to lessen both in bright sunlight and in subdued light.

The less natural daylight that enters a room, the brighter and lighter it should be. The color used to compensate for the lack of light. If the room is naturally very bright, the dominating color used should be darker in value, and more gray, to compensate for the excessive light. If a color is to be used under artificial lighting, it will be best to view it under this light before selecting it.

The qualities of "warmth" or "coolness" in colors has a relation to the wave lengths of color. Long wave-length colors such as red and orange reflect heat slightly more than do colors of short wave-length such as blue and green. But warm and cool colors are primarily a matter of psychological reaction. Most people "feel" red, orange and yellow as warm, and blue, green and violet as cool. Yellow-green is the neutral point. Researchers of the DuPont company have found that the warmest hue seems to be red-orange, with the general region of blue and green as definitely cool. Seemingly cold rooms therefore can be made to

FIG. 8—A COLOR TRIAD is made up of three colors at equi-distant points. All three will blend harmoniously.

FIG. 9—MUTUAL COMPLEMENT. Adjacent colors of the spectrum have what is known as "color analogy." For instance, yellow-orange, yellow, and yellow-green share a common color factor—yellow. Analogous colors can be combined directly across the wheel from the center one.
A PAINT AND COLOR STYLE GUIDE (below) is combined in the Sherwin-Williams color-selection system with a companion color book (above) based on 16 colors in Super Kem-Tone, a new latex paint. Cutout windows in the color book make possible as many as 720 authentic color harmonies. Colored index tabs direct the user to the dominant shade in the color scheme. By turning the page forward and reverse, four correct accessory colors are suggested. (See page 125, "Systems to Aid Color Selection.")

THE CHROME POINTERS of the Pratt & Lambert color selection device are shown in closed position, automatically indicating a true complement. They open into four pointers which are revolved by hand to indicate split, alternate or double complements, triads, analogies or monochromatic with-acent color harmonies. (See also Figs. 4-9.) The instrument is so calibrated that the pointers always separate at equal distance from the center guide. As they will not extend beyond 120 degrees, the colors indicated by the pointers are always in perfect balance. Tints are shown on the three outer bands of the color wheel; tones (or shades) on the three inner bands.

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Mixing and Matching

Mixing paint to achieve a desired color is an uncertain undertaking, and is complicated by the fact that colors of the lighter in some paint types and darker in others. Wall paint and enamel matched well in a tinted wet state may change to a very poor match when dry. The safest way around the color-matching problem is to use tints that have been factory-mixed by the manufacturer after many years of experience in painting out rooms. After all, proper color-matching is a matter of up-to-date machinery manned by experienced technicians under modern factory conditions. Many wise builders make a rule that there shall be no mixing of colors on the job; only factory-mixed tints are used.

However, informal matching and mixing still goes on, and for those who get involved in this costly pastime, the table reproduced on the following pages is useful. It is taken from Lonore Kent’s recent book, "Paint Power," published by the National Paint, Varnish and Lacquer Association.

SEPTEMBER 1952
### How to Get Tints by Mixing Colors-in-Oil with a Base

<table>
<thead>
<tr>
<th>Color Name</th>
<th>Description</th>
<th>Pigments To Use To Obtain It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple green</td>
<td>Moderate yellow-green</td>
<td>White for base. Add light chrome green and orange chrome yellow.</td>
</tr>
<tr>
<td>Apricot</td>
<td>Pale orange</td>
<td>Medium chrome yellow for base; Venetian red and carmine lake. If a light tint is wanted, lighten it with white.</td>
</tr>
<tr>
<td>Bottle green</td>
<td>Dark green</td>
<td>Lampblack and Prussian blue for base; lemon chrome yellow.</td>
</tr>
<tr>
<td>Browns and brown drabs—all shades</td>
<td>Dusky orange</td>
<td>Venetian red for base; add ochre and lampblack in various proportions according to shades of brown wanted. For the brown drabs, add white to reduce the above brown tints.</td>
</tr>
<tr>
<td>Café-au-lait</td>
<td>Light brown</td>
<td>Burnt umber for base; add white ochre and Venetian red.</td>
</tr>
<tr>
<td>Canary</td>
<td>Moderate yellow</td>
<td>Use chrome yellow of that name or lemon yellow for base, lightened with white.</td>
</tr>
<tr>
<td>Chameau</td>
<td>Weak yellowish orange</td>
<td>White for base; add ochre, medium chrome yellow to suit, reddened with a little burnt sienna.</td>
</tr>
<tr>
<td>Chartreuse</td>
<td>Light yellow-green</td>
<td>Medium chrome yellow for base; add some medium chrome green.</td>
</tr>
<tr>
<td>Cinnamon</td>
<td>Weak orange</td>
<td>White for base; add burnt sienna, ochre, medium chrome yellow.</td>
</tr>
<tr>
<td>Crimson</td>
<td>Strong red</td>
<td>Deep English vermilion or any of the crimson vermilion reds. If desired very rich, add some of the crimson lakes or glaze with them.</td>
</tr>
<tr>
<td>Colonial yellow</td>
<td>Moderate yellow</td>
<td>White for base; add medium chrome yellow, tinge with a trifle of orange chrome yellow desired.</td>
</tr>
<tr>
<td>Copper</td>
<td>Weak reddish-orange</td>
<td>Medium chrome yellow; tinged with burnt sienna.</td>
</tr>
<tr>
<td>Coral pink</td>
<td>Moderate pink</td>
<td>Venetian yellow for base; white, medium chrome yellow.</td>
</tr>
<tr>
<td>Cream color and all the buffs</td>
<td>Weak yellowish orange</td>
<td>White for base; add ochre to make the color desired.</td>
</tr>
<tr>
<td>Ecru</td>
<td>Weak yellowish orange</td>
<td>White for base; add ochre, burnt sienna, lampblack.</td>
</tr>
<tr>
<td>Electric blue</td>
<td>Weak blue</td>
<td>Ultramarine blue for base; add white and raw sienna.</td>
</tr>
<tr>
<td>Emerald</td>
<td>Strong green</td>
<td>Very light chrome green.</td>
</tr>
<tr>
<td>Fawn</td>
<td>Light brown</td>
<td>White for base; add medium chrome yellow, Venetian red, burnt umber.</td>
</tr>
<tr>
<td>Flesh color</td>
<td>Weak yellowish orange</td>
<td>White for base; add medium chrome yellow, French ochre and Venetian red.</td>
</tr>
<tr>
<td>French gray</td>
<td>Light gray</td>
<td>White for base; add ivory black with a faint tinge of ultramarine blue and madder lake or carmine.</td>
</tr>
<tr>
<td>Golden brown</td>
<td>Moderate brown</td>
<td>Ochre for base; add orange chrome yellow, lampblack. Lightened with white.</td>
</tr>
<tr>
<td>Gray green</td>
<td>Weak green</td>
<td>White for base; add ultramarine blue, lemon chrome yellow, lampblack.</td>
</tr>
<tr>
<td>Gray stone</td>
<td>Pale brown</td>
<td>White for base; add lampblack, Prussian blue, Venetian red.</td>
</tr>
<tr>
<td>Grays, all shades</td>
<td>Gray</td>
<td>White for base, lampblack in various proportions to obtain shade wanted.</td>
</tr>
<tr>
<td>Ivy green</td>
<td>Moderate olive green</td>
<td>Ochre for base, add lampblack, Prussian blue.</td>
</tr>
<tr>
<td>Jonquil</td>
<td>Moderate yellow</td>
<td>White for base; add medium chrome yellow and a tinge of vermilion.</td>
</tr>
<tr>
<td>Lavender</td>
<td>Pale purple</td>
<td>White for base; add ivory black, ultramarine blue, tinge with carmine or madder lake.</td>
</tr>
<tr>
<td>Lemon</td>
<td>Moderate yellow</td>
<td>Use lemon chrome yellow.</td>
</tr>
<tr>
<td>Magenta</td>
<td>Deep red-purple</td>
<td>Vermilion for base; add carmine or madder lake with a tinge of ultramarine blue.</td>
</tr>
<tr>
<td>Marigold</td>
<td>Strong orange</td>
<td>Medium chrome yellow for base; add white, orange chrome yellow.</td>
</tr>
<tr>
<td>Maroon</td>
<td>Very dark red</td>
<td>Tuscan red for base; add orange chrome yellow and some ivory black.</td>
</tr>
<tr>
<td>Mauve</td>
<td>Strong red-purple</td>
<td>Ultramarine blue for base; add white, tint with madder lake.</td>
</tr>
<tr>
<td>Nut brown</td>
<td>Weak brown</td>
<td>Ultramarine blue for base; add ivory black.</td>
</tr>
<tr>
<td>Old gold</td>
<td>Light olive brown</td>
<td>White for base; add medium chrome yellow, ochre and a little burnt umber.</td>
</tr>
<tr>
<td>Olive green</td>
<td>Moderate olive</td>
<td>Lemon chrome yellow for base; add about equal parts of Prussian blue and lampblack. Some shades of olive can be made by substituting ochre for lemon chrome yellow. Then, of course, the tone will not be so bright.</td>
</tr>
<tr>
<td>Orange</td>
<td>Orange</td>
<td>Orange chrome yellow as it comes from the can.</td>
</tr>
<tr>
<td>Peach</td>
<td>Moderate orange-pink</td>
<td>Ivory black for base; add ochre, medium chrome green.</td>
</tr>
<tr>
<td>Pistachio</td>
<td>Weak yellow-green</td>
<td>White for base; add madder lake or carmine or the crimson shades of vermilion.</td>
</tr>
<tr>
<td>Pink</td>
<td>Very pale red</td>
<td>White for base; add Indian red, ultramarine blue.</td>
</tr>
<tr>
<td>Plum</td>
<td>Very dusky purple</td>
<td>White for base; add Indian red, ultramarine blue.</td>
</tr>
<tr>
<td>Primrose</td>
<td>Moderate yellow</td>
<td>White for base; add lemon or medium yellow chrome according to the color desired.</td>
</tr>
<tr>
<td>Purple</td>
<td>Purple</td>
<td>White for base; add dark Indian red and a trifle of light Indian red to suit.</td>
</tr>
<tr>
<td>Robin's egg blue</td>
<td>Pale blue-green</td>
<td>White for base; add ultramarine blue, until the shade is a deep blue, then add some pale chrome green.</td>
</tr>
</tbody>
</table>
Color Name | Description | Pigments To Use To Obtain It
--- | --- | ---
Russet | Strong brown | White for base; add orange chrome yellow, a trifle of lamp-black and Prussian blue.
Sage green | Dusky yellow-green | White for base; add medium chrome green until the tint is nearly but not quite a pea green, then add lampblack to shade it.
Salmon | Moderate orange-pink | White for base; add ochre, burnt sienna, a trifle of vermilion.
Sapphire | Dark blue | White for base; add ultramarine blue.
Sea green | Moderate yellow-green | White base; add Prussian blue, raw sienna.
Scarlet | Deep reddish-orange | Pale English vermillion or any of the scarlet toned vermillion reds.
Shrimp | Moderate reddish-orange | White base; add Venetian red, burnt sienna and a trifle of vermilien.
Sky blue | Pale blue | White for base; add Prussian blue as desired.
Straw color | Moderate yellow | Medium chrome yellow for base; add ochre; a little Venetian red; lighten with white.
Tan | Dark orange | White for base; add burnt sienna and a trifle of lampblack.
Terra cotta | Dark orange | Ochre for base; add Venetian red and white. Some shades of it require the addition of Indian red. If rich colors are wanted, use orange chrome yellow in place of ochre; add Venetian red and a trifle of burnt umber.
Turquoise | Light greenish-blue | White for base, cobalt blue; pale chrome green.
Violet | Very dusky red-purple | White for base; add pale Indian red, a trifle of dark Indian red.

Suitable Colors for Northern Hemisphere Exposures

Northern Hemisphere Exposures

| Exposure | Suggested Colors for Walls and Decorative Accents |
--- | --- |
Northern (Receives no direct sunlight) | Warm colors such as: yellow, gold, rose, beige, bittersweet, buff, burgundy, cafe-au-lait, canary, chamois, cinnamon, coral, cream, daffodil, dusty rose, ecru, fawn, flesh, henna, maize, peach, primrose yellow, russet. |
Southern (Has warmer light) | Cool colors such as: green, light blue, light gray, turquoise, sky blue, robin’s egg blue, jade, French gray, chartreuse, Alice blue, apple green, aqua green, leaf green, lettuce green, lime, mint green, Nile green, emerald green. |
Eastern (Light is hard; gives a harsh look to colors) | Colors such as: light gray, ivory, cream, buff, fawn, English gray, taupe. Some of the warm colors suitable for northern rooms can also be used, especially if rooms are small. |
Western (Warmest light received by any section of house) | Cool soft colors such as: sky blue, powder blue, oyster white, mint green, Alice blue, apple green, Nile green. |

The rules for tinting are: Don’t add a little of the oil color to the whole can of paint and expect to stir it evenly into one smooth tint. Instead, thin the oil color with a little of the paint, stir thoroughly and combine the mixture with the paint in the large container. Blend well, and see to it that the last streak of color is absorbed. Then strain the whole mixture through a cloth-strainer.

Rules for matching: Be sure to mix enough paint for the whole job. When the matched wet sample seems about right, brush it out on a surface similar to the one to be covered, and let the sample dry. If the dry color seems about right, brush it out in a large sample (two square feet) and allow that to dry, studying it under both natural and artificial light. Remember that the finished job, especially on a large surface, will look darker than the sample. Always decide on a lighter sample than the finished effect desired.

Systems to Aid Color Selection

Understanding enough, paint manufacturers have been afflicted with color madness. The general objective seems to be to provide buyers with an incredible array of colors without any regard for the problem of the decorative value which a given color might have in any given situation. More thoughtful manufacturers have begun to question this policy. As one of the oldest of them, Pratt & Lambert, puts it: “Of what value is a thousand or more colors if less than one per cent of the buyers know how to use them harmoniously? The answer is not in the number of colors you have to offer customers, but in your ability to show them what colors may be harmoniously used together and know that your advice is correct.”

So there have come into use color selection systems, offered by the manufacturer as a guide to help the paint buyer make intelligent color decisions. They all are designed to answer the key question, “Does the color have decorative value?”

The Pratt & Lambert system is based directly on the color wheel device. The wheel has simply been transformed into a patented “calibrator” by which proper combinations of colors can be easily and quickly determined without loss of sleep on the part of the builder or buyer. This Color Calibrator, pictured and described in the photograph on Page 123, scientifically assembles from two to six colors in perfect harmonious relationships. It is used along with a color chart book showing the complete line of Pratt & Lambert job-tested wall colors plus four let-downs (lightening of value) for each deep color and spectrum color. These let-downs are made by the addition of varying quantities of either platinum gray or white. The Calibrator and color book can be borrowed by the builder from the manufacturer, or purchased at $2.50 for the Calibrator and $5.00 for the color book. Pratt & Lambert also offers a free color-planning service as part of the purchase price of its paints for a job.

The Sherwin-Williams Company offers a combination of two color-selection tools. One is a large pictorial “Paint and Color Style Guide,” which shows actual rooms done in various color combinations—that is, the same room units are shown decorated in different combinations. This Guide is used with a “Style Guide Companion, Vol. II” a color book based on 16 colors in the SAW Super Kem-Tone line (a latex paint). Windows in the pages of the color book enable the user to view as many as 720 authentic color harmonies. Both the Guide and Companion are available to builders on loan or purchase from the nearest Sherwin-Williams dealer or retail store. The Guide costs $7.75; the Companion, $9.75. Of the two, the Companion would seem to be the more versatile tool for average use.

Less elaborate but very handy is the “Color Dynamics Home Guide” offered by the Pittsburgh Plate Glass Com-
the answer to the
basement window
problem...

INSULUX
GLASS BLOCK

When customers complain that cellar windows are continuously being broken, frames rotted, wind and rain driven in—recommended replacement with Insulux Glass Block!

Make the comparison! Figure it out for yourself! Compare the cost of sash, screen, storm window and maintenance against that of a lifetime panel of maintenance-free Insulux Glass Block.

A panel of Insulux Glass Block can't rust or rot; never needs painting. Glass block is extremely hard to break... makes a sound, weather tight, insulating panel. And glass block lets in all the light, yet blocks out sight.

Supplies of glass block and all of the accessories needed are non-critical and immediately available in quantity. Installation is simple and quick... requires only ordinary mason's tools.

Want more information about this use of Insulux Glass Block? Just write: Insulux Glass Block Division, Kimble Glass Company, Dept. AB-9, Box 1035, Toledo 1, Ohio.

A GIANT HOME TEST COLOR ALBUM (shown on floor) is the Eagle-Picher Company's idea for expediting intelligent color selection. This album includes 40 colors. 12 ready-to-use from the can and 23 being simple intermixes of two colors. The "giant" cards are 14 by 19 inches, are more reliable a test than the average small color chip. The album is available on loan from dealers who handle the Eagle-Picher line.

KIMBLE GLASS
COMPANY
Subsidiary of Owens-Illinois Glass Company
Toledo 1, Ohio

CONSUMER RESEARCH
SURVEYS are a big factor in some paint manufacturers' approach to color. Average American home owners have been screened and questioned on color, not only from the point of view of paint but home furnishings as well. From such information, carefully classified and correlated, manufacturers endeavor to arrive at better points about suitable colors for flat, semi-gloss and gloss finishes for every room in the house.

Faber Birren, long-time color consultant for DuPont. A 25-cent booklet, "Color Likeable and Liveable," includes examples of proper color planning for the home, while "Your Pocketbook of Modern Colors for Home and Industry" is DuPont's latest contribution to the art of making color catalogs. This tool is available from the company at $1 a copy.

There are other such color selection systems, but these are sufficient to illustrate the trend.

Next Month—this discussion of color will be continued in a series of illustrated cases showing how

PAINT BRINGS OUT THE BEST POINTS
include light...include privacy...include INSULUX

Insulux Glass Block® offers you opportunities to create new architectural designs that cannot be achieved with any other material.

For specifications using Insulux in these or other designs, write to Insulux Glass Block Division, Kimble Glass Company, Dept. AB9, Box 1035, Toledo 1, Ohio.

KIMBLE GLASS COMPANY

Subsidiary of Owens-Illinois Glass Company

SEPTEMBER 1952
ATLAS MORTAR
is the best mortar cement
I have ever used

...declares WILLIAM ASHTON, mason contractor for some of the neatest-looking new homes in Collingdale, Pa. Enthusiastic about Atlas Mortar in the home-building field because better work means better business, he adds, "I think it's ideal to work with, and gives an excellent finished job."

WHY IT PAYS TO USE ATLAS MORTAR

There's an extra safety factor in Atlas Mortar. It is such a well-balanced masonry cement that mixes get too short to work with when too much sand is added. So it actually works as a "job inspector" to help assure customer satisfaction. And masons like to work with mortar that's not too fat...not too lean...but just right.

Atlas Mortar has proved itself on both large jobs and small and in the laboratory as well. It complies with ASTM and Federal Specifications for masonry cement. For further information, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N.Y.
When a midwestern architect set out to reproduce the charm of a traditional style, he got the results shown in the picture above. Aiding his efforts was the special design of the Barcol OVERdoor sections, with vertical grooves suggesting the boards in barn doors of a bygone day. But back of this beautiful facing is solid, up-to-date mechanism that makes the Barcol OVERdoor "an improved overhead door" — a pleasure to own and use. We suggest you visit with your Barber-Colman representative on the subject of Barcol OVERdoors, electric door operators, and the Radio Control. He can give you full details and tell you the many advantages of these modern products, which are so useful toward improving the pleasure of good living.

Barcol OVERdoors

Attractive Appearance

PLUS

MECHANICAL FEATURES THAT GIVE
EASY WORKING
NO STICKING
WEATHERTIGHT CLOSING
LONG LIFE

FACTORY-TRAINED SALES AND SERVICE REPRESENTATIVES IN PRINCIPAL CITIES

BARBER-COLMAN COMPANY
104 MILL STREET, ROCKFORD, ILLINOIS

SEPTEMBER 1952
SHEATHING THIS HOUSE WAS A SNAP

...with easy handling Gold Bond Gypsum Sheathing!

YOU don't have to saw Gold Bond Gypsum Sheathing. Just score the water-repellent outer casing...and snap! The panel breaks off clean as a whistle. This easy workability means faster application, and sizable savings in labor costs.

NEW HARD-EDGE! Now, Gold Bond Gypsum Sheathing has a tough, damage-resisting Hard Edge on the groove side of every panel! Needs no "bullying" on the job...gives tighter joints, reduces replacement costs.

Here are more ways the big 2' x 8' panels cut building costs:
1. Costs about 3/4 less than wood sheathing.
2. Can be applied in half the time.
3. About 50% fewer nails required.
5. Eliminates building paper. FHA permits application of all types of exterior finishes (except stucco) over Gold Bond water-repellent Gypsum Sheathing.

YOU'LL LIKE Gold Bond Gypsum Sheathing for its extra strength too. Racking tests prove that these big knotless panels give greater structural strength than other commonly used sheathing materials. And the core of gypsum rock is asphalt-treated for increased moisture resistance.

NATIONAL GYPSUM COMPANY • BUFFALO 2, N. Y.

You'll build or remodel better with Gold Bond

When you specify Superior Windows you are thinking of tomorrow! No other window offers more complete weathertightness and continual ease of operation! Superior's exclusive jamb-liner weatherstrip is flexible and compensates for dimensional variations due to climatic changes—it assures smooth, quiet sliding the year 'round. In addition, Superior Windows are perfectly counter-balanced, and adjustable to wall thicknesses and various standard types of construction.

Superior windows are made of kiln-dried Ponderosa Pine and are chemically-treated in strict accordance with NWMA standards.

CARR, ADAMS & COLLIER CO.
Dubuque, Iowa

Here's a list of the Bilt-Well line: Superior Unit Wood Windows • Na-Style & Multiple-Use Cabinets • Car-sol Garages Doors • Combination Doors • Screens & Storm Sash • Basement Unit Windows • Shutters • Exterior Doors • Interior Doors • Entrances • Louvers & Gable Sash • Corner China Cabinets • Ironing Board Cabinets • Mantels • Telephone Cabinets • Stair Parts

Build Well with BILT-WELL WOOD WORK
One of 23 new Norgate homes occupying two-acre sites on rolling, heavily wooded land in Brookville, L. I. Each is set back 100 feet from the street and has an overall length of 75 feet.

There's Always a Better Plan

No matter how good his home plan may be, a builder can often pick up a few worthwhile ideas to better it—either by eavesdropping on the comments of visitors as they pass through his model house or by suggestions direct from new owners.

Usually such well-intended efforts go for naught, ruled out by price increases. But Gustav A. Mezger, developer of the Norgate colonies in Long Island, N. Y., found himself in an unusually strong position this past spring to take full advantage of the situation.

Mezger has a large ranch-style house which he introduced during the 1949 NATIONAL HOME WEEK. Containing six rooms, two baths, 26x32 foot basement, a multitude of glass area including two 20-foot window sections, fully equipped electric kitchen, flagstone terrace and attached garage, it was offered at a base price of $21,500 on a quarter-acre plot. More than 140 units of this model were built and sold, attesting to its popularity. Still, suggestions for improving the plan were entertained.

For the past two years, Mezger has been working with Philip Resnyk, his architect, to perfect his revised design. During this time, he acquired a 51-acre portion of the former estate of Joseph F. Davies, once-time United States Ambassador to Russia. The land is in the exclusive estates section of Brookville, L. I., where strict zoning requirements presage higher costs, so it was natural that the new plan be adopted there.

The new homes occupy two or more acres each which, with steadily rising costs of the past three years, explains most of the higher price level beginning at $32,700. The balance is attributed to more efficient use of space, as noted in the adjoining floor plans. This is how Mezger accomplished the change:

A service door was cut into the kitchen to eliminate the necessity of walking across the dining room to the rear door adjoining the garage. The kitchen door replaced one of the five panels of windows making up a 20-foot-long window wall in the rear, but glass panels were retained in the door.

Kitchen and dining room, formerly only partially obstructed by a long breakfast bar, were separated by a solid partition with a door, to increase privacy in each room. A feeling of spaciousness encouraged by the former open planning was retained by a clever arrangement of two 4x6-foot mirrors. Mounted on each side of the new wall, they extend from the door to the windows. Thus, each room has approximately as much light as it did in the old design and appears to have four or five tiers of windows.

The kitchen is no longer a dead end. A door was cut through the wall leading to the bath and bedroom section. To do this meant shifting the linen closet to a larger space formerly used as a guest closet.

In turn, the guest closet, which heretofore was reached by crossing the living room, was relocated direct-
by adjoining the main entrance. To accomplish this, the closet wall between the two front bedrooms was moved between the living room and bedroom areas. This also served to better insulate the living and sleeping sections.

The master bedroom was fitted with two closets having a total length exceeding 8 feet, instead of one 6-foot, and the smaller of the two is cedar-lined. The change brought about a vastly increased floor area in the master bath to permit installation of a glass-enclosed shower stall, accessory cabinet with full-length mirror and a vanity-type lavatory with large mirrors diagonally across each end.

The garage was doubled to two-car size. In this space, a 4-foot-wide niche formerly left open was fitted with a built-in broom and garden tool closet.

One other factor has been added to the salability of houses at Norgate-in-Brookville. Once the 23 units planned are completed, all others to be built within the village limits must be still larger and more costly. Local authorities again tightened their regulations after the project was started.

OWNERSHIP OF A NORGATE COUNTRY RANCH HOME HAS BEEN MADE SIMPLE AND EASY FOR YOU.

<table>
<thead>
<tr>
<th>Amount of Mortgage</th>
<th>$18,000</th>
</tr>
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<tbody>
<tr>
<td>Term of Mortgage</td>
<td>20 years</td>
</tr>
<tr>
<td>Interest and Amortization</td>
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<tr>
<td>Taxes (Estimated)</td>
<td>30.00</td>
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<tr>
<td>Water (Estimated)</td>
<td>2.50</td>
</tr>
<tr>
<td>Insurance (Estimated)</td>
<td>5.40</td>
</tr>
<tr>
<td>TOTAL Monthly Carrying Charges</td>
<td>$151.84</td>
</tr>
</tbody>
</table>

For each $1000 additional down payment, deduct $6.33 from above monthly carrying charges.

The average monthly amortization is $75.00. This is a saving!

Why continue increased rents?...or be content with an ordinary or obsolete home?...when you can now own a new Country Ranch Home for so little at NORGATE-IN-BROOKVILLE.

HOME OWNERS SAVE ON INCOME TAX

Mortgage interest and real estate taxes are allowable income tax deductions which amount to a substantial saving to the home owner.
MODULAR PRINCIPLES:

How the Four-Inch Control Simplifies Home Building

Chapter 9—Construction and Use of the Universal Jig Table

By Griffith S. Clark

Application of the mass production technique is possible whenever materials are scheduled to the job in an orderly fashion and working stocks of dimension lumber are properly handled at the site. This can be done by using jig tables for assembling many small pieces into larger construction parts. Any system is acceptable, if uniform, but use of the 4-inch modular control as the coordinating medium assures a simplified operation and virtually guarantees substantial savings.

So long as it has modular markings, accurately placed, only one jig is necessary to fabricate all wall, floor, roof and non-rectangular sections required in a house. This is the only known system with which one jig can be used successfully.

As stressed in previous articles, center lines of all walls and partitions must be located in exact 4-inch multiples and all walls are treated as if they were actually four inches thick. This makes it easy to locate subassemblies for intersecting partitions in their proper places, once the various functions of subassemblies and their relationship to the modular lines in placement is understood.

Portable or Permanent

Obviously, the universal assembly jig should have modular identifications so located that they permit easy marking of the plates. The jig need not be elaborate, but accuracy is a must. This framing device can be outlined by 2x4's on the subfloor and a tick strip laid out on a 1x4 with the proper markings. It may be portable, easily moved from one site to another, or it may be a permanent shop installation. If permanent, the jig should have a hardwood flooring and two softwood 2x6 nailing strips should be inserted, one on the zero line and

---

FIG. 1—Universal type of modular jig used for fabricating walls, floors, roofs and non-rectangular sections
the other centering on the 6-foot line, for use in laying out non-rectangular sections.

Every jig must have a zero-starting right angle so that all framing to be assembled will be absolutely square. This zero angle starting position should be on the left hand end when facing the jig.

**Four-color Marking**

Four-inch marks along the length of the jig should be designated in four different colors, such as red, white, yellow and black which seem to be the easiest colors to identify accurately. Most color-blind mechanics can pick out these colors without trouble. Each colored stripe should be 1\(\frac{1}{4}\) inches wide and each color should repeat itself every 16 inches. The center line of each stripe should coincide with the 4-inch modular marks. This pattern will allow quick placement of studs through covering the stripes of a designated color (see Figure 1).

The jig should be wide enough to contain the maximum height wall section with space left over for wedging against solid backing. If an 8-foot 1\(\frac{1}{4}\)-inch section height is used, the clear space between guides should be about 8 feet 8 inches. Two 2x6 wedges can then be used on the flat. Stubs, rough openings and subassemblies should be in place before tightening the wedges against the plates. The wedges should always be driven in the direction of the zero end so that the framing remains square.

**No Hand Rule Needed**

It should not be necessary to use a hand rule provided the jig table has been marked accurately and the plan has been properly detailed. Cut a four-inch square of \(\frac{3}{8}\)-inch hardboard diagonally in half. Starting at the right angle, mark the base and altitude of the triangle with \(\frac{1}{4}\)-inch kerfs, each one inch apart. This will make a rule that has only 1-inch markings. Have several of these markers on each side of the jig (see Figure 2).

**Locating a Rough Opening**

In locating a rough opening (for a window), be sure that all lintel lengths are six inches longer than sash widths. When the center lines are designated on the plan, deduct one-half the lintel length and mark the top and bottom plates. Keep the two plates together while being marked so that all marks coincide. The mark corresponding to the left end of the lintel becomes the location of the inside face of the through stud.

For example, a reference to the first floor plan which appeared as Figure 1 in the August installment of this series will show that section...
Field Erection of Walls

After the first-story walls have been erected and joined, the ends of the interior partitions which abut outside walls should be lagged. Experience has proven that fabricated sections cannot be joined successfully with spikes alone. One 3/8 x 3 1/2-inch lag screw has a resistance to withdrawal per inch of penetration from Douglas fir equivalent to seven 20d spikes. Lag should be located approximately one foot from the top and bottom of each section, plus one in the middle.

When continuous plates are applied conventionally, they can be attached by two methods. One breaks the joint between sections and the plates so that they are not continuous (see Figure 4). The alternative is to make half-lapped connectors in 2-foot lengths for the various conditions and send to the field. These are nailed in place, nailing the joint properly, and intermediate filler pieces are cut to fit. The latter method will save at least 35 per cent of the time required for application with the usual conventional methods.
Caterpillar D-7 strips top soil prior to construction and piles it to the rear of lot. Slab and stoops are poured, house is built, and sidewalks and drives are laid. The D-7 returns the top soil to the lot after rough grading.

How to Reduce Lawn Costs To Less Than Half

Experiments by Virgil Place prove that farm machinery is a valuable addition to his equipment inventory. Through owning and operating the equipment shown on these pages he has reduced the cost of a 4,000 square foot lawn from $124 to $47.

The standard farm attachments used with a Ford tractor include a weeder, tiller, and seeder. These, in addition to the large land preparation machinery, reduce the need for common labor, speed the job, and lower costs.

Crews are not enlarged in the spring when the company starts catching up on seeding the lawns of winter building. The new method not only saves money, but quickly over-takes the backlog of unplanted lawns.

Rough grading of the top soil is done with a rear bladed Ford tractor. The rubber tired machine does not harm sidewalks and drives.
Smaller amounts of top soil are strategically spread with this scraper-loader. All attachments are powered with Ford tractors.

Track-on front end loader throws top soil over the sidewalk onto the parkway. Dirt has been moved from the rear of the lot.

Allis-Chalmers Model-D grader with a 12-foot blade finishes grades the lot. Operators regulate the correct slope.

Minimum labor is needed in the mechanized operation. Leveling operations are the only hand jobs.

First step in the seeding operation utilizes standard farm weeder. The ½-inch teeth break clods prior to seeding.
Heavy clods are broken with a tiller. The spring teeth dig down 4 to 6 inches.

The seeder has two storage units for seed and fertilizer. Design of the attachment enables it to roll and cover the seed. Operator seeds entire lawn in less than 30 minutes.

How to Seed

Sixteen pounds of blue grass and 120 pounds of 6-12-12 fertilizer are used on every 4,000 square feet of lawn. The “hot” fertilizer requires plenty of water. High school boys water lawns prior to owner occupancy. Owners are instructed in lawn care and take over the responsibility when they move in.

“Summer seeding is a problem. It should start June 1 and continue to August 15. However the FHA won’t allow any summer escrows for lawns,” stated Andy Place, secretary of the company. In answer to the question, “What do you do in the summer months?” Place told of a perennial rye grass which germinates in seven to eight days and is used as a protective cover for the blue grass. The rye is sown by a hand operated broadcast seeder using about one pound per 1,000 square feet of lawn.

High school students on summer jobs keep the lawns wet. Owners will move into houses having green lawns; they then take over their responsibility. Company educates them on care during the first year.

SEPTEMBER 1952

Seeding operation uses a Brillion seeding attachment. The farm machine combines seeding, fertilizing, and rolling in one pass.

Tables Show Savings When Builder Owns the Equipment

### Machinery Method—16 Houses Per Day

<table>
<thead>
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<th>Operation</th>
<th>Man Hours</th>
<th>Cost Per Hour</th>
<th>Total</th>
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<tr>
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<td>Model D</td>
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### Labor Method—5 Houses Per Day

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<tr>
<td>Cost of Seed and Fertilizer Per House</td>
<td>25.00</td>
<td></td>
<td>TOTAL $124.20</td>
</tr>
</tbody>
</table>
"We save $95 per home"

"We can cut sheathing and under-coursing time as much as fifty percent and still build a better, faster-selling home with Insulite's new sidewall system. We're completely sold on this new method of applying outer-course shingles over Shingle-Backer and Bildrite has been proved to give you extra bracing strength, greater insulation value, more durable construction . . . and to stand up under wet weather conditions! Here's how it works to save you money!

FREE KIT FOR BUILDERS. This helpful Insulite Kit for Builders is yours for the asking. Contents include Insulite's Cost-Comparison Folder with which you can easily figure your actual savings with Shingle-Backer and Bildrite. For your free kit, write Insulite, Minneapolis 2, Minnesota. Or, contact your Insulite sales representative or Insulite dealer for further information.
with Insulite's new Shingle-Backer system!

shingles over Insulite Shingle-Backer and Bildrite Sheathing!

Rey Halin
Superintendent, Shirley Construction Company,
Minot, North Dakota

BILDRITE SHEATHING goes up faster, easier. Cuts application time as much as 50%. 4-foot sheets have twice the bracing strength of horizontally-applied wood sheathing, thus save corner-bracing. Waterproofed throughout, eliminates need for building paper. No matching loss or waste. Saves time... saves material.

INSULITE SHINGLE-BACKER speeds completions. Handy 4-foot panel applies far faster and easier than wood under-course shingles... cuts application time in half. Produces deep, modern shadow-line. Eliminates waste. Waterproofed throughout... use it, store it anywhere in any weather. Comes in easy-to-handle packages.

DEVELOPED BY INSULITE, this combination makes a strong, tight exterior wall with tremendous holding power. (1) Bildrite Sheathing (2) Shingle-Backer (3) Outer-course Shingles (4) Grooved Nail. Test wall exposed to 250 m.p.h. air blasts at Univ. of Minn. came through intact. Not a shingle was loosened.

Build and insulate with double-duty INSULITE

Made of hardy Northern wood

INSULITE DIVISION,
Minnesota and Ontario Paper Company,
Minneapolis 2, Minnesota
LEIGH BUILDING PRODUCTS
... for that home-selling final touch!

CLOTHES CHUTE DOORS
RECESSED SHOE RACK
SWING-AWAY GARBAGE CONTAINERS
ADJUSTABLE CLOSET RODS
BUILT-IN DUST CHUTES
ATTIC VENTILATORS FLUSH TYPE
ADJUSTABLE TRIANGLE VENTILATORS
FOUNDATIONS VENTILATORS
BRICK VENTILATORS
HEAVY DUTY FOUNDATIONS VENTILATORS
CEMENT BLOCK VENTILATORS

ARISTOCRAT AWNINGS
FLOWER BOXES
WINDOW SHUTTERS
DOOR CANOPIES
MAIL BOXES
SCREEN DOOR SCROLLS
PACKAGE RECEIVER

So much added beauty, convenience, value ... FOR SO LITTLE!

For new homes or remodeled jobs, builders the country over agree Leigh All-Metal Building Products provide those final touches that add real "buy appeal" for both Mr. and Mrs. Home Buyer. The Leigh Line is complete with each unit built to fill a definite need in a more attractive, efficient manner . . . and mass produced in a modern factory at lowest possible cost. Join the thousands who know from experience the sales power of Leigh products. Just one trial will convince you!

See your Leigh jobber or write direct for beautifully illustrated catalog 52-L showing the complete Leigh Line.

LEIGH BUILDING PRODUCTS DIVISION
AIR CONTROL PRODUCTS, INC.

COOPERSVILLE LEIGH AVE. MICHIGAN

142 AMERICAN BUILDER
There's a famous BEE GEE Window to meet every need, satisfy every fancy, fit every budget—of every customer for every type of home. Beauty, design, style, practicability, price—BEE GEE Modern Wood Windows have them all—in over 42 different styles and sizes.

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

BROWN-GRAVES CO.
Akron 1, Ohio
This fast selling window means business!


Every sale is backed up by hard-hitting dealer aids: Mat ads! Radio Scripts! Television Scripts! Direct Mail! Cooperative Advertising! Write, wire or phone today for information about dealership in your territory.

Get on the bandwagon for better sales...faster turnover. Stock All Aluminum Miami Awning Windows...

IT PAYS OFF IN BIG PROFITS!

Manufactured by
MIAMI WINDOW CORP.
5200 N.W. 37th Avenue, Miami, Florida
How One Builder Held Costs to a Minimum

Savings start with basic design. Three main lines of approach are employed in design studies.

(1) Simplification. Plans are drawn with an eye to eliminating as many points of contact and changes of direction as possible.

(2) Design. Use of as many units as possible that can be prefabricated by factory production methods away from the site.

(3) Redesign of elements and improvement of erection methods to eliminate some of the materials and operations previously required for installing door bucks, stairs, window trim and floor systems.

Bidding, generally, is informal, and quotations are usually made after close cooperation between architects and builders in preliminary planning. Contractors are not required to assume any responsibility for performance. The Holsmans believe it is unfair to expect a contractor to assume responsibility for performance when he did not create the design. It is also uneconomical; for if a contractor is obligated as to performance as well as workmanship, he will naturally include a margin of safety in his bid.

A major design feature of the Winchester-Hood project permits 33 per cent more apartments over practically the same foundation and under the same roof as compared to a typical three-story and English basement walk-up. The Winchester-Hood buildings have four floors of apartments in the same height once required for three. This has been attained by lowering floor-to-floor heights without lowering ceiling heights. With the Holsman truss-slab system of floor construction, a four-story walk-up requires only 40 to 42 risers from entrance at grade to fourth floor, instead of 42 to 45.

Design and construction details at Winchester-Hood are typical of other Holsman projects, and of projects in which the Holsmans have associated in an advisory capacity. Briefly, these include:

(1) Rowlock reinforced brick walls in which steel lintels are eliminated and erection is expedited. All exterior walls are reinforced brick of uniform 8-inch thickness with an allowable load-bearing value of 400 pounds per square inch. The bricks are laid on edge with stretchers and headers alternating, and the 3 1/2-inch core of the wall is poured with 2,500 pounds per square inch cement grout.
Joints and girders boxes are set in place and are ready for the setting of precast concrete slabs.

Cement mortar of the same strength is used for bedding the brick. To assure filling the core, brick is run up only three to five courses between groyt pons. In warm weather, the core is filled at more frequent intervals than in cool weather.

Half-inch vertical rods on 24-inch centers are dropped in the hollow core either before or after grouting, and a 1/4-inch horizontal rod at every third course (13 inches c. to c.). Additional horizontal rods are introduced over windows, just above the precast headtrim, of lightweight concrete to increase the beam strength of the reinforced brick and eliminate need for steel lintels. The precast headtrim, set on a template and used as a form for laying brick above the window, is anchored to the brick masonry.

This rowlock brick wall construction results in substantial saving of interior space, saving of mortar and 33 per cent increase in wall construction speed. It is also less expensive to build than comparable walls built on a concrete skeleton frame.

(2) The floor system consists of 3-inch slabs of lightweight concrete, 12 by 32-inches in size, supported by steel-box concrete joists, 8-inches deep, 30 inches O.C. The concrete mixture used in the slabs is designed to give them a fine porous texture which produces a finished acoustical ceiling with a symmetrical pattern of V joints between the slabs every 12 inches, running from joist to joist. Joists are supported at one end in the brick masonry wall, and at the other end are framed into the girders.

Girder sides are closed by field-welding filler boxes of 16-gage steel between the joist boxes. Conventionally bar and stirrup reinforcement is placed in the girders. Joist reinforcement consists of a single bent bar, of a size depending on the span, shop-welded into the steel box unit.

This workman is placing reinforcing steel in the floor slab grooves.

Journeymen laying copper tubing on top of steel box joists (dark lines in photo). 80 per cent of the heat is directed downward from the ceiling, and 20 per cent upward from the floor. Installation is used on the roof, which employs the same general construction.

This bar takes both tension and shear stresses. The steel box form also helps to resist these stresses. Anchors in addition to the angle plates are installed at both ends of the joists. In the wall pocket, a bent bar is hooked over a horizontal rod of the wall reinforcement. Across the girders, a U-bar ties the ends of opposite joists together.

Precast floor slabs laid on the flanges of the steel box joists form a working deck for installing heating coils. Light reinforcement of 1/4-inch rods is placed in the top grooved joints between slabs, and steel ties are dropped over those rods into the joists to anchor the deck to the floor framing members. When all floor installations are completed, the joists and girders are poured and the slabs grouted, transforming the entire floor system into a rigid unit.

3. Stair design construction includes use of precast treads supported at one end by a 10 by 16-inch steel plate stringer and at the other end by the masonry wall of the stairwell. The stringers, prefabricated in story heights with clip angles welded on to carry the treads, serve as story poles for the brick mason and the floor contractor. The stair treads for the enclosed stairways are laid by the masons as they build the supporting 4-inch-block walls. Coursing of the block in these walls is designed to fit the stair treads without any cutting.
of the block. Treads for enclosed stairways are manufactured with risers attached, in precast units, and joints between units are filled with grout after erection. For the outside stairways, pockets are left in the exterior brick walls to permit insertion of the treads. No risers are used on these stairways, erected in open walls.

(4) Solid plaster partitions are required only to form continuous separating barriers to ceiling height between rooms. Precast wardrobe storage units with sliding doors are used in place of conventional closets, and because they are less than ceiling height, they do away with finishing joints at the ceiling line.

While wooden floor runners for the partitions are being placed, carpenters at the same time erect finished door bucks, 2 inches deep, which are held rigidly in position by precision templates. This eliminates the conventional rough door frame and saves the operation of setting it. In a groove provided by the bucks, nails are driven on 12-inch centers on both sides of the metal lath to anchor the door frames to the plaster. Plaster is finished flush with the bucks, and joints are covered with 3/4-inch half-round casing. In hanging the doors, carpenters need do no trimming, as the doors are pre-fit.

As an alternate to the use of plaster, a 2-inch solid gypsum board partition is now being used in some construction. The wall is laminated, using four sheets of 2-foot by 8-foot gypsum board, glued together.

(5) Setting of precast window trim is simplified in a way which eliminates the temporary installation of a rough frame. The precast apron is set on the brickwork, and on it is placed a tractable wooden template with adjustable stops set to proper height and width. Precast trim is erected around the template, with the jambs tied to the sides. The beoltrim, in one or more pieces, rests on the top. Brickwork then is carried up alongside the jambs and over the window head, where an additional horizontal rod or two is inserted as required. After the mortar has set, the window template is removed. Steel casement windows are set into reglets provided in the precast concrete trim.

(6) Panel heating installation is tied in with floor design. Efficiency gained by installing 3/8-inch soft copper coils in contact with steel joists makes it feasible to heat the apartments with this size tubing on 3-foot
centers. Each apartment has individual flow control of hot water to its ceiling coils, the control being operated by an air-activated thermostat. The heating circuit is equipped with an upfeed return in order to maintain a balanced system with equalized pressure on all floors. At the top of the return loop is an air vent connected by a discharge line to the basement. Eighty per cent of the heat is directed downward from the system, and 20 per cent upward. Heat output from the coils under maximum design conditions requires 150-degree average water temperature of coil, 125 B.T.U. per lineal foot of tubing installed parallel joists or girders, and 75 B.T.U. per lineal foot of tubing on crossovers. The panel heating system is 95 per cent completed when the concrete floor slabs are poured, and can be used effectively to provide temporary construction heat, even with glazing and doors out. This factor expedites construction as well as provides more comfortable conditions for workers in winter months.

Heat lag and high cost of installation have always been considered the two prevailing drawbacks to panel heating. The Holsman method of installing panel heating proves, however, that heat lag can be overcome by eliminating overdesign of system. In a four-day test at one project, outside temperatures varied from 65 degrees F. to zero, but apartment heat varied no more than two degrees at any time, and thermostatic control was maintained with virtually no lag. This is attributed to the use of small piping, high water temperatures, rapid flow, and extended ceiling surface which increases effective heating areas.

Installation costs are reduced by cooperation between architect and contractor, and the fact that the contractor is not expected to guarantee performance of the system. Panel heating costs less to install in this way than any other system.

(7) Vertical wiring for electricity was installed at Winchester-Hood because the mutual owners preferred to buy electric power wholesale. In each building, the vertical risers are tied back to a distribution box in the basement by horizontal conduits in a 3-inch poured concrete slab on the first floor. This floor, of conventional beam and slab type constructed on steel pan forms, is the only one that is not built by the precast slab and joist system. Heavy feeder lines are hung below the first floor.
This Award Winner

Features Modern Design

LOCATION:
Provo, Utah

ARCHITECT:
William Rowe Smith

BUILDER:
Delmar C. Kenner
Livable Homes Company

This house is an example of the latest trend in house design for speculative building. Its principal features are:

1. Open planning which gives a sense of spaciousness, while retaining privacy and ease of circulation for all rooms.
2. Placing the bathroom as an inside core to free valuable wall space.
3. Orienting the living-dining area toward the rear of the house.
4. A folding curtain arrangement which makes it possible to use the main bedroom space either as one large master bedroom or as space for...
Spacousness of living-dining room is enhanced by orientation to mountain view at rear of house

Roof at rear is extended out four feet over living-dining-kitchen section. Skylight provides light for utility hall, ventilation and light for bathroom.

Kitchen opens up around corner of fireplace. Utility hall is behind fireplace core, connects kitchen with front entry.

Skillful combination of simple materials lends distinction to living room.

 Amaricn Builder

The Livable Homes Company is building ten of these houses on plots of one, two, one-half and three-quarter acres in the countryside just north of Provo. Prices range from $16,000 to $18,500.

Livable Homes Company won an honorable mention in a recent judging by the Housing Research Foundation of the Southwest Research Institute, for the country's top housing projects by merchant builders.

**National Products Used**

- Insulation: Fiberglas by Owens-Corning Fiberglas Corporation
- Floor surfacing: Kentile by David E. Kennedy, Inc.
- Electrical: fixtures by Swivelier Co., Inc.
- Hardware: Kwikset lock sets.
- Paint: interior, Pratt & Lambert, Inc.
- Plumbing: tub, toilet, lavatory sink by Crane Co.
- Kitchen: Universal Selecto range by Landers Frary & Clark.
Built-ins are numerous, include a window-seat bookcase under living room front window, and bedroom closets which combine drawers, mirrors, open shelves, shoe racks, and a drop-front desk.
SENSATIONAL NEW THREE-BEDROOM SARATOGA BY NATIONAL HOMES

THE HIT OF NATIONAL HOME WEEK

Watch the crowds flock to see ... admire ... and BUY! The right product at the right price! Nationally advertised in leading magazines and newspapers, to sell for less than $10,000 (plus land). Investigate your opportunities as a National Homes dealer today! Buy Nationals and you build success!

LATEST CATALOG FREE!

Write on your business letterhead for your copy of this beautiful, colorful catalog. Complete array of National's designs and features. No obligation.
YOU'LL NEVER NEED THESE...

WITH Roddiscraft PLYWOOD WALLS

RODDISRAFT PLYWOOD PANELING
PAYS FOR ITSELF

You can tell your prospects they'll never have to PAPER, PAINT or PATCH — when you panel your homes with Roddiscraft Hardwood Plywood.

Yes . . . the first cost is practically the last cost with Roddiscraft Hardwood Plywood.

Over a period of ten years or less the average cost of a paneling job will be no more than that of an ordinary plaster job using paper or paint finishes requiring constant maintenance.

Beyond that period, the negligible amount of maintenance needed to preserve a Roddiscraft paneled wall results in real savings to the building owner.

Sell your prospects on this economy feature of Roddiscraft paneled walls. It will mean more sales, more satisfied customers and more profits for you.
Does your town need a new bank, or a branch bank? This 35 x 48 foot building housing the Osceola branch of the First National Bank of Mishawaka, Indiana includes the latest in banking facilities—a drive-in teller’s window.

Banking from your car is a California innovation now sweeping banking circles around the country. Busy depositors can drive up to the projecting teller’s window, make their deposits and leave; without stepping from the car. The window combines 1-3/16-inch stainless steel and 1-3/4-inch bulletproof glass for protection.

All banking facilities have been included in this small branch bank. In addition to the drive-in teller’s window are a manager’s office, three inside teller’s windows, vault, two safety deposit booths, and two check-writing counters.

LOCATION:
Osceola, Indiana

ARCHITECT:
Paul F. Jeregan, Mishawaka, Indiana

BUILDER:
Ralph Slessman, Osceola, Indiana

Structure has been divided into three parts. At the rear are the heater room, vault, and washrooms. The center area houses the working facilities while the front area is for the public.
Projecting teller’s window for drive-in customers allows banking transactions from cars.

Neighborhood Bank

Interior view of the drive-in teller’s window shows the turnstile pass-through and the electronic intercom.

Detail of the Diebold drive-in window and package receiver.
Gentlemen:

In 1948 I had my home built at the address below and after living there about six months my cellar started to leak from several places along the seam and walls. At first I didn’t pay much attention but the following Spring after a rain, it leaked worse. I called the Research Laboratory of Rutgers University in New Brunswick and was informed that in order to make the cellar 100% dry proof, I would have to have the outside dug out and have the footing and walls retarred.

Needless to say, it was going to be a big job and an expensive one too, because several contractors wanted from $350.00 to $450.00 to do the job. The upstart was I couldn’t afford it, so in August 1950 I was transferred to Korea and when I returned last year (1951) my wife told me the cellar was worse, anywhere from 40 to 60 buckets of water coming in during and after a rain—in fact, if it looked like rain, it would start coming in, almost. Then there was always the dampness and musty smell after or during the dry-up period.

Several months ago my wife heard from a party about your KAY-TITE and not being sure, I visited this party and he showed me his results—a dry cellar, although his was not leaking—only dampness. So what did I have to lose by getting several cans, which I did. I put two coats of KAY-TITE from the base to about 1/2 feet up the wall. I also discovered I have several large holes and without a word of lie, after reading the directions carefully, then applying KAY-TITE, I have a dry cellar. Not a drop of water or dampness. As you no doubt know, we have had quite a lot of heavy rain these past several weeks. Now I intend to do the whole walls up to the ceiling.

The reason I am writing you, Gentlemen, about KAY-TITE is I want to say I’m grateful and pleased beyond words. You not only gave me a nice dry cellar but you also save me a lot of money and time. I wish you could send someone over and just see the good results of KAY-TITE, and my cellar was really bad. Try and send someone before I finish the rest of cellar.

I’ve had quite a lot of people over and they all agree. At present I’m stationed in Philadelphia and a few persons tell me they can’t buy it here and last week I bought four cans for a friend of mine who lives in this area, so he could dry his cellar.

In closing, many, many thanks for the first time my children can really enjoy our cellar now—because KAY-TITE makes it dry and cozy.

Respectfully yours,
(signed) H. J. Kupper

To: KAY-TITE
West Orange
New Jersey

From: M.sgt. Hubert J. Kupper,
U.S.M.C.
148 Second Street
Dunellen, New Jersey

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No. G-34
Store Front Details

The problem here was to design a store front around existing conditions. The building construction (parapet and structural members) were already in place and could not be changed because of the owner’s objections. In addition, the owner would not permit any projections beyond the building line. This meant that any additional features necessary in the store design, such as awnings and lighting would have to extend below the existing construction.

To overcome the effect of a still lower appearing front, the awning enclosure and the entire display window was recessed in the store area. This kept the ceiling at the building line at a maximum height.

Owner requirements demanded a complete fireproof construction. The platforms and ceiling were framed in steel and covered with fire resistant materials.

The show window platform and sign fascia are precast terrazzo of red Lavanto marble chips and white portland cement with color pigment added. The show window glass sash and sill members are stock aluminum members. The drywall wall, adjoining the entrance doors, is Verdi Antique marble.

Lighting for the display windows is a combination of fluorescent and incandescent. The incandescent lights are 150 watt R-40 lamps in recessed HighHat fixtures.

Leveling Rod Made From Whiteface Tape

Attach a whiteface steel tape to the face of a 2x2 inch wood strip, 8 feet long. Hook (4) is attached to bottom of stick and tape is unrolled from case (3). Secure bottom and top of tape to stick with two small bent nails. When purpose is served nails are pulled and tape removed.—Warren W. Howe, Longview, Wash.
BRIGHTEN 2 ROOMS...with 1 partition of PATTERNED GLASS

It's an idea that opens prospects' eyes, wins admiration, and starts favorable talk about your houses. And it's an inexpensive thing to do. Try it in your houses and listen for comments. You can choose from a variety of Blue Ridge patterns—in several attractive finishes. Your Libbey Owens Ford Glass Distributor or Dealer can show you samples.

BOOK OF 42 DECORATING IDEAS. "New Adventures in Decorating" shows how leading architects and decorators have used this smart-looking glass to add brightness and distinction to homes. Mail the coupon for a copy.

No. D-94
Fireplace and Cocktail Bar

The details and photograph on opposite page show the novel arrangement of fireplace and adjoining cocktail bar placed in a prominent position on the wall of living room. The fact that the house is contemporary with a spirit level setup including dining room and kitchen on the half level below living room, made these unnecessary to avoid extra steps.

There is ample provision for storage on each side of the fireplace and above the bar. There is also shelf space for books. The panel forming the cabinet above the bar continues in redwood plywood over the fireplace and around the entire room, tying in the fireplace and cocktail bar as a part of the living room. Ceramic tile is carried around the fireplace and over the bar tying these two units together. A refrigerator is provided beneath the bar. There is also a sink and a small work counter. The counter top, sink and fixtures are stainless steel. Note also the fluorescent light above the sink.

Nailing Forms

When form nails are not available for setting up forms, then common nails and pine plaster lath may be used. Lath are ripped off when stripping forms. This leaves nails free to pull.—W. A. Woodard, Volga, So. Dak.

Handling Short Nails?

When using extremely short nails, put a little glue or linoleum cement on the tip of your finger to facilitate handling.—Werner Kraatz, Santa Cruz, Calif.
NO. D-94 FIREPLACE & COCKTAIL BAR

Sections...
YES, THE HEATILATOR® FIREPLACE UNIT MAKES YOUR HOMES SELL MUCH FASTER.

YOU GET A BIG EXTRA BONUS BECAUSE:

1. **It's easier to build** a fireplace around a Heatilator unit. Complete from floor to chimney flue. Fully assembled with firebox, throat, down-draft shelf, damper and smoke dome.

2. **Construction is standardized** with no limit to mantel design or decorative treatment.

3. **You save time**, labor and materials because the Heatilator Fireplace is a compact, ready-to-install unit.

**It's easier to sell** a house that has a Heatilator Fireplace. The unit's scientific design assures trouble-free operation and eliminates the common causes of smoking. It circulates heat throughout the room instead of wasting it up the chimney. This is the kind of extra-value feature people are looking for these days . . . and it costs you less than almost any other important feature. So specify the famous Heatilator Fireplace . . . the name home buyers know and respect. Heatilator, Inc., 329 E. Brighton Ave., Syracuse, New York.

*Heatilator is the reg. trademark of Heatilator, Inc.*

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YOU SAVE TIME AND TROUBLE

WHEN YOU USE

THE FAMOUS

HEATILATOR

FIREPLACE
Here Are Six Unusual Ways
To Use Standard Garage Doors

Garage doors can act as disappearing walls. They can solve many building and ventilating problems.

Don't overlook the possibilities of installing standard garage doors to solve special building problems. Today, the garage door with its easy mechanical operation can serve as a disappearing wall. It can be used effectively in breezeways to further outdoor living, in church dining halls, in winter storage areas and numerous other ways.

Northern climates require the protection of a garage door. Outdoor living space utilizing such a door can be easily converted into valuable winter storage space. The sunroom, breezeway, and carport illustrated are examples. See installation Number 1 below.

Ventilating (screened paneled) door is used with a standard garage door in this sun porch. Both doors are operated on a special track which has a locking device so that the doors do not interfere with each other. The ventilating unit is available for summer living while the garage door affords winter storage facilities. The sun porch can also be used as an extra garage when the need arises.
2 Kitchen odors have been eliminated in this Indianapolis church. When cooking is in progress the two section 12-foot door is in the closed position. It can be opened to facilitate serving. Lock on door keeps out intruders.

3 Carport was transformed into a garage by the addition of two garage doors. Owner placed storm sash above the stucco wainscoting of the carport. Doors at both ends make a large open passageway so owner can drive through to the front of his narrow lot.
The easy opening mechanism of the upward acting garage door is a safety factor in boat house construction. Large door accommodates cabin cruiser while two section door gives plenty of headroom for runabouts. Mesh below the large door stops wave action.

West Virginia Tuberculosis sanitarium uses garage doors to close off large ventilating areas. Nurse or ward attendant has only to turn locking handle to operate doors.

Deluxe breezeway installation has hidden tracks. The glass paneled door slides upward into a false ceiling. Screen cloth has been placed on the exterior for family comfort.
New Tobacco Barn Is Designed to Cut High Fire Losses

Use of gypsum sheathing promises to reduce fire hazards, lower construction and curing costs.

OUT of about 400,000 tobacco barns in the flue-cured area of North Carolina, South Carolina, Virginia, Georgia, Alabama and Florida, almost 10 per cent are replaced annually—partly due to old age and severe weather, but largely due to fires.

Though educational programs conducted by the North Carolina Experimental Station at Oxford, N. C., have helped reduce this tobacco barn hazard, the danger still persists—mainly because the majority of existing tobacco barns today are built with logs or double layers of wood sheathing, materials that will burn if given the chance.

But a new type barn—already thoroughly tested by the Oxford Tobacco Experimental Station and finding enthusiastic acceptance by many farmers who have built them—promises to reduce the tobacco barn fire menace materially. This barn gives more fire resistance by incorporating gypsum sheathing, which has a gypsum core that resists combustion.

In addition, the barn usually costs less than the conventionally built tobacco barn, gives savings in fuel used for curing, goes up much faster, and does an excellent job of curing. It's giving tobacco farmers very satisfactory service, according to Dr. O. A. Brown of the Oxford Experimental Station.

Farmers save on lumber from the framing out with this new barn, which is 18x18x18-feet. Instead of the conventional framing where wood studs are spaced 16 inches on center, studs are placed 24 inches apart, thus saving on wood in the initial framing. Instead of piece-by-piece handling of wood sheathing, 2x9-foot gypsum sheathing goes up quickly and easily. By adding a good roof covering, longer life is given to these barns. And, as many farmers have done, the inside of the barn can be lined with gypsum sheathing to give even greater fire protection and insulation value.

Also adaptable for this type of installation is insulating gypsum sheathing, which has a vapor permeable reflective paper on one side. This reflective surface is applied to the studs, giving added sidewall insulation equal to 1⁄2-inch of fiber insulation board. The insulating quality of a reflective surface is a recognized principle of physics, and this valuable reflective insulating paper adds only a fraction to the cost of materials. No additional labor of application is required.

Whether plain or insulating, gypsum sheathing can be applied to the inside stud surfaces as a lining, just as it is applied to the outside. This sheathing makes a tighter wall because its "V" tongue-and-groove edges minimize wind infiltration. Typical frame barns, for example, require from 900 to 1,000 pounds of coal for each tobacco cure. But tests with the new barn using gypsum sheathing showed that a marked saving in fuel was made for a typical curing.

This modern tobacco barn can be built by following the detailed plans shown on these pages, together with the "Bill of Materials" and directions for applying gypsum sheathing.

### BILL OF MATERIALS

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<tr>
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Lumber, Etc.

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Mineral Surface

Roll Roofing ...... 90 lb. 8 rolls

Flues—Straight .... 10 pieces 20" long x 12" diameter

Ducts—Straight .... 24 pieces 20" long

Miscellaneous ..... 13 elbows—3 tees, 3 fire joints, roof collar

Braces .......... 2 — ½" x 1" iron straps

Anchor bolts .. 15 — ½" x 18" long

Add For Windbreak

Gypsum sheathing .. 5 — ½" x 2' x 9'
Studs and Plates .. 6 — 2" x 4" x 10'

How to Apply Gypsum Sheathing

1. Apply gypsum sheathing with the long dimension across the supports and with the groove edge down, interlocking the tongue and groove edges.
2. Place face side out (paper on back is lapped at edges).
3. Butt ends of sheaths over centers of supports.
4. Use galvanized 5/16" head diameter, 1-½" long roofing nails, having No. 11 gauge barbed shanks.
5. Secure sheathing to studs with nails spaced about 4" on centers, seven nails per 24" sheathing width per support.
6. Place starter nails not less than ½" from edges and ends of sheathing.

Illustrations and data courtesy United States Gypsum Co.
Another New AMWELD® Product

AMWELD® INTER-LOK

KNOCKDOWN STEEL DOOR FRAME

with these New Design Features

SAVE SPACE AND DOLLARS. Ship and store from 5 to 6 times as many Inter-Lok as one-piece frames in the same amount of space! ... saves freight and warehousing costs.

MITRED CORNERS. No unusual vertical or horizontal joints ... does not require open corners to fasten assembly together...no screws, pins or loose fastenings.

REINFORCED HEADER. No twisting ... strong.

SNAP-ON SPREADERS. Keeps frame in alignment during erection ... easily, quickly removed.

NO SCREWS. Hammer is only tool needed. No screws in header-to-jamb or spreader-to-jamb assembly.

ECONOMICAL. Quickly and easily assembled, transported and erected by one man.

SAME PLEASING APPEARANCE AS AMWELD ONE-PIECE WELDED FRAME.

AMWELD® INTER-LOK FRAME

FRAME. Material—18 U.S. gauge steel. Snap-on steel spreaders. Frames primed at factory. Frames equipped with two 3-knuckle leaves of 3½” x 3½” hinge welded in place. Two knuckle leaves of hinges, hinge pins furnished. Rubber bumpers, and screws furnished for strike side of jamb; also equipped with heavy gauge reinforcement for strike plate and welded-in plaster guard. Strike plate furnished, except for frames to be used with Schlage locks.


5 EASY STEPS

1. Insert Jamb in Header
2. Lock AMWELD Inter-Lok Tabs in Place
3. Snap Spreaders on Bottom of Frame
4. Install Frame
5. Remove Spreaders

AMWELD BUILDING PRODUCTS DIVISION

THE AMERICAN WELDING & MANUFACTURING CO. • 310 DIETZ ROAD • WARREN, OHIO
Includes THE NEW

American Kitchens
ROTO-TRAY DISHWASHER!

The one appliance
proved to sell
houses faster!

Here's house selling magic you can build right in.
...it's the new, sensational AMERICAN KITCHENS
ROTO-TRAY DISHWASHER. For—when she sees
the dishwasher she wants—thathouse—and its promise
of a work-saving, more enjoyable way of life!
Yes—the houses that sell fastest today are
work-free houses. And now you can add the one appliance
that saves work every day than any other
appliance you can name!

MAKES OTHERS "SECOND BEST"
The American Kitchens Roto-Tray Dishwasher
is the greatest dishwasher of them all—modern, efficient,
and really work-free. It can make your
houses the most popular houses in town!

American Kitchens Division, Dept. AB-9
AVCO Manufacturing Corp.
Connersville, Indiana

Find out today about the special discount to builders. Mail coupon!

Here's house selling magic you can build right in.
...it's the new, sensational AMERICAN KITCHENS
ROTO-TRAY DISHWASHER. For—when she sees
the dishwasher she wants—thathouse—and its promise
of a work-saving, more enjoyable way of life!
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and really work-free. It can make your
houses the most popular houses in town!

American Kitchens Division, Dept. AB-9
AVCO Manufacturing Corp.
Connersville, Indiana

Find out today about the special discount to builders. Mail coupon!
Reinforced concrete throughout...that means a lot when you build your home. It means a home that will last for years because it's resistant to the ravages of the elements, safe from fire, watertight and termiteproof. It means a home that's cooler through the hot months and costs less to heat in the winter. It means a home that retains its beauty, requires little maintenance and few repairs...a home that remains eternally young.

The strength of steel combined with the beauty and durability of concrete provides ideal construction practice. Clinton Welded Reinforcing Fabric, with steel members closely and uniformly spaced, gives proper distribution of steel reinforcing throughout...supplying strength and flexibility to home design and building. That's why builders, architects and engineers specify Clinton Welded Wire Fabric.

THE CALIFORNIA WIRE CLOTH CORPORATION * Oakland
THE COLORADO FUEL AND IRON CORPORATION * Denver
WICKWIRE SPENCER STEEL DIVISION * New York
Tough Waterproofing Problem
Solved by New Masonry Paint

A Midland, Mich., furniture dealer credits a new masonry paint with giving him a dry basement for the first time in 13 years.

Simon Cash, owner of the Midland Furniture Co., reports that his masonry waterproofing problem had been so stubborn he was not only forced to surrender the entire storage space in the basement, but that the store’s electrical system and the wooden floor of the building were in constant danger of extensive damage by moisture. In addition, there was some deterioration of the masonry itself.

Cracks in the floor were chiseled out so that the cement paint could penetrate to the source of the trouble.

Because of the unusually great water seepage, the masonry paint couldn’t be applied in the normal manner—considerable improvisation was necessary. For example, weep holes were drilled into the basement blocks to drain off water lying outside the foundation. While draining, two coats of Rox were applied to the walls; and the weep holes were plugged with the material in dry form.

Where masonry was disintegrating, the paint, mixed with two parts silica sand, is trowel-applied.

Applying powdered packing compound in widened cracks

Before deciding to give a trial to Rox, an inorganic cement base paint made by Rox Products, Detroit, Cash said he had tried several “disappointing cures” for the seepage, and had had other bids as high as $1,500 with no guarantee of permanent correction.

The basement, he said, was continuously flooded during both summer and winter; and four to five feet of water had to be pumped out at regular intervals to control, even mildly, the volume of water which poured in the walls and floor of the building.

Weep holes are plugged with the powder in dry form.

This is how Cash described the successful treatment with Rox:

Where masonry surfaces near the floor were starting to disintegrate, a heavy coating of the masonry paint, mixed with two parts of silica sand, was applied by trowel to restore and protect the wall against further damage.

Sealing up the walls was only part of the job because water was oozing up through cracks in the basement floor. These cracks were chiseled out, dry Rox was packed into the openings and then Rox, mixed to plaster consistency, with two parts silica sand, was applied as a finish coating.

National Home Week, Sept. 14–21

What’s underneath this CONCRETE IDEA FOR BEAUTY?

Floors, walls, roof decks, steps, driveways and walks... everywhere reinforced concrete is used, Clinton Welded Wire Fabric is a favorite with builders—here’s why:

Simple to Form and Shape. Clinton Welded Wire Fabric possesses the proper flexibility to make it easy to bend, form or shape right on the job. It is sufficiently rigid to hold its shape after forming.

Easy to Handle and Place. Both the heavy and light gauges of Clinton Welded Wire Fabric flatten quickly and easily from the roll.


THE CALIFORNIA WIRE CLOTH CORPORATION • Oakland
THE COLORADO FUEL AND IRON CORPORATION • Denver
WICKWIRE SPENCER STEEL DIVISION • New York
NEW PRODUCTS
Offered by Manufacturers

CHAIN SAW AB95206
Lightweight chain saw which can be operated by one man is powered by a nine h.p. Mercury engine. The saw has an automatic clutch, automatic chain oiler, non-clogging air intake, oversized cooling fan and simplified controls. The saw can be broken down into two parts of less than 35 pounds each. Harry Daston and Sons, Dept. AB, 472 Tacony, Philadelphia 35, Pa.

3½ YARD CEMENT MIXER AB95207
The White 3000 with a 3½ yard cement mixer allows a weight distribution advantage and permits an additional half-yard payload within highway weight limitations. The single axle unit has a 109½-inch wheelbase. The unit with 3½ yards of mix and 125 gallons of water has a total G.V.W. 27,450 lbs. front axle 7,500, rear axle 19,950. The White Motor Co., Dept. AB, 842 E. 79th St., Cleveland 1, Ohio.

MATERIALS CONVEYOR AB95209
The conveyor converts any Brik-Toter into a conveyor for sand, gravel, and other bulk materials. The hopper and side guards assure no spillage and no overloading. One man can excavate faster than three using manual methods, states the manufacturer. In many cases the upper end of the conveyor may be placed directly over a truck. Mar-Rail Conveyor Co., Dept. AB, 566 York Ave., Pawtucket, R. I.

PORTABLE POWER GENERATOR AB95222
Portable electrical power generators can supply power at the building site for all types of power tools. The units are small enough to transport in pick-up trucks and can be easily handled by one man. Two of the light weight units generate 750 to 1500 watts while two larger units can supply 3,000 and 5,000 watts. Kohler Co., Dept. AB, 44 High St., Kohler, Wis.

METAL AWNINGS AB95215
Low-cost awnings and canopies are made of heavy gauge, weather-protected steel. Assembly is by aluminum bolts. Ventilation is through sides and back edge or top. The unit is available in standard white with red, blue, or green alternate striping. Awnings are supplied in 38- and 40-inch widths, canopies in 50- and 50-inch widths. Special sizes are available. Leigh Building Products Division, Dept. AB, Coopersville, Mich.

BATHTUB ALCOVE PANELS AB95227
A bathtub alcove remodeling unit is delivered in a single package which includes three precut pieces of Monowall with metal channels and water-proofing channel filler. Designed for a five-foot tub, all units are precut to size; metal striping is cut to length and mitered at the factory. Four colors—white, blue, yellow, and green—are available. Armstrong Cork Co., Dept. AB, E. Liberty St., Lancaster, Pa.

STORMS AND SCREENS AB95208
Adaptable to casement windows used in factories, commercial buildings, hotels, hospitals, and other institutions, these units are fitted by local distributors. They are installed either on the outside or the inside of the prime window. On inside installations, access to the window is easy because of the sliding storm sash. The storm sash is self-weather-stripped providing a complete insulating seal for the prime window. Alumatic Corp. of America, Dept. AB, 2081 S. 56th St., Milwaukee 14, Wis.

FORK LIFT AB95220
Rated at 3,000 pound capacity at 15 inch load center, Buda’s models are modernly styled with all mechanical parts made for lower upkeep costs. Removable wet sleeve cylinder liners and quick change 11-inch industrial type clutch are included in the two models. A 4-cylinder 49 H.P. gasoline engine and a Buda diesel engine are available. The Buda Company, Dept. AB, 15425 Commercial Ave., Harvey, Ill.

PORTABLE ELECTRIC SAW AB95220
Makes all cuts in 2-inch dressed lumber at 45 degrees. The unit weighs 10 pounds and has pivot point closer to the saw shoe. Called “Magic Pivot,” it reduces weight and bulk. Another benefit claimed for the saw and its “Magic Pivot” is the use of stub-radius blades which put more power in the cutting edge. Mayer, Cummings Industries, Cummings-Chicago Corp., Dept. AB, 4740 N. Ravenswood Ave., Chicago 40, Ill.

New Products continued on page 172

American Builder
DEXTER

The Lock with a Million Friends

FRENCH SHANK

FINGER TIP POSITIVE LOCK

2 SPRINGS, FEATHER TOUCH ACTION

STAY-TITE SET SCREW

"JEWELER'S" FINISH

TRANSPARENT DISPLAYS

FOR SCREEN AND COMBINATION DOORS

Easier to install —
just bore two ¼" diameter holes.

DEXTER LOCK COMPANY
GRAND RAPIDS, MICHIGAN
A SUBSIDIARY OF NATIONAL BRASS COMPANY

Manufacturers of America's Original Tubular Locks

In Canada: Dexter Lock Canada Ltd, Guelph, Ontario
NEW PRODUCTS

(Continued from page 170)

WATER SOFTENER

ABOSB2

Sohens the water automatically by forcing it through synthetic resins. Simplified servicing of the unit and the reduction of moving parts offer economies and long life. For regeneration of the Permunit Q resin, first lift the rubber lid and add salt. Replace the lid and turn on the electric timer. The unit puts itself back into service in two hours and during the time, hard water is available. Two units are available for 25,000 and 50,000 grains of softness. The Permunit Co., Dept. AB, 330 W. 42nd St., New York 36, N. Y.

PORTABLE ELECTRIC DRILLS

ABOR23

Designed for all kinds of installation work with any material, these 1/2-inch capacity drills are available with pistol grip, spade handle, and center contour handle. Free drilling speeds of the models are 600, 800, 1,000, 1,500, 3,500, and 5,000 rpm. Weight of the models are 31/2 to 4 pounds. Several types of universal motors can be had in 115 or 230 volts for AC-DC. 25 to 60 cycle current. Mail Tool Co., Dept. AB, 1725 So. Chicago Ave., Chicago 19, Ill.

STRIPPER SHOVEL

ABOSB10

This machine uses either a 2 or a 2½-cubic-yard dipper with a 50-foot boom and 36-foot dipper stick. This attachment allows a maximum dumping height of 4 feet and a reach of 60 feet with a boom angle at 45 degrees. The unit can be converted for a lift crane, drag line, or clamshell operation. Total weight as a stripper shovel is approximately 204,000 pounds. Koehring Co., Dept. AB, 3026 W. Concordia Ave., Milwaukee 10, W. I. New Products continued on page 174.

SAVE LABOR—AND PRODUCE BETTER

FLOORS FROM START TO FINISH—

WITH AN ALL-AMERICAN LINE-UP OF

MACHINES AND MATERIALS ON THE JOB!

DEPEND ON AMERICAN MACHINES AND

ABRASIVES TO PUT A BEAUTIFUL, SUPER-

SMOOTH SURFACE ON FLOORS WITH

RAPID AND EFFICIENT SANDING, STEEL

WOOLING AND POLISHING. FOR THE RIGHT

FINISH FOR ANY FLOOR—SPECIFY AMERICAN

QUALITY FINISHES AND CLEANING

MATERIALS ... A COMPLETE LINE FOR

WOOD, CORK, CONCRETE, TERRAZZO,

ASPHALT, RUBBER, LINOLEUM OR PLASTIC.

FOR ALL-AROUND SATISFACTION AND PROFITS

MAKE IT AN ALL-AMERICAN JOB!

SEND FOR LATEST CATALOGS.
MENGEL
MAHOGANY
Flush Doors

Cost Less Than Many Domestic Woods!

The Mengel Company is now able to offer you African Mahogany Flush Doors at prices actually less than you pay for many domestic woods!

Operating its own large logging concession and mill in the best Mahogany section of Africa, Mengel imports this King of Woods in tremendous volume. The savings of these large scale operations are passed on to you.

What's more, when you choose Mengel Mahogany Flush Doors, you're assured of finest construction, guaranteed by the world's largest manufacturer of hardwood products. Mengel Mahogany Flush Doors have been tested and proved in thousands of installations. Better doors cannot be bought!

Let us tell you about the extra quality, the extra luxury, the extra value of Mengel Flush Doors in genuine Mahogany! Mail the coupon for complete information.

The Mengel Company ... America's largest manufacturers of hardwood products • growers and processors of timber • manufacturers of fine furniture • veneers • plywood • flush doors • corrugated containers • kitchen cabinets and wall closets

THE MENGEL COMPANY
Plywood Division, Louisville 1, Ky.

Gentlemen: Please send me full information on Mengel Mahogany Flush Doors—both Hollow Core and Stabilized Solid Core.

Name ____________________________

Firm. ____________________________

Street __________________________

City ___________________________ State ________
NEW PRODUCTS

(Continued from page 172)

ASBESTOS-CEMENT SIDING AB95231
New Chroma-Tex siding shingles are twotoned—dark in the valleys, lighter on the ridges—to give a natural-looking, weathered appearance. Five colors are produced. Easily applied over sideward surfaces, the shingles are designed for exterior remodeling jobs as well as new construction. The siding is said to be fireproof, weatherproof, rotproof, termite-proof, and to require no painting, preservative treatment or maintenance. Asbestos Corp., Dept. AB, 5380 Tchoupitoulas St., New Orleans 15, La.

BAND SAW AB95230
Fourteen inch band saw is equipped with a 20x22 inch tilting table made of heavily ribbed cast iron. The unit has a capacity of 12½ inches vertically (table top to wheel guard), and 13½ inches horizontally (blade to main guard). The motor base of the saw is easily adjusted and requires no belt tightening device. A free-turning hand wheel raises or lowers the large, dynamically-balanced variable wheel for blade tension. Heston and Anderson, Dept. AB, Fairfield, Iowa.

ADJUSTABLE AIR DIFFUSER AB95205
Flexifoil concentric circle diffuser incorporates adjustment in air flow from zero to full volume. The diffuser can be shifted by turning the center rod knob, thus providing a variable adjustment of the effective area while the air diffusion pattern remains constant. All adjustments are made after the installation. The diffuser is available in 11 sizes. The largest is capable of handling up to 9000 CFM with a throw of over 48 feet. Universal Diffusor Corp., Dept. AB, 890 Whitman St., New York 59, N.Y.

New Products continued on page 176

AMERICAN BUILDER
BONDERIZED

Cut Cost—Save Time—Make Building Easier
with these TWO GREAT ECONOMY PRODUCTS

STEELCRAFT STEEL DOOR FRAMES
For all types of construction—Installed in 3 Easy Steps.

1. SET IN PLACE
2. LEVEL UP
3. NAIL TO STUDS

STEELCRAFT STEEL DOOR FRAMES

For all types of construction—Installed in 3 Easy Steps.

#(anchors furnished free for masonry)

SPACEMAKER STEEL SLIDING CLOSET DOORS

- Packaged ready to install
- Easy to install
- Cut construction cost
- Give added closet space
- Make homes easier to sell

SPACEMAKER STEEL SLIDING CLOSET DOORS are easy items to sell... keep customers satisfied because they add trouble-free convenience wherever installed. Doors, tracks and hardware make a complete packaged unit, ready for installation. Steelcraft steel closet frames are optional.

MAIL THIS COUPON TODAY!
The Steelcraft Mfg. Co., Dept. AB-952
9017 Blue Ash Rd., Rossmoyne, Ohio
Please send me full information on
( ) Steelcraft Steel Door Frames
( ) Spacemaker Sliding Steel Doors

Name ........................................ Title ..............................
Company ........................................ Business Address ............
City ........................................... Zone State

SEPTEMBER 1952
Latest RAMSET System development adds new ease, speed, utility and economy for most fastening jobs in steel and concrete.

See the new Ramset Jobmaster in action. Compare the 10-star values with any other method or tool. Watch how the Jobmaster seats a Tru-Set stud or drive pin instantly—better, stronger, straighter, with far less effort. Operates with one hand when necessary.

Be sure also that you use only Tru-Set Fasteners, guided straight to the work by the exclusive, elasticized RedTip Pilot. At their new, lower prices, Tru-Set Fasteners give you the biggest dollar-for-dollar value.

Ask your dealer or write us for factual proof of how Ramset System cuts fastening costs.

Ramset Fasteners, Inc.
12117 Berea Road - Cleveland 11, Ohio

Greedy installation

HOLT
Floor Sander

Keeps Earning Money
FOR YOU

HOLT NMPL12 is ruggedly constructed, easy to handle. Operates smoothly. Cut selector assures right tension for rough, medium or fine cut.

DEMOUNTABLE DRUM CUSHION CHANGES IN MINUTES

Why let damaged drum cushions tie-up floor sanding 12 to 24 hours? HOLT demountable drum cushion (patented) can be replaced in minutes by the operator right on the job...so sanding goes on almost without interruption.

You cover more floor, too, with HOLT high-speed cutting. Sure-grip clamps keep paper "in." Self-adjusting, double belts stay tight. Correct design and dynamic balance eliminate chatter and vibration...assure smooth, craftsman-like work.

Do floor jobs the easy, time-saving HOLT way. For further information and name of nearest dealer, write your name and address in margin of this ad and mail TODAY.

For floors that make happy home owners, wax and polish with HOLT floor machines.

For your next project—order a HOLT Rotary Edger.

It's easy to sand edges, corners, stairs, closets, etc., with HOLT Rotary Edgers.
NEW PRODUCTS

(Continued from page 176)

HORIZONTAL FURNACE A895218
A horizontal oil-fired furnace or unit heater for installation in homes, garages, shops, schools, and commercial structures. In homes it can be set on ceiling joists, suspended from roof rafters, or installed in crawl space or basement. Initial design is 110,000 B.T.U. input while future models will have up to 225,000 B.T.U. The unit can be converted to gas. L. J. Mueller Furnace Co., Dept. AB, 2005 W. Oklahoma Ave., Milwaukee 15, Wis.

Pella

CASEMENT WINDOWS

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

Write Today for the Pella Installation Instructions and full size Casement Details.

ROLSCREEN COMPANY, Dept. D-37, Pella, Iowa
Without obligation, send me "PELLA CASEMENT Installation Instructions in Full Size Casement Details No. 1050M."

NAME ____________________________
FIRM ____________________________
ADDRESS ____________________________
CITY __________ STATE __________

PELLA CASEMENTS • ROLSCREENS • VENETIAN BLINDS

NEW PRODUCTS

ALSO MAKERS OF FAMOUS PELLA ROLSCREENS AND VENETIAN BLINDS
A team you can trust

There's a Worthington Blue Brute team to lick every clay, rock or concrete breaking job.

These job-tested air tools give you more action for every cubic foot of air. They're as easy-handling as ever an air tool could be—and their rugged construction from special heat-treated metals gives you longest life.

Teamed up with the famous Worthington Blue Brute Air Compressor, they'll speed your work and cut your costs every time.

See your Worthington distributor who will point out the Worthington design features that guarantee more work for your money. As for bulletins, write Worthington Corporation, Construction Equipment Sales Division, Plainfield, New Jersey.

Buy Blue Brutes
WORTHINGTON

We keep bringing buyers back
We're the Hard-selling Hardboard Pair
STAN and TEMP

STAN stands for Weldwood® STANdard Hardboard.
TEMP, for Weldwood RezTEMP Hardboard, the oil- and plastic-treated . . . water-resistant hardboard.

Just get a load of us, and...zing!...you're back for a second load. And back and back and back, for every hard job you can think of.

And we can take it. For we're tough, strong, and we stand up to any job.

But we also work easily. Planes and saws and chisels shape us with sharp, clean edges.

And have you heard about how we get along with paint brushes? You see, we're light in color. So even pastel prints flow on smoothly.

Today, place your order for Weldwood Hardboard. It will be followed, soon, by repeats.

To meet all your requirements: both Standard and Reztemp Grades of Weldwood Hardboard come in three popular thicknesses: 1/8", 3/16", and 1/4". In sizes: 4'x6', 4'x8', 4'x10', 4'x12', and 4'x16'. Panels up to 4'x12' are wrapped six to a package. Weldwood Reztemp Tile Board is available only in 1/8" thickness and sizes 4'x4', 4'x8', 4'x12'.

Call your Weldwood salesman for Weldwood Hardboard or Tile Board today.

WELDWOOD® Hardboard
Manufactured by Abitibi Power and Paper Company
Distributed Exclusively By
UNIVERSITY STATES PLYWOOD CORPORATION
World's Largest Plywood Organization
55 West 44th Street, New York 36, N. Y.
Branches in Principal Cities • Distributing Units in Chief Trading Areas

SEPTEMBER 1952
FIRST—Leaf through the book from cover to cover and get the general layout in mind. This will enable you to use it sufficiently later on. The 5 Directory Sections are printed on colored stock for easy identification. If you are looking for the answer to a specific building problem, consult the index for the particular Product Reference Section you want. These sections tell you who makes it and how to use it.

1. Building Products and Equipment Manufacturers
An alphabetical list of products and equipment listed under appropriate titles. No cross references to delay or confuse you.

2. Brand Names
If you know the brand name but not the maker, you can find the name of the manufacturer here.

3. Names and Addresses of Manufacturers
This section completes your Buying Guide by listing the principal manufacturers in alphabetical order.

4. Industry and Allied Professional Trade Assns.
A valuable addition that saves you a lot of time when you want the name and address, and principal officers of local or national associations.

5. List of Participating Communities in 1951 National Home Week
An alphabetical list by states of communities that have taken part and cashed in on the promotional value of National Home Week. Look and see if your community is listed.

If you have a special building problem—write us. Our editors have the knowledge and experience to be of real help to you. Don’t hesitate to write. No obligation, of course.

AMERICAN BUILDER
79 W. MONROE ST.  CHICAGO 3, ILL.
IT'S THE FIRST COAT THAT COUNTS!

Factory-stained SHAKES Are "PRIMED FOR LIFE"

Home buyers are "hep" to the fact that nothing used on exterior walls can forever escape the ravages of dust and dirt, freeze and thaw. They know that nothing is "permanent"—but they expect to be able to maintain the original beauty of their sidewalls at minimum cost.

That's why the original, factory-controlled color coat makes pre-stained cedar shakes the outstanding choice for sidewalls today. Once your cedar shakes have been given their first color treatment under the watchful eyes of factory color technicians, using the right combination of pigments, toxics and sealers to protect the high quality cedar, re-staining in later years is bound to be right, sure to be easy and inexpensive.

Pre-stained cedar shakes are color-coated front and back. Even the shake edges get a full color tone which could not be accomplished on the finished wall.

Yes, when you build with pre-stained cedar shakes, you are using the only sidewall material that is "primed for life."

STAINED SHINGLE & SHAKE ASSOCIATION
4403 White Building - Seattle 1, Washington
Canadian Address: 509 Metropolitan Bldg., Vancouver 1, B.C.
NEW PRODUCTS

(Continued from page 180)

PLASTER CORNER REINFORCING

Narrow width Keymesh combats cracks and separations in plaster. Available in 4, 5, and 6-inch widths, the material is applied over the plaster base as a reinforcement. It comes in 150 foot rolls and can be cut on the job with ordinary snips and applied in one piece for long and short lengths. Keystone Steel and Wire Co., Dept. AB, 7000 S. Adams St., Pearsall, 7, Ill.

WALL COATER

Flooring wall coater utilizes a specially engineered paint brush bristle. The unit is seven inches wide. According to the manufacturer, it is the first complete change in method of manufacture in more than a generation. It consists of narrow metal channels in which double length strands of scientific bristle are locked. A longer handle is clamped to the unit. It permits swinging strokes to cover large areas. Any type of paint can be used. Pittsburgh Plate Glass Co., Dept. AB, 632 Duquesne Way, Pittsburgh, Pa.

SAW HORSE BRACKETS

Flanged nail holes allow a carpenter to slip a claw hammer under the raised nail heads and pull the nails out. This disassembly feature permits the horses to be stored and transported easily. The nailing feature makes the assembly stronger and ready for hard usage. The brackets take either dressed or common 2x4's. Dalton Mfg. Co., Dept. AB, 20 So. Central Ave., St. Louis 5, Mo.

1-COAT MASONRY COATING

An oil base paint applicable to both interior and exterior surfaces of concrete block, cement, brick, stucco, asbestos cement siding and similar masonry surfaces has been developed for decoration and protection against moisture. It can be applied by brush or spray over either new or previously painted surfaces. United Laboratories, Inc., Dept. AB, 16801 Euclid Ave., Cleveland 12, Ohio.

EXTENSION RULE

The 1-6 rule can be used for accurate inside, outside, regular, and flat reading measurements. A brass extension slide allows inside measurements up to 78 inches. A stop prevents the slide from coming out. Brass strike plate prevents wear. Figures are easy to read against a light background and are marked to 1/6ths. Folded length is 8 inches. Lulkin Rule Co., Dept. AB, 1730 Hess Ave., Saginaw, Mich.

LOUVRE WINDOW

Full ventilation without drafts is claimed by the manufacturer of this louvre window. The unit consists of a pair of galvanized steel up-rights with 3 to 14 six-inch steel pockets on each, depending on the height. The operating handle, below the gravity lock, simultaneously rotates all pockets through a 105 degree swing. Glass used is 1/16 inch (or 7/32 inch) thick, 6 inches high and any width up to 39 inches. Broken panes can be replaced by sliding out old glass and sliding in the new glass. Sun-Sash Co., Dept. AB, 38 Park Row, New York 38, N. Y.

STATIONARY POWER UNIT

A heavier series of power units developing 73 H.P. has been added to the stationary power line of the Oliver Corp. The number 195 engine is available for gasoline and diesel fuels and engineering development is now complete for L.P. gas. The unit is a six cylinder engine which features overhead valves and replaceable cylinder liners. It can be used to supply power for electric generators, irrigation pumps, rock crushers, refrigeration units, air compressors, industrial loaders, conveyors, feed mills, saw mills, and replacement units. The Oliver Corp., Dept. AB, 400 W. Madison St., Chicago 6, Ill.

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Architect picks FOAMGLAS to insulate his own home

In his home at Allentown, Pa., Architect Herbert F. Everett was willing to put his own money on FOAMGLAS as the most durable insulation to go under poured concrete, radiant-heated floor.

FOAMGLAS really shines in this kind of an installation, because it will not absorb water. In addition, FOAMGLAS has a compressive strength of up to 5 tons per square foot. Thus it is ideal for use beneath a concrete slab—even though the slab must carry great loads.

If you use FOAMGLAS for under slabs, around floor perimeters and for roof insulation, it will give you a solid selling feature. For here at last is an insulation that will not warp, shrink or become soggy. For the full story, send the coupon for a free sample of FOAMGLAS and a copy of our latest booklet.

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 Builders’ Temporary Heating Needs Met By LP-Gas Dealer

Builders in Willimantic, Conn., who need temporary heating facilities can leave that phase of worrying about their operations to a local liquefied petroleum gas dealer, who will install the equipment and supply the fuel, all on a rental basis.

For residential construction, the Tri-County Gas Co. will temporarily set up a 65,000 B.t.u. floor furnace, fired with LP-gas, to speed drying of the plaster. Fee for a month, including installation and rental, is $20. The gas is piped to the furnace from cylinders delivered to the site and hooked up by Tri-County servicemen.

For commercial jobs, Tri-County puts in automatic steam radiators, also fired with LP-gas, to heat timekeepers’ offices. Monthly rentals range from $4 to $6, depending on the size of the radiator. Before it is delivered to the construction office, the radiator is sprayed with aluminum paint.

According to H. I. Phillips, proprietor of the firm: “LP-gas can be installed when and where heat is needed by builders. They are ideal for the relatively cramped quarters of construction shacks, because office visitors can lean on them, and safely touch them, without getting burned.”

‘Housing—Mass Produced’ Booklet Issued by MIT

The Albert Farwell Bemis Foundation of Massachusetts Institute of Technology, Cambridge, Mass., has just published a 42-page booklet entitled “Housing—Mass Produced,” covering proceedings of its housing conference held last January.

Included in the text are widely divergent comments and views on prefabrication and site-fabrication methods. Panel participants were Edward P. Brooks, dean of the new MIT School of Industrial Management and former Sears Roebuck vice president; Foster Gammison, founder of Gammison Homes, Inc., and now retired; John W. Galbreath, former president of the National Association of Real Estate Boards and now engaged in developing the Fairless Hills community for workers of U. S. Steel’s Fairless Works at Morrisville, Pa.; Alfred Levitt, in charge of design and production for Levitt & Sons, Inc., now building the big Levittown community at Morrisville; Fritz B. Burns, California builder known for his post-war housing research and large projects in the Los Angeles area; and Howard T. Fisher, Chicago architectural firm head.
A NEW SURFACE!
A BEAUTIFUL THOROSEAL SURFACE!

PILGRIM BADGE BUILDING
BOSTON, MASS.

Above photograph shows extreme blistering and spalling of concrete spandrel beams and columns of Pilgrim Badge Building, Boston, Massachusetts which is now entirely protected and further deterioration arrested.

Restoration of concrete spandrel beams and other structural concrete work done by contractor Henry Gironi, Allston, Massachusetts. THORITE Patching Mortar used to seal rods and patch blistered concrete and THOROSEAL to protect surface and patched areas.

Standard Dry Wall Products
NEW EAGLE, PENNSYLVANIA

SEPTEMBER 1952
CATALOGS—
and Manufacturers Literature

273—CABINETS—The cabinets are designed to fit in any room to meet many storage requirements. The 4-page folder illustrates the company’s complete line of kitchen and storage cabinets. Sizes of the units are included. Bilt-Well Cabinets, Carr, Adams, and Collier Co., Dept. AB, Dubuque, Iowa.

274—ENGINEERING INSTRUMENTS—A 36-page catalog covers engineering and surveying instruments: Transits, levels, tripods, level rods drafting room supplies, and slide rules are included in the booklet. A foreword describes the design and construction details of the precision instruments. Warren-Knight Co., Dept. AB, 136 N. 12th St., Philadelphia 7, Pa.

275—HINGES—The manufacturer’s complete line of hinges are described in a 6-page folder. Additional information covered in the folder includes trim clearance for various sizes of hinges, suggested size for door thicknesses, and a weight chart of wood doors. Also included in the booklet are descriptions of hinges for steel, wood, and aluminum doors. C. Hager and Sons, Dept. AB, 2457 DeKalb St., St. Louis, Mo.

276—INSULATION CATALOG—The booklet is in three sections: the first covers structural products; the second, interior products; and the third general information such as “U” values of the company’s various wall and ceiling materials. At least one page is devoted to each of the manufacturer’s building products. Insulite, Dept. AB, 500 Baker Arcade Bldg., Minneapolis 2, Minn.

277—INDUSTRIAL PIVOTED STEEL WINDOWS—Designed to give complete data on the company’s new window, the catalog has many photos, drawings, cross section details, and technical data. It can also be used as a direct mail piece. The Steedcraft Manufacturing Co., Dept. AB, 9017 Blue Ash Road, Rossmoyne, Ohio.
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278—GARAGE DOORS—
Sectional and one-piece, upward-acting garage doors are covered in this booklet. Various sizes and styles as well as complete description of the hardware are included. Franz Manufacturing Co., Dept. AB, Sterling, Ill.

279—RADIAL ARM SAWS
—A 12-page catalog has been issued describing this complete line of home, commercial, and industrial radial arm saws. Complete specifications are given for all models. Accessories for the units are also included in the booklet. Delta Power Tools, Rockwell Manufacturing Co., Dept. AB, 600 E. Vienna Ave., Milwaukee 1, Wis.

280—REINFORCED CONCRETE FLOORS AND ROOFS—A four-page folder describes a reinforcement method that forms concrete floors or roof decks. Installation photographs and finished examples are included. The material is laid on a concrete or steel frame and acts as the form and reinforcing for the concrete. Granco Steel Products Co., Dept. AB, Granite City, Ill.

281—ROOF DECKS AND ROOF INSULATION—The general properties and specifications of vermiculite insulating concrete are covered in a booklet devoted entirely to the use of the product in roof decks and roof insulation. Diagrams, illustrations, and charts are included. Zonolite Company, Dept. AB, 135 S. LaSalle St., Chicago 3, Ill.

282 — ALUMINUM DOUBLE HUNG WINDOWS—Residential double hung windows can be arranged in five groups to vary styling. A brochure prepared by the manufacturer shows these suggested installations, and includes three sets of dimensions. Inside rough opening dimensions, outside, and window dimensions as well as double glazing glass area measurements are included. Ceco Steel Products Corp., Dept. AB, 5601 W. 26th St., Chicago 30, Ill.

(Continued on page 190)
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SEPTEMBER 1952
Catalogs

283—BATH VANITY—A four-page color folder details this manufacturer’s line of bath vanities. Suggested installations and specifications of the models are included in the folder. Four colors are available: sandstone, green, blue, and white. The Toledo Desk and Fixture Co., Dept. AB, Maumee, Ohio.

284—SLIDING DOOR HARDWARE—Single and double sliding door tracks, door locks, latches, door pulls, converging guides, and metal sliding door frames are covered in a 16-page catalog. Detail drawings included in the publication cover the suggested construction methods employed in the installation of the sliding door hardware. Jay G. McKenna, Inc., Dept. AB, 72 E. Jackson Blvd., Elkhart, Ind.

285—PLUMBING CATALOG—The catalog offers information on all types of plumbing and heating supplies for industrial, residential, and rural installations. Large illustrations are helpful in gaining a complete visualization of the product. Aetna Sales Co., Inc., Dept. AB, 1289 McDonald Ave., Brooklyn 30, N. Y.

286—UPWARD ACTING DOORS—A 12-page booklet describes the manufacturer’s line of upward acting residential and commercial garage doors. Included are special designs for period and modern architecture. Door hardware for both residential and the commercial doors is covered in the booklet. McKee Door Company, Dept. AB, 148 Hermes St., Aurora, Ill.

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SEPTEMBER 1952
Redwood in the News

The salient contribution redwood makes to our national palate through its importance in the business of mushroom culture is evinced in the summer issue of Redwood News, now being circulated.

Various other functions, varying from new total effects in musical instruments to thermal control in hotel refrigeration are also demonstrated in this issue. An anomalous, but practical use is that of the laminated redwood vault designed by a lumber company to protect records from fire after important documents had been charred in a steel safe.

Redwood News is circulated by the California Redwood Association, 376 Sacramento Street, San Francisco 11, California.

6 Ways to Finish Concrete Floors

There are six general types of finishes and coverings used over concrete subfloors: (1) concrete and ceramic tile, slate, flagstone, etc.; (2) colored concrete topping; (3) hardwood surfacing cemented to the subfloor; or hardwood flooring nailed to wood nailing strips attached to the subfloor; (4) linoleum, rubber, asphalt, and cork tile; (5) over-all carpeting; (6) terrazzo.

Concrete and Ceramic Tile

In applying concrete or ceramic tile, slate, flagstone and similar finishes set in mortar, finish the concrete base slab to a level which will be the finish grade less the thickness of the floor covering and setting bed. Give the concrete a rough finish or a coarse broomed texture. Remove all plaster, oil paint or any other foreign material before applying the floor finish.

Broom a slush coat of neat cement grout into the surface of the hardened concrete base slab, and before this hardens cover the base slab with a mortar setting bed at least ½-inch thick. The mixture should be one volume of portland cement and three to four volumes of sand mixed with enough water to get a good working consistency. Spread it on the slab and screed it until the surface is true and even. Spread only as much mortar at one time as can be covered with the flooring material before the mortar attains its initial set.

Light Coat Portland Cement

Uniformly dust a light coating of portland cement over the surface of the mortar setting bed just before placing the finish material. Tap the material into the mortar until true and even with the finish grade.

As soon as the mortar beds have set sufficiently, wash the floor with clean water and grout the joints between the tile. The grout filler should consist of one volume of portland cement and not more than one volume of sand. Pointing mortar can also be used, and for all joints ½ to ¾-inch should be one volume of waterproofed portland cement and one volume of sand. For joints greater than ¾-inch in width, the pointing mortar should be one volume of waterproofed portland cement and two volumes sand. The grout or mortar should be forced into the joints by troweling or some other suitable method, and finished flush and true. Remove all surplus grout or mortar before it has hardened.

(Continued on page 216)
Here's an easy way to get new essential information that will help you increase your income. Every volume a standard work by leading authority. Remember—it's the informed builder who is the successful builder.

**ESTIMATING**

1. **THE BUILDING ESTIMATOR’S REFERENCE BOOK** and Vest Pocket Estimator (not sold separately). By Frank R. Walker. Contains latest estimating and cost data on everything that goes into house construction. Most complete compilation of estimating and cost data available. $12.00.

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6. **HOUSE CARPENTRY AND JOINERY**. By Nelson L. Burbank. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundation forms to interior trim. $4.75.


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9. **STEEL SQUARE**. By Gilbert Townsend. This how-to-do-it steel square instruction book provides fundamentals plus step-by-step house construction problems solved by proper steel square use. $3.25.

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(Continued from page 194)

Colored Concrete Topping

The structural base slab should be struck off reasonably true at a level not less than one inch below the finished floor level. Before the concrete has hardened, remove all dirt and laitance. Roughen the surface with a broom or otherwise to improve the bond between base and topping.

The concrete topping should be not less than one inch thick. Wet the surface of the subfloor (but remove all free water) and broom in a neat cement grout just before placing the topping. Bring to the required level by screeding, and remove all surface water. Then dust on the colored mixture uniformly, applying not less than 125 pounds for each 100 square feet of floor area. The dust-on mixture is floated and worked into the topping. After the water sheen produced by floating has practically disappeared, the surface can be troweled to a smooth finish of uniform color. Another method of achieving the same result is to mix the color pigment integrally into the topping mix.

After subfloor has been screeded to proper elevation, colored dust-on mixture can be applied by hand uniformly over floor surface. Proportion should be not less than 125 pounds per 100 square feet

Concrete topping mix ranges between one volume of portland cement, one and a half volumes of sand and one and a half volumes of gravel or crushed stone, and one volume of portland cement, two volumes of sand and two volumes of gravel and

(Continued on page 197)

Color mixture is floated and worked into the topping. Discontinue floating as soon as the surface becomes wet.
crushed stone. Don't use more than five gallons of water per sack of cement, including the water in the aggregate.

The dust-on mix should consist of one volume of portland cement, one to one and a half volumes of well-graded sand, at least 80 per cent of which passes a No. 8 sieve and not more than three per cent of which passes a No. 30 sieve, plus the amount of mineral oxide pigment required to produce the specified finish color. Proportion all materials accurately by weight, and use the same amounts in each batch. Mix them dry in a mortar box or an approved mixing machine until the mixture is of a uniform color.

To get a satisfactory wearing surface, always defer troweling of the topping until the water sheen is disappearing. Troweling at this time forces coarse particles of aggregate into the mass, producing a dense, durable finish.

Steel troweling to a smooth surface

As soon as the topping has hardened sufficiently to resist injury, cover it with at least one inch of wet sand, or other suitable covering. Keep this covering wet for at least seven days for normal portland cement, or for at least three days for high early strength portland cement.

Plain concrete topping can also be polished by grinding, or it can be painted, stained, scored, or treated with linseed oil.

Hardwood Floor Finish

Strike off the base slab at the proper grade, that is, the finish grade less thickness of the hardwood covering to be used. Into the concrete slab, as nailing strips, should be set 2 x 3-inch creosoted wood sleepers with beveled edges on 16-inch or 12-inch centers. Or rust-resisting metal floor clips can be set into the concrete at time of construction and used for attachment of wood sleepers. Set the clips in straight rows not more than 16 inches apart; spacing between the clips should not be more than 16 inches. Creosoted wood

(Continued from page 196)

(Continued on page 198)
Powerful Trip-Hammer Action Makes Hansen "Best for Builders"

Hansen tacks
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Material is held in one hand—tacked with other operating Hansen Tacker. Strips protect window while spraying—then quickly ripped off first row of staples in building and other types of construction.

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Linoleum, Asphalt, Rubber and Cork Tile

In applying coverings which are cemented to the subfloor, grade of the base slab should be the finish grade less the thickness of the floor covering. Give the subfloor a smooth troweled finish or a fine broomed texture. The slab should be thoroughly dry before applying the surfacing.

A simple test to determine when a concrete floor is dry is to place pieces of linoleum face down on different parts of the floor. Weight down the linoleum and leave it for 24 hours. If there are damp spots under the linoleum at the end of this time, the floor is not dry enough and should be left alone until a retest shows no damp spots.

(Continued from page 197)
NOW... A complete line of Steel Kitchen Cabinets by American-Standard

Combinations to fit any kitchen you plan...Plus exclusive convertibility feature

American-Standard, maker of the finest kitchen sinks, now offers you smartly-styled cabinets in a variety of combinations to fit your plans exactly.

American-Standard cabinets are the most useful cabinets available. For example, the exclusive convertibility feature permits an almost limitless variety of drawer and shelf arrangements in undersink and base cabinets. Doors, exposed and concealed drawers, and sliding shelves can be added or removed in a few seconds, without special tools. And cabinets can be converted at any time—before or after installation.

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Attractive, work-saving American-Standard cabinets have the features prospective home buyers want. So include popular American-Standard sinks and cabinets in the houses you build—and let them help you sell.

The complete kitchen products line also includes a ventilator, disposer and many cabinet accessories. The American-Standard sales office serving you will be happy to give you a copy of our catalogue, Form No. KP 52.

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JOHN WILEY & SONS, INC.
440 Fourth Avenue, New York 16, N. Y.

(Continued from page 198)

Homes Near Airports Subject to New VA Appraisal Standards

A new bulletin on the appraisal of residential properties near airports, recently released by the Veterans Administration, reverses earlier instructions to VA offices prohibiting real property appraisals within a four-mile radius of airports and sets up new standards for appraising this type of property.

In addition to general considerations and leeway left to local offices, the technical bulletin (TB4A-121) lists the following specific limitations:

"(1) A dominant runway is one used principally for the take-off or landing of aircraft.

"(2) As to each dominant runway, 4,000 feet or more in length, the 'runway zone' shall be that rectangular area extending laterally 500 feet on each side of the center line of the runway projected outward from the end of the runway one-half mile.

"(3) As to each dominant runway less than 4,000 feet in length, the 'runway zone' shall be that rectangular area extending laterally 500 feet on each side of the center line of the runway projected outward from the end of the runway a distance equal to one-half the length of the runway."

This rule will apply to any unit on which construction has not begun prior to June 25, 1952, according to the bulletin. Certificates of reasonable value outstanding on any units within a runway zone will not be affected.

Each regional office is directed to maintain up-to-date files of data relating to necessary determinations for each airport within the area.

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New plant of Brown Lumber Co., Sweetwater, Texas, is attractive combination of green stucco and redwood, with aggregate-design louvered awning. Attached on right is 52x160-foot warehouse with truck dock

“Homeless” Dealer Fully Modernizes At New Location

It turned out to be a blessing in disguise for the Brown Lumber Co. of Sweetwater, Texas, when the city recently acquired its downtown property to build an underpass. Made “homeless” by the action, the firm bought a yard in another part of the city, spent $60,000 to remodel and enlarge, and reopened three months later with one of the most modern and complete building materials stores in west Texas.

In the new plant are three display rooms with a total area of 3,000 square feet; 12,000 square feet of warehouse space; and 256 feet of double-deck lumber sheds. The site is 250x150 feet, with adjacent railroad trackage.

Home Planning Aids Featured

Among the outstanding features of the new store is a home planning center—a comfortable lounge equipped with home magazines, plan books, literature on loans, wall paper books, a sample rack of materials and other home building aids.

Another separate room is devoted to wallpaper, of which the company carries more than 300 patterns. It has striated plywood walls with a linseed oil finish, and candy-striped carpeting.

The center sales room, leading to the offices, features white oak fixtures, rubber tile flooring of green and yellow. Several different plywoods make up the office counter front, with natural finish and walnut top. Walls of the other large display room are finished with yellow and green plastic point; floors are of green rubber tile.

A Two-Day Opening

Two days were given over to the formal opening, which was described as “very successful.” One of the highlights was a guessing game, designed to place emphasis on the large number of items carried in stock. Guests were escorted through the various departments and asked to guess the number of separate articles in each. Best guess on the grand total was good for a $100 prize. As it turned out, a 16-year-old newsboy hit the figure exactly on the head—4,315 items.

Head of the company is Paul E. Brown, a director of the Lumbermen's Association of Texas.
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Restaurants, hospitals, hotels and other institutions use Lamidall because of its serviceability and low yearly maintenance cost.

In offices, stores and other commercial buildings, the natural beauty of Lamidall lends itself to the requirements for dignified, attractive walls.

Lamidall solves the problem of low-cost partitions that are still unusually attractive . . . give years of service . . . take plenty of abuse.

The cost advantage, plus the functional decorative beauty of Lamidall makes it the perfect answer for show rooms and other spacious display areas.

Dry Wall Finishing System Developed by Paint Manufacturer

A new dry wall finishing system, incorporating four relatively new products, has been developed by the Sherwin-Williams Co.

In making the announcement, J. P. Patterson of the firm's painter maintenance division said the technique is not new, but a refinement of present practices coupled with some radically new developments in materials. Basis of the system, Patterson said, is a ready mixed, ready-to-use silicon joint filler. This material is applied to wallboard or recesses and to all nail heads in the manner of a spray. Following overnight drying, a top coat of filler is applied and feathered out to insure a uniformly flat surface. A second top coat is applied after about four hours of drying. The final top coat of joint filler can be dispensed with in most cases where a textured finish is to be applied.

The joint filler contains no alkali, a feature which avoids burning through of the paint. Uniform package consistency of the filler eliminates on-the-job mixing. The material is easy to work, spreads readily, and sands easily without polishing.

Another new product, also with a silicon base, provides a stipple texture finish on dry walls.

"It mixes readily," Patterson said, "with a new paint trade-named 'Quall-Kote,' and provides close control of the degree of texture. The material is mixed with the paint in a predetermined ratio and is then brushed on, and followed immediately with a roller-stippler. A final coat of paint, used as it comes from the can, is recommended for added washability and depth of color."

(Continued on page 206)
ROBERTS-GORDON Gas Hot Water Boiler

Utilizing the famous GORDON Spreader-Flame principle of burning gas more efficiently, the low-cost, compact, cast iron Series "GW" gives more heat in less space. Designed for gravity or forced-circulation hot water heating. Easy to install and maintain. Trouble-free and a real fuel saver, it assures greatest home owner satisfaction. Ideal for small homes where space is at a premium. Installed singly or framed in banks, it offers efficient, economical heating for multiple family dwellings and apartment houses.

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UP TO 50 FEET OR MORE

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Packed in husky wooden carrying case 12 x 11¼ x 3½". Only 6 pounds, easily carried.

PERFECTLY ACCURATE LEVEL
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Send C.O.D. I will pay postman full purchase price plus delivery charge on arrival.

Full purchase price is enclosed. Send postpaid.
According to Patterson, another new material makes it possible to produce a sand-textured finish with comparable ease. This product is a silicon mix consisting of silica beads that have been electro-plate and bathed in a silicon ester solution. "Following treatment of the wallboard joints and nail heads with the

The Concord
Superb quality solid cherry hall clock-chime. Plays 4-note Westminster melody for front door, single note "D" for rear. 9%"x61" list price $69.50.

The Avalon
Luxurious beige boucle grille covering, highlighted with gold brass trim. Produces 2-notes for front door, one for rear. 8%"x7%", list price $9.95.

The Colonial
Authentic colonial design with a contemporary touch. Ivory plastic housing with decorative gold figurine. 2-notes for front door, one for rear. 8%"x7%", list price $6.95.

Easy brushing is a characteristic of both the silicon-base stipple texture material and the paint to which the silicon mix has been added. Here a fine sand-textured finish is being applied to a treated wall. "Joint filler," he said, "the silicon mix is added to the paint in a one part to one gallon ratio. Since the mix stays in suspension, the mixture can be brushed, rolled, or sprayed. A second coat of the paint, similarly treated, results in a finely finished surface that will withstand considerable abuse."

Still a third type of finish can be achieved on wallboard, Patterson pointed out. This is a smooth, textured finish that results from use of the paint without additives.

"Experience indicates that a thin trowel coat of the joint filler covering the entire board area will greatly enhance the smoothness of the finish," he said. "However, satisfactory results can be achieved merely by properly feathering the final top coat of filler and applying two coats of paint."

Discussing development of the finishing system, Patterson said that, like most new methods, it was the result of need. "There is nothing mysterious about the system," he concluded. "While the materials are designed to be used with the new paint, they will work equally well with oil and resin-emulsion paints."

Holder for Hose Washers
To keep hose washers together on a job, make a safety pin of a bicycle spoke or wire. Then put the washers on the pin and fasten pin to inside of hose reel—Oscar West, Bryan, O.

(Continued from page 204)
goes sales resistance

when your houses include electrical living

In test after test, builders report "electrically planned and equipped" houses sell faster.

Prove this to your own satisfaction. Plan your kitchens and laundries around Westinghouse matched-design appliances. Feature planned lighting...cove, valance, under-cabinet, soffit. Include a kitchen ventilating fan...inexpensive electric heaters for comfort and health. Have an engineered wiring system. See how much faster you close sales...how many more sales you close...when you push the electrical living features.

And remember—good planning is as important as good equipment. Even the best equipment cannot "sell" for you if it is poorly arranged. To help you with your electrical planning, Westinghouse offers a file of booklets covering planning of kitchens, laundries, lighting and wiring. To get a set, send the coupon below.

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SEPTEMBER 1952
Plastics Industry Doubles Output; Eyes Housing Use

With more than 2,600,000,000 pounds of synthetic resins estimated as its 1952 output, the plastics industry has doubled its production in five years and increased it six times since 1942.

Hiram McCann, editor of Modern Plastics, cited these figures at a recent Boston meeting of the Eastern New England section of the Society of Plastics Engineers, and forecast the annual rate would jump to at least 3,800,000,000 pounds by 1955 on the basis of already announced plans for expansion.

He reported the housing program now requires plastics for flooring, decorative laminates, wiring devices, wall and furniture coverings, kitchen cabinets, trimmings, and outdoor furniture. Possible plastic materials of the future, according to McCann, will include gutters, downspouts, roofing materials, molded furnishings, bathroom fixtures, garage doors, water systems and outdoor equipment.

N. Y. Code Group Names Benline

Arthur J. Benline, vice president of the Building Officials Conference of America, has been appointed technical director of the New York State Building Code Commission. He is taking a leave of absence as Manhattan superintendent of New York City's Department of Housing and Buildings. He succeeds Albert P. Backhaus who had been on leave from his position of principal building engineer of Maryland.

McMahans Cabinet Lifts raise cabinet efficiency, lower work and saves valuable space. The all-steel mechanism is counterbalanced for smooth, always-level operation, and locks rigid and safe in the working position. Tested and approved by hundreds of satisfied users; McMahan Lifts add extra sales appeal and profit to any cabinet job.

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Contents include:
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- 37 ideas for work benches and attachments;
- 62 work-saving ways to use portable equipment;
- 39 suggestions on excavations, foundations and forms;
- 32 methods for making sills, girders, joists and sub-flooring;
- 49 hints on exterior and interior wall construction;
- 36 short-cuts in roof and bay construction;
- 19 tips on making cornices and porches;
- 44 ideas for interior wall covering and trim; 27 helps on stair construction;
- 37 window suggestions; 54 ideas for installing doors; 29 tips on closets, shelves and built-in equipment;
- 24 flooring pointers;
- 35 aids in installing sanitary equipment;
- 44 short-cuts in lay-moving work; etc., etc.;
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Association News, cont'd

Health Board O.K. Required
For Massachusetts Projects

It is now a Massachusetts state law that all subdivisions must be approved in writing by the local board of health in regard to water supply, sewage disposal and drainage before the planning board can give approval, reports the Master Home Builders Association of Worcester. Subdivisions previously approved but not yet placed under construction are also subject to the new statute.

The association held one of its largest dinner meetings May 12, with 190 members in attendance. John E. Mitchell, loan guaranty officers of the VA Boston office, reported that his agency had had 97 foreclosures so far this year, of which only one was in Worcester County.

First Prize for Minneapolis

EVERYBODY'S HAPPY about National Home Week awards won by Minneapolis Home Builders Association in American Builder's 1951 contest. Receiving scrolls at recent association meeting are J. E. Bow, 1951 Minneapolis president, and Harold R. Rosenbahl, center, last year's home week committeeman. Making the presentation is American Builder architectural editor Arthur V. Hansen. Minneapolis took first prize in the contest's Group I, for associations with more than 250 members.

'Shop Talk' Series Launched
By St. Louis Association

The Home Builders Association of Greater St. Louis has launched a series of bi-monthly "shop talks," in addition to regular monthly meetings, president Clinton R. Schatthe reports.

Schatthe said he felt that the local job problem meetings would prove of special value and interest to small volume and larger custom homes builders, which together make up "the bulk and backbone of our membership." Attendance will be restricted to builders and their superintendents and foremen.

(Continued on page 214)
Heslop Building and Realty Company built its deluxe Colony Apartments several years ago to rent at $275. They glazed them throughout with Thermopane® insulating glass. It proved so popular that they wanted this feature in their new two-suite, five-room apartments, now being built to rent at $97.50. Read what J. W. Heslop says about it.

"Here's why we can afford it. We use the panel window system throughout. Only two standard sizes of Thermopane insulating glass are used—one for fixed lights and one for ventilating units. Frames come to the site assembled, weather-stripped, glazed with DSA Thermopane and with complete hardware. The carpenter simply nails the window frame and four strips of trim into place. Everything is standard.

"Our experience with the more expensive apartments made us want the powerful sales appeal of Thermopane insulating glass in our new homes. The panel window system and standard DSA Thermopane sizes made it possible."

Why not get full information now on this economical way to give your prospects, tenants or buyers, the long-term benefits of Thermopane in every window? Mail the coupon for full information and complete detail sheets.

---

Living rooms of new two-family apartments have windows of four DSA Thermopane units. Bedrooms have strip windows one unit high and three units wide. These apartments are equipped with sure-fire sales features—nationally advertised electric ranges, washers, dryers, dishwashers. Plus Thermopane in all windows!  

**Architect: Firestone & Cassidy, Akron**
PROUD of the house BUT what about the basement?

You have a right to be proud of those modern houses you are building, but what about the basements? Do they have beautiful walls and floors? Do they contain waterproofed cements that assure a dry basement for years to come? Yes, within your hands lies the possibility of creating beautiful, dry basements for home owners...basements that will thrill them as they see the possibilities of a lovely recreation room...a bright laundry...or a playroom!

The cost is much less than you would expect. Simply use Medusa Portland Cement Paint for the walls. Made by the cement company that first developed and patented cement paint, this superb masonry paint when properly applied is renowned for its beautiful, non-peeling finish. On the concrete floors, apply Medusa Rubber Base Paint, the paint that "bounces off wear" and stays new indefinitely. And above all, use Medusa Waterproofed Cements, gray or white, or Medusa Waterproofing Paste or Powder for all concrete and mortar work. You will be proud of the results. For details on Medusa Products for basements, contact your nearest sales office.

You can build BETTER with MEDUSA PRODUCTS

MEDUSA PORTLAND CEMENT COMPANY

1000 Midland Bldg. 228 N. LaSalle St. 135 W. Wells St. 230 Park Ave. 1844 Oliver Bldg. 1307 Toledo Trust Bldg. 25 N. George St.

New opportunities for remodeling sales

...with Johns-Manville Panels and Plank

This attractive room was built in wasted attic space. Walls are J-M Plank in Buckskin Tan. J-M Ceiling Panels are Ivory. Notice the broken-joint ceiling treatment which saves time in application.

Flame-resistant finish at no extra cost!

It's so easy to build a beautiful room like this with J-M Panels and Plank! Their rich new colors and flame-resistant finish (no extra cost) open up big, new opportunities for interior remodeling sales—both in the home and commercial buildings. The J-M Glazecote finish is smoother, harder and more durable than ever before. The famous J-M Lightning Joint which speeds application and conceals fasteners gives you additional advantages—see diagram.

J-M Wall Plank comes in Ivory, Antique Green, Dust Rose and Buckskin Tan—J-M Ceiling Panels in White and Ivory.

Johns-Manville, 22 E. 40th St., New York 16, N. Y.
Association News, cont’d

11th New England Chapter
May Be Opened in Stamford

The New England Council of Home Builders Associations, which is operated like a state organization, but serves all six New England states, may soon add its eleventh chapter.

Possible formation of a new association to serve the Stamford, Conn., area was discussed at the quarterly meeting of the Council May 8 in Boston. Comprising such rapidly expanding centers as Greenwich, Stamford, Darien and New Canaan, the region has more than a dozen active builders who are members of the National Association of Home Builders, according to Clark B. Summer, of Worcester, Mass., NAHB regional vice president.

NAHB President Alan E. Blockbank, a guest at the meeting, sharply rapped both major political parties for asking a national public housing group to write their convention planks on housing, while ignoring the building trade associations.

"I wonder how we can get so far down the ladder that we are not even consulted," he said. "We've got to insist that private enterprise gets a word in on these housing planks."

Albert B. Cole, council president of Hingham, Mass., conducted the meeting at which tentative plans were made to sponsor an annual banquet each fall. Arthur Brewer, first vice president, of Springfield, Mass., was appointed as chairman of the newly formed resolutions committee.

Member Drive Nets 101

FOR OUTSTANDING WORK in recently-completed two-week membership drive, which added 101 members to roster of Home Builders Association of New Orleans, Al Sanier (right), campaign chairman, is awarded plaque by association president Fred C. Loucks. Ceremony took place during New Orleans group's annual "Spring Fiesta."

(Continued on page 216)
WIREMOLD ANNOUNCES
PLUGMOLD 2000

ONE Plugmold Raceway For THREE Wiring Services
Faster to Install, Easier to Install, Cheaper to Install

PLUGMOLD 2000 has been tested in all types of construction

Proved best method yet devised for providing unlimited convenience outlets for homes, business, industry.

Here—for the first time!—is a single raceway for all 3 services! Plugmold 2000 is Wiremold's new, improved raceway base and cover assembly designed to accept Snapicoil with NEMA grounded receptacles, 2-wire "hot" Duplex receptacles, or 3-wire Duplex receptacles with one side switched and one side "hot".... For homes, office buildings, factories, stores—for new construction or the modernization of existing buildings—Plugmold 2000 has proved itself to be a far better, more modern way of providing more convenience outlets, more conveniently located. With Wiremold's famous Snapicoil pre-wired receptacles, Plugmold 2000 saves time and labor costs, because 3 simple steps complete any Plugmold 2000 installation.

PLUGMOLD 2000 is EASY to install!
Required lengths of Plugmold 2000 base are mounted in one continuous run. The proper Snapicoil pre-wired receptacles are quickly snapped into the raceway cover. Then the cover, with receptacles all inserted, is snapped into the base. A few simple fittings complete the job!

ARCHITECTS and BUILDERS WELCOME PLUGMOLD 2000

Whether you're building new homes, factories, office buildings, stores, a hotel, any other new building .... or modernizing existing buildings, Plugmold 2000 enables you to provide unlimited convenience outlets. That makes a more desirable home or building! Plugmold 2000 is faster, easier, cheaper to install. It saves time and labor costs .... no special fitting of the job is necessary, the installation is made in a continuous run, and cutting and fitting are reduced to a minimum.

Write today for new FREE PLUGMOLD 2000 Book!
Tells the whole Plugmold 2000 story! . . . . shows the many applications of Plugmold 2000 . . . . shows how easy it is to install, and how easy it is to specify and order Plugmold 2000 in units.

THE WIREMOLD COMPANY
HARTFORD 10, CONNECTICUT
WHEN YOU SELL STORE FRONTS

GET THAT EXTRA PROFIT BY SELLING

MARMET ALUMINUM COVERED DOORS Too!

MARMET ALUMINUM COVERED DOORS satisfy the demand for sturdy, neat appearing, quality and economically priced metal, wood core doors for use in commercial and institutional buildings... packaged complete with butts, pivots, locks, push bars, metal frame covering. Ask for specifications and complete details.

Other Marmet Products... MARMET ALUMINUM WINDOWS for glass block construction (ribbon windows, monumental windows, church and chapel windows, casement and projected windows, residential picture windows, custom windows) ... MARMET WALL OF WINDOWS, completely fabricated as a unit ready to install... MARMET GLASS BLOCK VENTILATORS louver blocks... picture windows. Write for complete information today.

MARMET Corporation WAUSAU WISCONSIN

HOW TO GLAMORIZE YOUR HOUSE JOBS

- Use Bostwick metal lath, corner bead and casings... the same stuff we sell you for schools. Metal Lath has multiple uses: Straight or curved surfaces, tile setting, fire hazardous areas, reinforcement, two-inch solid partitions, etc. You also have fewer dimensional limitations with metal lath. 
So get in touch with your Bostwick Dealer. He has closer contact with his metal lath factory than does any other dealer. Or write for our "fall-line" catalog.

the Bostwick steel lath company

SURPRISE FOR JOHN DICKERMAN (right) on his recent visit to the Home Builders Association of Greater Cincinnati was news that the Ohio group had signed up 35 new members in a two-week "flash" drive. Showing how it was done are Harry M. Adkins (left), Cincinnati president, and Al Koch, treasurer and membership chairman. Dickerman, legislative officer for the National Association of Home Builders, was on hand to deliver an "Inside the Industry" report.

L. I. Builders Score Zoning Changes In Low-Cost Areas

Proposed zoning changes on Long Island, N. Y., if adopted, will force upward the price of a low-cost house more than $1,000 and upset a growing practice to encourage reasonable development of light industry, the Long Island Home Builders Institute charged at its recent meeting in LaGrange Inn, Babylon, L. I.

The criticism was leveled particularly at the town of Oyster Bay, a center of small homes activity, which plans to increase the minimum plot from 5,000 to 7,000 square feet and minimum habitable floor area from 800 to 850 square feet.

Urging the town board to reconsider, a special committee of builders termed the increases as unnecessarily high and "in no way related to the health, safety, morals or general welfare of the community." The projected change, according to the builders, would mean at least $6 to $7.50 per month added to carrying charges on $9,500 to $12,000 homes, range of the average industrial worker.

"Surveys have shown," the builders said, "that this additional $6 or $7.50 a month is sufficient to make it impossible for a majority of such families to acquire homes. When such moderate-income families are denied the opportunity of buying homes in the community in which they work, it is not long before the plea develops that 'private builders are not supplying the needs of moderate-income families and, therefore, we must resort to public housing.'

We submit that public housing can and does create an added burden upon all taxpayers."

(Came on page 218)

AMERICAN BUILDER
whatever you build...whether it's a school
...a hospital ...a hotel

a home ... a top-quality building

deserves the top-quality venetian blind!

the all- Flexalum® blind

At last ... a venetian blind that gives you positive assurance of lasting quality and precision operation. Every part of the all-Flexalum blind has been designed specifically to meet your building needs: to give you easy upkeep, longer wear, fool-proof operation, lowest maintenance costs.

Flexalum tapes, cords and tassels are re-inforced plastic ... easy to clean, durable, decorative. They won't fade, fray, shrink or stretch.

Flexalum slats are spring-tempered aluminum ... always keep their shape, won't rust, chip, crack or peel. Flexalum mechanism is friction-free, permanently lubricated, fool-proof.

Greater versatility — cords can be placed where most convenient.
Head-rail can be extended to accommodate draperies without extra hardware.

Write for name of Flexalum manufacturer nearest you and complete file of venetian blind information: color guides, specification data, detailed scale drawings showing installation requirements and conditions.
Association News, cont’d

A major portion of the meeting was devoted to a discussion of steam and hot water heating systems. Robert Ferry, general manager, Institute of Boiler Manufacturers; Thomas Lewis of the United States Radiator Corp. and J. B. Pierce, chairman of the Technical Committee for Radiant Heating, were among the speakers.

Approximately 200 members and their families spent June 27-29 at Muhlenberg Manor, resort hotel at Montauk, Long Island, for a week-end of fishing, swimming, golf and dancing. James Graham, vice president of the institute, arranged the party.

Material Distributors
Open Chicago Offices

The National Building Material Distributors Association has announced the opening of new offices in Chicago and appointment of S. M. Van Kirk as secretary-manager.

Van Kirk was formerly assistant manager of the Insulation Board Institute. Earlier, he was in the sales department of United States Gypsum Co. He joined the insulation board group after Army service as an officer in the Corps of Engineers.

S. M. Van Kirk

Officers of the association are John P. Ashton, Des Moines, president; Art E. Lundgren, Tacoma, vice president; and Harold W. Sparks, St. Louis, treasurer.

These four major association functions were listed by the officers:

(1) To increase volume of sales of products handled by wholesale building material distributors; (2) to gain increased recognition for the distributors; (3) to raise the value and efficiency of the services of distributors; and (4) to remove obstacles which affect economic efficiency and establish objectives which will promote orderly competition.

Detroit Builders Aid
College Loan Fund

A grant of $400 to the Sigma Lambda Chi student loan fund at Michigan State College by the Builders Association of Metropolitan Detroit has been announced by Edward W. Pratt.
Valance lighting like this is specified in a G-E living room Light Conditioning recipe to give a feeling of spaciousness and beauty.

Kitchen Light Conditioning recipes call for under-cabinet and oversink lighting, shown above, to reduce shadows, make work easier.

General Electric laundry lighting recipe eliminates glare and shadows over work areas, makes the room seem larger, too.

Shaving is easier when lighting follows the G-E bathroom Light Conditioning recipe. Sunlamps on walls are “extras”.

New sales-clincher for builders  
...G-E Light Conditioning

LIGHT CONDITIONING in the homes you build gives you a double-barreled sales advantage. First, it offers customers easier, more comfortable seeing, with lighting that’s scientifically correct. Second, it shows off every feature of the home to its best advantage—flatters colors, makes the most of design, even makes small rooms seem larger.

Based on lighting recipes developed by lighting experts (see examples above) General Electric Home Light Conditioning has already been adopted by scores of leading builders. These comments from builders are typical:

“Light Conditioning brought out the real beauty and individuality . . . especially at night. From now on, I want my houses to be Light Conditioned all the way through. It’s a real selling advantage.”

“I noticed that Light Conditioning stopped the visitors to our home. In past years, frankly, nobody even looked at the lighting. Light Conditioning, especially lighted valances, will certainly be in the plans for my future homes.”

FREE BOOKLET! Learn how to Light Condition your homes. Write General Electric for full information and a free copy of the Light Conditioning Recipe Book. General Electric, Lamp Div., 166-AB-9, Nela Park, Cleveland 12, Ohio.

You can put your confidence in—

GENERAL ELECTRIC

SEPTEMBER 1952 219
New large table
provides greater working area!
No extra cost!

The new H & A 14K Band Saw makes work easier, speeds production.

Heavy (20" x 23") grey iron tilting table actually equals in size tables used with much larger saws. Yet cost remains low! Money and time saved, too, through exclusive device which makes blade changing simple, done in a jiffy! All moving parts guarded for maximum safety.

WRITE TODAY! Write for FREE circular, name of nearest authorized dealer.

HESTON & ANDERSON
Division of St. Paul Foundry & Mfg. Co.
14-3C FAIRFIELD, IOWA

only ONE easy Adjustment to put Men at the Right Height QUICKLY!

"TROUBLE SAVER"
ADJUSTABLE STEEL TRESTLES

- Your men can do more work because they will spend less time in erecting and moving "Trouble Saver" Steel Trestles.
- Only one, easy, positive adjustment - no tools, triggers or gadgets required.
- "Trouble Savers" are made of carbon steel ... in eight handy sizes.

Write for literature - giving complete information on all "Trouble Saver" scaffolding accessories.

The Steel Scaffolding Company, Inc.
856 Humboldt Street Dept. AB Brooklyn 22, New York
Telephone: EVERgreen 3-5510

Association News, cont'd

association president. The fund is earmarked for needy students majoring in the college's Light Construction and Lumber Merchandising course, and is administered by the students themselves.

Sigma Lambda Chi is the first collegiate honorary fraternity organized for students in the residential building and building materials merchandising fields. It was founded at Michigan State in 1949 and now has four other chapters - at the universities of Wisconsin, Florida and Denver; and Virginia Polytechnic Institute.

They Get Up Early in Oregon

6:45 A.M. BREAKFAST proves real of new Toastmasters Club formed by Portland Home Builders Association to promote good public relations for the industry. The club, affiliated with a national group, presents the builders' side of the picture by furnishing speakers to luncheon groups, women's clubs and other civic organizations. It has 29 members, chairman by John Austin. Representatives of other clubs come to coach at the monthly breakfast meetings.

Raise Building Permit Fees,
Des Moines Builders Urge

Full support of a 100 to 200 per cent increase in city fees for building permits was pledged by the Home Builders Association of Des Moines in a recent statement by T. R. McNeal, president.

The group is urging an even sharper increase in such fees, McNeal said, in order to pay for more adequate inspection services and a stricter safeguarding of the city's housing standards.

Neal said the builders' policy had been defined in a series of meetings, and had been expressed to city officials.

New Officers Named by
Greater Eastbay Group

Scott W. Bonds of El Cerrito was elected president of the Associated Home Builders of the Greater Eastbay (Calif.) at a recent meeting in Oakland. He succeeds Fred F. Chopin and will serve for the 1952-53 fiscal year. Elected with Bonds were Albert G.

(Continued on page 222)
Washable Feature Proves To Be Great Sales Maker

Lockport, N. Y.—Tremendous acceptance accorded Upson Ceiling Tiles, both by the trade and home owners, proves conclusively that this product fills a long felt market need, lumber dealers everywhere agree.

The washable surface, smart appearance and ease of installation have all contributed to the growing demand for this product, an inquiry reveals. The new tiles are 12 inches square, made of 6 ply laminated board, with surface edge beautifully beveled.

Toughness of material used and application with matching color pins overcomes the complaint of loosening and sagging so prevalent in ordinary tiled ceilings.

Armstrong Praises Merchandising Job on Upson Panels

Huttig Sash & Door Company, now in the 67th year of operation, is now rendering expanded service to lumber dealers in an eighteen state area, the Middle West, south and southeast. In this area, there are twelve Huttig Houses, stocking a wide variety of millwork and building products. Part of the millwork requirements of these wholesaling operations are supplied by two Huttig subsidiary manufacturing plants, located in the Far West.

“Our reputation with our lumber dealer friends,” says T. R. “Ted” Armstrong, Vice President and General Sales Manager, “depends upon our ability to furnish them the very best available products.

“In our opinion, Upson products have for years been the finest of this type of building materials. Actually, we feel there is no competition with Upson in this field of products. Our ‘hat is off’ to The Upson Company for their excellent job of merchandising which has elevated this material to its rightful place as a high quality building material.”

Ideal Bulletin Boards Made From Upson Panels

More reports are being received of schools using Strong-Bilt Panels as bulletin boards. The panels are framed and hung like blackboards. Such boards will not pock after continuous use and can be repainted as desired.

Now—the P-Bomb!

When a ton of plaster ceiling in the Police Athletic Boys Club in Philadelphia fell recently, policemen and detectives, two stories below thought a bomb had fallen. Luckily, no one was injured.

Upson Offices Flooded With Inquiries

Can it be a new interest in modernizing? Or a rush to buy improved new products? Anyway, hundreds of inquiries from Upson national advertising pour in to Lockport every day. Each is forwarded to a dealer for follow-up.
Association News, cont’d

Lockwood, Oakland, vice president, and Dan Bodily, Niles, secretary-treasurer. New directors are William Freeborn, Oakland; Dean Morrison, Oakland; Theodore Peterson, Diablo; McKie Roth, Lafayette; and Sol Sherman, Oakland.

John I. Hennessy continues as association executive vice president, a position he has held for the past four years.

Downpayment Bond Plan Spreads to New Jersey

The $100,000 bond to protect buyers against possible misappropriation of their downpayments, a confidence-building action recently introduced by the Chicago Metropolitan Home Builders Association, has been adopted by the Home Builders Association of Metropolitan New Jersey.

The coverage applies to all members wherever they operate and without extra assessment, according to an announcement by Richard D. Hudson, president. Members are said to comprise about 90 per cent of the larger building companies in Essex, Morris, Union and Middlesex counties.

Raymond E. Hanly, president of the New Jersey Home Builders Association, viewed the plan as a precedent which might soon be followed by the seven other local home builder associations in the state.

Be Safe
from
Moisture
Damage

Install Damp-Vent New Year-Round Protection

Are you troubled by peeling paint—cracking or discolored walls? Stop it with DAMP-VENT—a breathing unit which allows exchange of air without free circulation. When you install DAMP-VENT in your home you know you are protecting your property from the many causes which burden due to moisture collecting inside the walls. Easily installed—drill a 1/4 hole in exterior siding and press DAMP-VENT in—-that’s how simple it is! Premium tapered body insures tight permanent fit. Made of aluminum or Tensile plastic.

DAMP-VENT
will not:
• rust
• clog
• deteriorate

CORNICE VENTILATOR


Write name dealer and distributor opening.

DAMP-VENT CO.
P.O. Drawer 2033
Bettendorf, Iowa

BUILT-IN RADIOS
WILL SELL YOUR HOMES!

Lowe Cost!

Retail Price only $34.95 plus installation.
Special Trade Prices on Request

Specifications on Request. Territory franchises available to qualified jobbers and dealers.

Built-in Radio Company
Dept. AS, 1012 Cleveland Street, Clearwater, Florida

AMERICAN BUILDER
Ry for Good Windows

This 60-bed privately owned hospital is completely modern—in design, materials and equipment. Everything possible has been planned for the patient's welfare—and at the same time offset today's high operational costs.

Lupton "Master" Aluminum Windows play a major part. Their attractive appearance would be enough to recommend them—but they offer far more than beauty. The aluminum frames will never need painting. Ventilators will always operate freely and easily, never get paint clogged.

Open-in ventilators at the bottom direct air to the ceiling—no drafts can strike the patients. The main ventilators open out, act as a weather shield.

Screens are clipped right to the windows, installed from within the building. Window cleaning is an inside job too.

Initial cost is moderate—but when you figure exceptional long life and no maintenance, you'll find Lupton "Master" Aluminum windows the most economical buy you can make.

For complete details see the local Lupton Representative—or write direct to us.

MICHAEL FLYNN MANUFACTURING CO.,
700 East Godfrey Avenue, Philadelphia 24, Penna.
Member Metal Window Institute and Aluminum Window Mfr. Assoc.

LUPTON METAL WINDOWS
Terrazzo Panels Give New School a Distinctive Finish

ARCHITECT: Maxwell C. DeWar

GENERAL CONTRACTORS: Christensen & McDonald (Both of Edmonton, Alberta, Canada)

Modern throughout in planning. Canadian high school presents trim lines, handsome white facing

One of Canada's most modern educational plants, the new $3 million Victoria Composite High School in Edmonton, Alberta, features a new type of exterior finish—precast panels of white terrazzo-vermiculite concrete—that is creating much interest among architects and builders because of its adaptability for distinctive treatment.

The panels are fabricated of white terrazzo and white cement, 1½ inches thick, with a back-up layer of vermiculite concrete (1:6 mix) of the same thickness. All precast to order, they were applied over exterior walls of brick and tile.

By using vermiculite aggregate instead of sand, three things were accomplished, according to Maxwell C. DeWar, Edmonton architect who designed the school: the panels could be precast in sizes as large as 8x8 feet; nearly 1,000 pounds of dead load were eliminated on each 8x8 slab; and the total insulation value of the wall was doubled by using (Continued on page 226)

Terrazzo-vermiculite concrete panels seen close-up. Note carving at right

ACOUSTICAL TILE NAILS
...designed for the job

When installing acoustical tile choose a job-designed nail that combines ease of application with these special features: a head end which allows the nail to be driven home without damaging the tiles...a collar which holds the tiles firmly in place...annular threading which gives superior holding power. The nails are furnished with a plated finish to prevent rust streaks where moisture is present. Send for free samples and descriptive literature.

JOHN HASSALL, INC.
182 Clay Street
Brooklyn 22, N. Y.

Here's QUICK HEAT to lick High Humidity in Fall
Building Simplex PORTABLE HOT BLAST HEATERS

This handy heater will more than save its cost in speeding up construction for you! Licks humidity and condensation in Fall construction—for faster drying of plaster, paint, varnish...prevents freeze-ups and aids work comfort, too, for Winter work. Saves both time and labor.
The Portable, HOT BLAST generates an intense blue flame, smokeless, sootless, on a mixture of kerosene and compressed air— like a blow torch. Completely safe. Automatic Shut-Off Control stops fuel supply if flame goes out. Lightweight, sturdy, easily portable. Also available with wheels. See your Builder's Supply Dealer, or write for details and prices.

WESTERN METAL SPECIALTY CO.
Dept. AB-9, 23rd N. 42nd St., Milwaukee 13, Wisc.
Step-saving kitchens

help to make Gunnison a lot of home for a little money

- Gunnison Homes are noted for their step-saving, time-saving, and work-saving kitchens. Women are amazed at how quickly they get their work done... how much extra time they have for other things.

There's a reason for this. The whole room was designed for convenience. You can reach every work center with just a few steps.

Gunnison Homes have the finest kitchen equipment. Built by American Kitchens... styled by the famous industrial designer, Raymond Loewy.

There's plenty of cabinet space in rugged steel units with sparkling baked enamel finish. The smooth rounded contours and streamlined appearance fit perfectly with modern kitchen appliances. Double-action spring hinges on cabinet doors, quiet, gliding drawers, and a "giant-size" double-bowl sink are all there to save time and work.

Outstanding kitchen equipment is but one of the many desirable features of Gunnison Homes. Notice the others listed below. Only Gunnison offers so many wanted features in a home at such a moderate price.

**Gunnison Homes, Inc., New Albany, Ind.**

**Other outstanding Gunnison features**

- New Perimeter heating system
- Mar-Sun automatic gas or oil furnaces
- Beautiful exteriors
- Flush panel doors
- Fenestra steel windows
- Thermo-Pane window walls
- Permaglas hot water heaters
- Washable Mellow-Tone interior walls
- Ceiling-to-floor sliding closet doors

"Gunnison" trade-mark of Gunnison Homes, Inc.
Safety is no Accident!

Only Master Welders work on SAFWAY Equipment

Interchangeable parts constructed by safe, strong, lifetime welding of high carbon tubing.

All SAFWAY Equipment
Treated with Rust Inhibitor

Maintains accurate fit of parts and fasteners to assure safe, rigid maintenance towers.

Enamel is Baked on All Surfaces, Inside and Out

Improves appearance of equipment—helps insure lasting fit of parts and long life.

All SAFWAY Equipment is Engineered to Last

With only routine care, Safway equipment will deliver a lifetime of safe, efficient service.

Write for this Free Bulletin
RENTED and SOLD
by distributors everywhere

SAFWAY
STEEL PRODUCTS, Inc.
6231 West State St.
MILWAUKEE 13, WISCONSIN

(Continued from page 224)

the 1½-inch layer of insulating concrete.

The facing combines beauty, flexibility and economy with a modern approach, DeWar said. The large panels and wide joints give the building a clean-lined exterior that is handsome and individual; and where special ornamentation was desired, the terrazzo could be carved. Total cost of the panels installed was approximately $1.70 per square foot.

Framework of the building is structural steel columns and beams with steel joists for second floors and roofs. The school is fireproofed throughout with vermiculite plaster. Interior walls on corridors, stairways and permanent locations are glazed brick dado, tile and plaster. Classroom partitions are staggered wood studs and plaster to allow for future expansion or construction of classroom sizes.

Home economics room has latest kitchen equipment, acoustical plastic ceiling, fluorescent lights.

An eight foot module was used to secure flexibility in planning for both present needs and future changes. This also proved economical in the use of materials and column spacing.

Floors are concrete fill over structural slabs, finished with linoleum in classrooms, rubber tile in laboratories, asphalt tile in other locations, and terrazzo in corridors, lobbies and on stairways.

The roof deck is vermiculite insulating concrete over expanded metal lath on bar joists 24 inches O.C. The concrete is covered with a built-up roof of pitch and gravel. Flashing is copper.

Fenestration is wood sash in wood frames with double glazing in classrooms; stainless steel casings in entrances; and solar glass in the south windows of the home economics department. The bottom quarter of all windows opens inward on hinges.

Seventy-five per cent of the ceiling area is acoustically treated with fireproof vermiculite acoustical plastic.
SCR brick* - biggest homebuilding news of the year... everybody's talking about it...

"SCR brick" HOMES ARE BEING BUILT EVERYWHERE

Here's why -

- Builds solid brick homes at a cost equal to frame.
- Saves time and materials.
- Builds warm, dry walls.
- Provides premium beauty.
- Meets construction requirements of FHA and all national building codes for 1-story residences.

Here's where you can get full information about "SCR brick" in your locality:

STRUCTURAL CLAY PRODUCTS INSTITUTE

NEW HAVEN 10, CONN. 341 State Street ... Phone 8-1287
NEW YORK 17, N. Y. 1949 Grand Central Term...Murray Hill 9-0270
CANTON 3, OHIO 306 Market Avenue, North ... Phone 5-5329
CLEVELAND, OHIO 402 Swatland Building...Prospect 1-5247
COLUMBUS 15, OHIO 81 East State Street ... Fletcher 1440
CHARLESTON 1, WEST VA. 1330 Kanawha Boulevard, East... Phone 2-6288
DETROIT, MICH. 2671 Ewald Circle, Apt. 2 ... Webster 5-2433
PITTSBURGH 32, PA. 807 Standard Life Building ... Atlantic 1-6393
CHICAGO 1, ILL. 228 North LaSalle Street ... Randolph 6-0578
ST. LOUIS 8, MO. 4117 Lindell Boulevard ... Olive 1155
AMES, IOWA 1201½ Welch Avenue ... Phone 2-4422
MINNEAPOLIS 4, MINN. 402 Westfield Temple Building ... Geneva 7055
DENVER 4, COLO. 116 West 10th Avenue ... Acoma 6884
SAN FRANCISCO 5, CALIF. 55 New Montgomery Street ... Sutter 1-7642
SEATTLE 4, WASH. 204 Central Building ... Eliot 6227

Clay Products Association of the Southwest
AUSTIN, TEXAS Littlefield Building ... Phone 6-2647
OKLAHOMA CITY, OKLA. First National Building ... Phone 2-5337
SOUTHERN BRICK & TILE MANUFACTURERS ASSOCIATION
ATLANTA 3, GA. 1328 Cordier Building ... Cypress 8076

The "SCR brick" is a new product developed by the Structural Clay Products Research Foundation.

*Reg. TM, SCPPR, Patent Pending

FREE BOOKLET "HOW TO BUILD HOMES THAT SELL WITH THE SCR BRICK" gives full construction details. To get one, just phone or write any one of the offices listed here. We will also welcome your inquiry at our national headquarters. Address Dept. AB-9.
Light colored glazed tile was used in all corridors to the height of the recessed lockers and in stairways, swimming pool, gymnasium, and other areas subject to hard use. Gang shower rooms and drying areas are completely covered with ceramic tile. In plan, the building consists of a main section with four large radiating wings. Total floor area is more than 200,000 square feet.

The attractive foyer has interior brick walls, a winding terrazzo staircase with a terrazzo flower box at its base for ornamental plantings, and wall wash lights topped by a fluorescent fixture in the center of the ceiling. This fixture's rose color spreads over the ceiling and effectively sets off the wall washes.

Administrative and student union offices, a library, guidance rooms, science labs, art rooms, and classrooms occupy the main section.

One entire wing is given over to home economics; a second to language and social studies; a third to recreation; and the fourth to technical and shop training. Each wing can be closed off and used separately; for example, the technical wing can be isolated for night classes and the recreation area, community affairs.
Here's why this line of Locks appeals to BIG ORDER buyers

When you give consideration to locks, you're lucky if your hardware merchant or building supply house handles the SARGENT "4500" line. For those locks, at moderate price, offer you real benefits:

THINK OF YOUR CUSTOMERS. They react favorably to style and appearance. They admire the tulip-shape knobs and the well-proportioned roses of the SARGENT "4500" line.

THINK OF YOUR REPUTATION. You know you can depend on SARGENT quality in material and in workmanship. Customers, too, know the SARGENT name, recognize it, trust it.

THINK OF REPEAT SALES. Friends of your customers are prone to form their judgments about your houses on a number of details. And probably no detail stands out more prominently than locks. The good impression starts when prospects are greeted at the front door by a SARGENT "4500" key-in-knob lock.

That good impression is fortified at every door they pass through: by locks on bedroom and bathroom doors; by latches on closet doors. And the rich SARGENT finishes make another favorable impression: bronze, brass or the popular anodized aluminum.

Your mechanics applaud the self-centering rose take-ups. They like the fact that there are just two round holes to bore, and that the boxed strike plate makes a "finished"-looking job. And remember, too, no reinforcement is needed when applying these locks to steel doors.

No one needs remind you that locks are among the most constantly used and most noticeable items of hardware in any house. You know that, and know, too, that the impression they create — favorable, or otherwise — is out of all proportion to their cost. It pays well to buy SARGENT "4500" locks.

Ask your supplier or us for complete information about these Sargent Products. Write Dept. 5J.
"Roto-Tray" Features
American Kitchens’
New Dishwasher Line

A line of automatic dishwashers, featuring the “Roto-Tray,” a circular upper rack which turns freely with the motion of the water for thorough cleansing of each dish, has been introduced by the American Kitchens Division of Avco Manufacturing Corp.

Because of the turning action of the Roto-Tray, according to Charles K. Clarke, general sales manager of American Kitchens, every surface of every dish is washed specklessly clean by powerful streams of hot water. Other features include an electric heating element which raises water temperatures during the wash and rinse phases so that water is actually hotter at the end of the cycle than at the beginning.

The three models in the line—a dishwasher-sink combination, Model DW-48, built on a frame 48 inches wide, the unit has a single bowl sink and a double storage compartment underneath.

Free-standing version of new line is Model DW-24. It is front-opening and fits into any space 24 inches wide.

(Continued on page 232)
Construction men know that proper air entrainment results in concrete that's more workable, more versatile, and more durable. But... like no glove will fit every hand perfectly... no standard air entraining cement will make concrete that fits every job perfectly.

The reason is simple. All brands of air entraining cement are made according to strict Federal and ASTM specifications—designed to produce concrete that's right for the "average" job. But when mixed with local materials, air entraining cement can fail to meet the specific requirements of the job—due to the effect of the aggregate, its gradation, and even the temperature, on the air entraining capacity of the mixture.

That's why it's wise, before you specify air entraining cement for your next job, to first make certain that it will combine with local materials and the job conditions to produce concrete that is best for that job. But why gamble when the "prescription" method—using regular portland cement and adding the required amount of any well known air entraining agent at the mixer—always pays off in quality concrete. You'll find that this method goes hand-in-glove with perfect performance every time.

Just remember, use air entraining cement only when you're sure that it "fits"... and remember, too—you can't buy better portland or air entraining cement than Marquette.

** Marquette Service Engineer will be glad to help and advise you — contact any Marquette office.**

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

Marquette Cement
MANUFACTURING COMPANY
SALES OFFICES: Chicago • St. Louis • Memphis • Jackson, Miss. • PLANTS: Oglesby, Ill., Des Moines, la. • Cape Girardeau, Mo. • Nashville, Tenn. • Cowan, Tenn. • Brandon, Miss.
PORTLAND • HIGH EARLY STRENGTH • AIR ENTRAINING • MASONRY
Yessir!...Your Hardware Dealer Has It for You NOW...

SIMONDS
SI-CLONE
SAWS

That's right — Simonds quality at pop prices! First time you've seen a line like this...13 saw-types up to 12" diam. (including dado heads and carbide-tipped saws). Round or special-shape center holes. Best saws made at these prices (look below) for home workshops, schools, contractors, and light industrial work. See your hardware dealer now.

RIP + CUT-OFF + EASY-CUT
and COMBINATION

6"...$1.75 9"...$2.65
7"...2.00 10"...3.15
8"...2.15 12"...4.35

Made of SIMMONDS STEEL fully guaranteed against any defect in material or workmanship.

Walter L. Greene
Is New FHA Head

Walter L. Greene has been named by President Truman to succeed Franklin D. Richards as commissioner of the Federal Housing Administration.

Greene, with FHA since its inception in 1934, has been deputy commissioner and chairman of the finance committee since 1947. He joined the agency as administrative officer in the Birmingham, Ala., in-

Under-counter unit of the line. Model DW-24UC, loads easily from front and will fit under any maple or vinyl counter-top 24 inches wide

the base cabinets and sinks of the American Kitchens line.

Clarke said a national advertising program would be launched with emphasis on 24 key markets; and that during the campaign, display and sales material would be distributed to American Kitchens dealers.

Ready Hung Doors

THE NEW
DOOR AND FRAME
PACKAGED UNIT

Under-counter unit of the line. Model DW-24UC, loads easily from front and will fit

Spoiled materials mean spoiled profit —

Stop spoilage with READY HUNG DOORS.

Under-counter unit of the line. Model DW-24UC, loads easily from front and will fit

American Kitchens line.

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Saw and Steel Co.

232
Here's Why You Can Look to Long-Bell

These 19 Modern Plants

Provide a Proven Source of Supply for Quality Lumber and Wood Products

Today, as for 77 years, a dependable supplier is one of your most valuable assets. That's why leading retailers, distributors and industrial users of lumber and wood products “Look to Long-Bell for quality lumber and wood products”.

Long-Bell's timber resources and 19 modern plants provide you a single, reliable source for the products you want through your nearby Long-Bell representative. Call him today—or write:

The Long-Bell Lumber Company

Established 1875 — Kansas City 6, Mo.
help owners
deide on the
design and
materials of their
fireplaces

Self-Furring Metal Lath Simplifies
Plaster Application

Easier and less expensive techniques for fireproofing steel columns with lightweight metal lath and plaster have been reported as a result of a research and fire-testing program being sponsored jointly by the Metal Lath Manufacturers' Association and the Perlite Institute. The program is being conducted at the Underwriters' Laboratories in Chicago.

First step in new method of column fire-proofing is bending the sheet of self-furring metal lath. Lath is placed so "dimples" are against column flange, furring out about 1/4-inch to provide space for plaster to key.

Since the advent of lightweight plaster-aggregates—vermiculite and perlite—fireproofing of structural steel has been rapidly changing from ponderous concrete encasements to lighter, thinner, less-expensive protective coverings of metal lath and plaster, according to Richard Davis, secretary-treasurer of the Perlite group.

But, Davis said, the original tests which qualified this new construction for the important role of fireproofing steel columns included two features which have been proved difficult to

WONDERDRAFT stops fireplaces from smoking because of "too air-tight" modern houses. Starts fires quickly with practically no kindling.

You can control your fire to burn hotter or slower. Increases fireplace efficiency. Stops fireplace from pulling all the warm air out of your house. Doubles the pleasure of an open fire. (See diagram)

Send for free descriptive circular.

Carter Engineering Co.
Warrenton, Virginia

When diamond mesh metal lath is used instead of self-furring lath, column is wrapped at approximately 2-foot intervals with 1/4-inch cold-rolled channels, furring lath a distance of 7 1/8-inch.

(Continued on page 236)
Builders! Cut costs, save time with this power-packed special!

With this power-loaded MAXAW 800, you can zip through 2-in. dimension, rough and oversize lumber at 45° with blade to spare—do rough framing in a fraction of the time it takes with an ordinary saw.

All of this jumbo-size, magic-pivot performance is compressed into only 14 lbs. of precision-built saw power with 100% all ball-and-roller bearing construction. Even the MAXAW 800 telescoping guard swings on all ball bearings, prevents jamming and snaps back quickly for greater safety.

The MAXAW 800 makes fast work of cutting heavy gauge and corrugated metals for roofing and partitions in factories, warehouses, granaries and similar business and industrial construction. When equipped with suitable blade, it slices through transite, concrete, asbestos, pipes, flues and liners.

See your hardware or building supply dealer. Ask for MAXAW.
the lathing and plastering contractor: metal lath had to be furred 1¼-inch thick for a four-hour fire rating—the minimum required by building codes—and only 1-inch thick for a two-hour fire rating. An intermediate thickness should achieve a three-hour rating. A three-hour fire protection for steel columns is the next scheduled construction to be tested in this research program.

Details of column fireproofing for four-hour fire resistance with self-furring method (top) and channel furring method

Newly tested procedures eliminate all need for costly furring, according to Davis. Self-furring lath is a standard product created by running diamond mesh metal lath through another manufacturing operation. It has evenly spaced indentations or “dimples” which hold the lath ¼-inch away from the surface to provide

(Continued from page 234)
Some people do get black eyes from doors. The doors they install.

But this need never happen to you! Not as long as you can supply your customers with Weldwood and Mengel doors.

Yes, here are two famous doors that always add to your reputation. You can always safely recommend either one.

There is no difference functionally between Weldwood and Mengel doors.

The only difference is in their structure.

The Weldwood Staved Lumber Core Door gives you a quality product for either exterior or interior use—residential, commercial, institutional. It can be hung from either side and is especially adaptable to custom-made lights and louvers. All bonding is done with 100% waterproof phenolic glue.

The Mengel Hollow Core Door uses a time-tested structural principle that has shown its worth on hundreds of thousands of flush doors. Especially recommended for residential use, it meets every demand for quality and beauty—at budget prices.

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

Both represent top-flight quality at rock-bottom prices.

Recommend and install either one to safeguard your reputation and profit.

United States Plywood Corporation carries the most complete line of flush doors on the market including the famous Weldwood Fire Doors, Weldwood Stay-Strake Doors, Weldwood Honeycomb Doors, Mengel Hollow-core Doors, Mengel and Algoma Lumber Core Doors, 1 1/4" and 1 1/2" with a variety of both foreign and domestic face veneers.

WELDWOOD* FLUSH DOORS
Manufactured and distributed by
UNITED STATES PLYWOOD CORPORATION
55 West 44th Street, New York 36, N. Y.
Branches in Principal Cities • Distributing Units in Chief Trading Areas
Dealers Everywhere
(Continued from page 256)

vile space for the plaster to key. Since the fire tests show that there is no need for furring, obviously the second problem; if filling the furred space of 1/4-inch between lath and column flange with plaster has also been eliminated, Davis said.

To provide data for contractors who may prefer to use diamond mesh metal lath, or for cases where it may be necessary to increase the finished size of the column, channel-furred construction was also tested. Diamond mesh metal lath was placed over 34-inch cold-rolled channels wrapped around the column horizontally at approximately 2-foot vertical spacings. The channel legs held the lath a distance of 1/4-inch from the face of the column to provide space for the plaster to flow around and embed the lath.

This construction with only 1/4-inch of gypsum-first plaster (measured from the face of the lath) protected the steel column for more than four hours to prove that channel furring is the equivalent of self-furring as far as fire resistance is concerned. A standard mix of 100 pounds of gypsum to two cubic feet of perlite for scratch coats and 100 pounds to three cubic feet for brown coats was used in all the fire tests.

PROTECT YOUR MATERIALS and PROFITS with tough, waterproof SISALKRAFT

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

Use SISALKRAFT over the subfill (under all concrete slabs) and to cure concrete. FOR FREE SAMPLES and installation specifications see your Lumber or Building Supply Dealer or Write Dept. ayy.
West Coast Hemlock bevel and bungalow siding is durable and highly adaptable to any style of architecture.

Kitchen cupboards and cabinets of wood are growing in popularity. West Coast Hemlock does much to accelerate this trend.

**Weyerhaeuser 4-Square**

**WEST COAST HEMLOCK**

How well do you know Hemlock? Not by hearsay... but by actual use... by working with it... nailing and painting it?

West Coast Hemlock is entitled to a fair evaluation on every single merit of its own, for West Coast Hemlock is a different type of wood from other Hemlocks. It is one of our leading softwoods. There are abundant stands of Hemlock. It will long continue to be one of our most available species. Hemlock is going to be with us for many generations.

Properly kiln-dried, and carefully manufactured by Weyerhaeuser, 4-Square Hemlock rates a preferred position in your building program. It has just about everything a customer could want in a softwood and can be used interchangeably with other multi-purpose softwood species.

Many experienced builders rate West Coast Hemlock excellent for framing, sheathing, siding, finish, moulding, flooring, stepping, cabinet work, paneling, ladder stock, food containers, cupboards, food lockers.

Acquaint your trade with West Coast Hemlock. Factual literature is available explaining the characteristics and uses of this abundant "ability" wood. Write for details.

**PROPER PROCESSING OF HEMLOCK**

- Weyerhaeuser takes this abundant "ability" wood and through scientific logging, accurate sawing, controlled kiln-seasoning, precision surfacing, proper grading, careful handling and shipping, produces a wide range of 4-Square West Coast Hemlock lumber products.

**Weyerhaeuser 4-Square LUMBER AND SERVICES**

*Weyerhaeuser Sales Co., St. Paul 1, Minn.*

**EXTEND YOUR USES FOR HEMLOCK... THE ABUNDANT "ABILITY" WOOD**

*SEPTEMBER 1952*
BUILDERS
Make extra
Money!

Simply plumb and level... anchor window and caulk

Save on Labor Costs
Gate City

Factory Assembled
Easy To Install

Preservative-Treated WOOD
AWNING WINDOWS

During these times of increasing labor costs, installation time saved means extra money for the builder... and even greater profits where the plans call for modern window walls.

FACTORY ASSEMBLED, including hardware and glazing. A "packaged unit" ready to install.

ATTIC INSTALLATION OF A SUPERFLEX OIL-FIRED SUSPENDED FURNACE IN A KOW GARDENS HOME

Furnaces in this 300-HOME Project Are All in Attic

In Berea, Ohio, all 300 homes in a new subdivision will have furnaces located in the attic.

Tait and Blackman, developers of Kow Gardens, are currently installing oil-fired suspended furnaces as well as conventional gas furnaces in the attics of their homes, routing the heat through ducts down to channels between the main floor slabs.

The homes are in the $25,000 to $45,000 class. All are one-story, basementless, with three bedrooms, living room, bath and, in most cases, a combination kitchen-utility room.

Formerly, the firm's homes were built with furnaces located in the kitchen-utility rooms. Heat was distributed in the same manner, through overhead ducts, down through partitions to passages in double-slab concrete floors.

ATTIC INSTALLATION OF A SUPERFLEX OIL-FIRED SUSPENDED FURNACE IN A KOW GARDENS HOME

FLOOR CONSTRUCTION, SHOWING THE TWO THIN CONCRETE SLABS, WITH AIR SPACES BETWEEN

The floors consist of two slabs, each three inches thick, separated by a 5½-inch air space through which the warmed air travels. The top slab is supported on brick withes which also separate the air passages.

In construction, corrugated steel sheets are laid directly on the brick withes. The corrugated steel used to support the top slab during pouring remains in place in the finished reinforced concrete.

According to Corliss Blackman, re-

(Continued on page 242)

VULCAN
FIN TUBE RADIATION

In the "long" run ... it costs less

Long runs of Vulcan Radiation reduce the number of joints and fittings and the amount of necessary piping for every installation ... SAVES TIME AND MATERIAL ON THE JOB.

Vulcan Radiation is ruggedly built for long life service ... IN THE LONG RUN IT SAVES MAINTENANCE UPKEEP.

For details on the Value in Vulcan, see your nearest Vulcan Representative or send direct for illustrated catalogs.

Over Twenty-Five Years
A Leader in Fin-Tube Radiation

The VULCAN RADIATOR COMPANY
HARTFORD, CONNECTICUT

MEMBER OF THE PRODUCER'S COUNCIL, INC.
Refer to Sweet's Builders' File 44 GA
Now...an Old Favorite
IN TWO NEW RANCH STYLES

IT'S THE FRANTZ No. 10 OVERHEAD GARAGE DOOR

- Horizontal paneling of this new Frantz door blends with the long, low ranch-type lines of today's popular homes. The Frantz No. 10 door fits standard 8' wide x 7' high opening, with choice of four glass or all solid-wood panels. It's easy to install, because the doors are factory pre-fitted, with all bolt holes bored. Adjustable power springs provide smooth, automatic operation, with door requiring but 2" headroom. Toxic treated against rot, and easy-running ball-bearing steel wheels, give the Frantz No. 10 door a long, service-free life.

JUST OFF THE PRESS
Send for your free copy of the new Frantz Overhead Door Catalog No. 301. Colorful, and completely illustrated, this book has a handy door selector which makes it easy to select the right Frantz door for your needs.

To help you build a better home...

Permalite makes plaster 4 WAYS BETTER!

That's right...Permalite aggregate means a better house...extra value for the money. In base coat plaster, it provides: (1) Three times greater insulation than ordinary plaster; (2) Extra fire resistance; (3) More resilience, more crack-resistance; (4) Tons less dead weight for minimum settling and maintenance.

Permalite makes concrete INSULATING!

In concrete floor slabs, Permalite gives up to 20 times the insulation of ordinary concrete. Minimizing heat loss into ground, it's a superior base for floor radiant heating systems. Adds year 'round comfort, helps eliminate cold floors.

Send in this coupon today for full details. Learn how you can add much to housing quality, little to housing cost with Permalite.

A Building Product of
Great Lakes Carbon Corporation and its exclusive Permalite Licensees

Permalite aggregate means a better house...extra value for the money. In base coat plaster, it provides: (1) Three times greater insulation than ordinary plaster; (2) Extra fire resistance; (3) More resilience, more crack-resistance; (4) Tons less dead weight for minimum settling and maintenance.

Permalite makes concrete INSULATING!

In concrete floor slabs, Permalite gives up to 20 times the insulation of ordinary concrete. Minimizing heat loss into ground, it's a superior base for floor radiant heating systems. Adds year 'round comfort, helps eliminate cold floors.

Send in this coupon today for full details. Learn how you can add much to housing quality, little to housing cost with Permalite.
Low-Cost Home Cooling

Hunter Attic Fan cools the entire house

This modern ventilating fan pulls in cool air through windows, exhausting hot stuffy air through attic louvers. In hottest summer months it circulates cooling breezes through every room in the house. The quiet, powerful Hunter Attic Fan requires little or no maintenance, costs only a few cents a night. It is backed by Hunter's 65 years of fan experience.

Easy to install—This compact unit is complete with automatic shutter and modern metal trim to cover the ceiling opening. No suction box to build; no accessories needed. Fan requires only 17 in. attic clearance. Available in capacities to fit any size home and any climate.

18 PROFITABLE SALES FEATURES!

(Continued from page 240)

Hunter Attic Fan $10,000 in Scholarships

The Hunter Attic Fan helps to cool the entire house, making it a more comfortable and energy-efficient living space.

Steel Industry Awards

Steel Industry Awards $10,000 in Scholarships

Ten high school seniors, selected from a group of 80 nominated by steel fabricating companies, were awarded $1,000 scholarships in civil engineering by the American Institute of Steel Construction.

In announcing the winners, T. R. Mullen, chairman of the institute's committee for education, said that the institute's annual scholarship program is an expression of its recognition that business is operated for the general welfare of the nation and its people as well as for profit.

Recipients of the awards were from nine widely-separated states.

18 PROFITABLE SALES FEATURES!

Many of them Exclusive in BESSLER Disappearing Stairways

1. The ORIGINAL disappearing stairway—made for over 40 years.
2. A real stairway—not a ladder.
3. Seven well-engineered models—for every need.
4. Safety-designed in every detail for your protection.
5. Suitable for the finest homes—old and new.
6. Operates from above and below.
7. Full width treads—SAFE for everyone.
8. All steps are of equal height.
9. Treads and stringers are made of Sitka Spruce.
10. Full door width provides ample access for large objects.
11. Full length SAFE hand rail.
12. Architectural design assures easy and SAFE ascending and descending.
13. All metal parts are made of strong, SAFE pressed steel.
14. Repairs always available on quick notice for all models—no "orphans."
15. Doors made of White Pine and Fir in two-panel type; flush doors in hard-wood only.
16. Tailor-made for all heights—no short or long steps.
17. Proved in performance—hundreds of thousands in constant daily use.
18. IMMEDIATE DELIVERY.

The BESSLER Disappearing Stairway Co., 1900 East Market St., Akron 5, Ohio

BESSLER—best for over 40 years!
Like REINFORCING STEEL in a CONCRETE BUILDING

Blok-Mesh is a high tensile steel reinforcing, laid in the mortar joints of masonry walls, to serve the same purpose as reinforcing bars in a concrete building. Blok-Mesh adds strength and rigidity... reducing the possibility of cracking at points of strain.

Masonry Wall REINFORCING

Blok-Mesh is manufactured in widths to accommodate all standard thicknesses of masonry walls. It is available in either plain or galvanized wire.

BLOK-MESH DEALERSHIPS ARE AVAILABLE

Write for descriptive literature... bulk quantities of which are available to Blok-Mesh dealers. Why not get the particulars and cash in on this profitable and greatly-in-demand product?

PUT THIS BURNHAM ECONOMY TEAM TO WORK!

When you specify the Burnham Oil-fired PACEMAKER Boiler and Burnham BASE-RAY® Radiant Baseboard you can be sure of customer satisfaction. The unusual economy of PACEMAKER both in first cost and fuel consumption will satisfy the most exacting homeowner.

BASE-RAY... its streamlined design contributes to smart interiors... the long-range economy of its lifetime cast-iron construction... its high heating efficiency are features which make for quick acceptance and overall satisfaction. Make sure of customer appeal with Burnham quality! Mail the coupon today for full details.

Burnham Corporation NEW YORK Irvington, New York

Please give me full data on the economy team PACEMAKER and BASE-RAY.

Name

Address

City State
HOME BUYERS LIKE THE KITCHEN-AIRE EXHAUST FAN BECAUSE IT’S DIFFERENT

Different, because it is FIRE-SAFE, grease laden air is NOT drawn over motor;
Different, because intake grill may be mounted above cooking range even on inside wall;
Different, because ordinary 6" stove pipe will serve for making connection between intake grill and exhaust fan.
Different, because it is QUIET, operating mechanism is mounted OUTSIDE the wall,
Different, because it is weatherproof, back draft damper protects against heat loss, operating mechanism is housed in corrosion-free aluminum.
Yes, the Kitchen-Aire is different. Electrically operated, easily installed, the Kitchen-Aire adds that plus-value which makes new homes salable. It is the last word in kitchen ventilation, a feature your buyers will like. Underwriters Approved. Advertised in Better Homes and Gardens.

STEWART MANUFACTURING CO.
320 E. St. Joseph Street, Indianapolis, Indiana

You get MORE HEAT from LESS OIL with Automatic

JOHNSON Oil BURNERS

You’ll like the fuel-savings that a Johnson Burner will give you. And you’ll like its quiet, carefree dependability. If you are confronted with a heating problem — large or small — let your Heating Engineer show you what a difference an automatic Johnson Burner can make in your fuel and service bills.

There’s a Johnson Burner for every heating need — all precision-built to give years of satisfaction...all engineered to maximum efficiency...all backed by a 40 year record of dependability. See the Johnson Burner dealer near you.

S. T. JOHNSON CO.
940 Arlington Ave.
Oakland 8, California
401 No. Broad Street
Philadelphia 8, Pa.

Three New Lines Of Garage Doors

Now available from the Caleb Mfg. Co. of Lancaster, Pa., are three brand new lines of upward-acting garage doors offering new permanently greased cable sheaves and a new gray permanent finish on all hardware.

1) This is the new Wedge-Tight Sturdy door. It is slightly lighter than the former Wedge-Tight door, and costs less.

2) The new Wedge-Tight Leveline door comes in five sizes: one-car doors, two panels wide, are 8x7 feet, 9x7 feet, and 8x6.8 feet; two-car doors are four panels wide, and come in sizes of 15x7 feet and 16x7 feet.

3) Caleb’s flush door line, flush two sides, is made in any window arrangement desired. This is the 16x7-foot door with glass in the fourth section.

Forum on Forest Products

A forest products forum featured the recent meeting of the Northern Hemlock and Hardwood Manufacturers Association at King’s Gateway, Land o’ Lakes, Wis. Approximately 125 industry representatives were on hand. Discussion topics included current market conditions of pulpwood, plywood and veneers, hardwood flooring, and railway ties; and the status of lumber production and sales.
ADJUSTO
SWING DOWN TUB-SHOWER FIXTURE

TURN THE HEAD
FOR TUB FILLER OR SHOWER

Quality plus
LOW COST

Easily Installed outside of the wall

ADJUSTO:

Eliminates a tub-filling spout.

Only one set of valves is needed.

Installs as easily as a swing spout sink faucet.

Installed in half of the time required for conventional tub and shower fixtures.

No danger of back siphonage.

May be installed after tiling and decorating are completed.

For remodeling, it is easy to fit most existing fixture conditions.

A beautiful, quality fixture at LOW COST.

Ideal for builders.

See your plumbing contractor

Plumbers: see your jobber

or write direct

MILWAUKEE
FLUSH VALVE CO.

323 E. Reservoir Avenue
Milwaukee 12, Wisc.

Manufacturers of the Famous Milwaukee Plumbing Fixtures
Including:

Sump Pumps
Deck Foulage
Sink Strainers
Tub Fillers
A variety of allied products

SEPTEMBER 1952
HART DOME DAMPER

Practical...

Made of rust-proof cast grey iron, the HART Damper with Worm Gear Rotary Control is designed to give permanently efficient operation. Consists of only three parts — frame or throat, door, and control. Sturdy construction, simplicity of maintenance provide lifetime, trouble-free performance.

And Ornamental!

The solid cast-brass andirons shown below are typical of HART craftsmanship. Highly polished and painstakingly lacquered, they compliment any fireplace, anywhere. 16 1/2" high. Matching fireset also available.

HART CAST-BRASS

ANDIRONS

HART PRODUCTS DIVISION

STRATTON & TERSTEGGE CO.

INCORPORATED

P. O. BOX 311

NEW ALBANY, IND.

 Atlas-6" JOINTER

PERFECT FOR CABINET WORK AND BUILT-IN UNITS

Take this Atlas 6" jointer right to the job (2 men carry it easily)—and you cut time costs on almost every surfacing operation. It handles planing, edging, truing, beveling, and rabbeting much faster and more accurately. It cuts costs on cabinet work, fine finishing of all kinds, planing doors, windows, as well as mass producing built-in units.

You'll like its size, speed, and smoothness. Table is 42" long with a precision ground surface! The solid ground two-way tilting fence is 32" long, 4 1/2" high. The heavy 2 3/8" diameter cutter head spins on large sealed-for-life ball bearings. Exclusive features include a time-saving width-of-rabbet scale, and simultaneous blade positioning.

The Atlas 6" jointer will make money for you. Send for the latest catalog.

ATLAS PRESS COMPANY

901 North Pitcher Street • Kalamazoo, Michigan

DEPENDABLE QUALITY TOOLS SINCE 1911

AMERICAN BUILDER
**FAGEOL HEAT MACHINES**

**give you heat instantly**

...where you need it!

for portable, on-the-job heat

for permanent plant installations

"HEAT MEN AT WORK—
NOT EMPTY SPACES"

**MODEL VO-168**

168,000 B.t.u. per hour. For permanent installations or use as a portable unit. Vent optional. (Delivers 130,000 B.t.u. per hour vented.)

At the snap of a switch. Fageol Heat Machines give you fast, efficient heat — in the work zone where it’s needed, not in overhead waste spaces.

On construction jobs, outdoor loading docks, for permanent plant installations ... drying, treating and curing materials ... everywhere heat is needed ... Fageol Heat Machines keep men warm at work, increase worker efficiency, save man-hours.

They operate on No. 1 or No. 2 fuel oil, kerosene or diesel oil, utilizing the exclusive Fageol patented counterflow principle of spraying heat out in all directions at the floor level. This assures economical heat distribution throughout the 6-foot-high working zone ... avoids heating overhead waste space.

Write today for complete details — ask for Bulletin L-5391.

**MODEL PW-189**

189,000 B.t.u. per hour. Highly portable. Attached fuel tank. Requires no flue or vent. Easily converted to fresh air circulator in summer.

FAGEOL HEAT MACHINE CO.

5723 Mt. Elliott Ave. • Detroit 11, Mich.
A few short weeks ago G. E. sent out a general letter to its Major Appliance distributors. Briefly, this is what it said...

The Home Bureau of General Electric has had plans drawn up for an unusual, moderately priced house. These plans are available to such builders as you may select, and who wish to invest in building this model home.

It's a house that we are confident will not only excite the interest of the public, but one that will permit the builder a quick return on his investment.

This model home, called the Young America Home, incorporates the latest in modern planning, with a complete General Electric Kitchen-Laundry.

**Know what happened?**

 Builders contacted by G-E distributors were enthusiastic. They were quick to recognize the unusual design

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As of August 1, 48 reputable builders all over America had committed themselves to build at least one G-E Young America Home as a model for their developments—and more are signing up each week.

These builders know that these projects will not only stimulate wide interest in their communities, but will also add to their prestige as the leading, most progressive builders in their areas.

Some of these Young America Homes will be completed in time for showing during National Home Week.

**Here are the builders to date...**

Amarillo, Tex.—Ricks-McGuire Co.  
Atlanta, Ga.—D. L. Stokes & Co.  
Augusta, Ga.—Bowen Bros.  
Baton Rouge, La.—Hall & Cox  
Birmingham, Ala.—B. D. Development Co.  
Birmingham, Ala.—Carl Culverhouse  
Brainerd, Minn.—Paul Bunyan Bldg. Supply Co.  
Bridgeport, Conn.—J. M. Snyder & Sons  
Chicago, Ill.—Lincolnwood Development  
Cincinnati, Ohio—Modern Builders, Inc.  
Columbus, Ohio—Max Stewart

Young America Home plans are featured as “AMERICAN BUILDER BLUEPRINT HOUSE OF

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"Count us

SAY BUILDERS ALL OVER AMERICA...

when they hear about the new G-E **YOUNG AMERICA**
features—the attractive layout of kitchen-laundry-dining areas, the quality of G-E matched appliances—all of which would make the house sell quickly. In effect these builders said “We want to build a Young America Home in our community. Count us in!”

All this happened before the ink was dry on the fine builders’ promotion and publicity kit we were printing!

Maybe there’s still an opportunity for you to sponsor a G-E Young America Home in your community.

If you’re interested, get in touch with your local G-E distributor, or the Home Bureau, General Electric Company, Louisville 2, Kentucky.

Denver, Colo.—T. W. Anderson & Co.
Des Moines, Ia.—John A. Reppert Co.
Evansville, Ind.—May Homes & Supply Co.
Glenside, Ill.—Dennis Realty Co.
Greensburg, N. C.—P. O. Barber
Houston, Tex.—H & D Construction Co.
Indianapolis, Ind.—Keith Nelson Co.
Indianapolis, Ind.—Dawson Construction Co.
Jacksonville, Ill.—Carroll Rexloft
Kalamazoo, Mich.—Harry A. Hurni
Kansas City, Mo.—A-L Huber & Son
Louisville, Ky.—Wm. Sunderhauf

Lubbock, Tex.—Geo. W. Gray
Madison, Wis.—Ivan Gregory
Magnolia, Ark.—Magnolia Builders
Minneapolis, Minn.—Ezra Osterhus
Mobile, Ala.—Gulf Development Co.
Needham, Mass.—Arthur Oman & Son
New Haven, Conn.—L. L. Darley
New Orleans, La.—Lionel F. Favret
Pittsfield, Mass.—Vacchina & Mazza
Plainview, Tex.—Harrison & Smeber
Portland, Ore.—Kenneth Birkemeier
Rhinebeck, N. Y.—M. W. Linville
St. Paul, Minn.—Donay-Reitz

San Antonio, Tex.—City Lumber Co.
Shreveport, La.—E. A. Thorpe & Co.
Snyder, N. Y.—Genrich Builders, Inc.
Springfield, Mass.—Louis DePalma
Springfield, Mo.—Dell Holmes
Terre Haute, Ind.—Newlin Johnson Co.
Toledo, Ohio—Roger Dunbar
Verona, N. J.—Fairview Const. Co.
Wichita, Kans.—Bodine Const. Co.
Williamsport, Pa.—Incorporated Real Estate Investors
Winder, Ga.—Brodus Williams
Wyandotte, Mich.—S. S. Broughton

THE MONTH in this issue! SEPTEMBER 1952
PLAN YOUR HOMES...
for fast, easy electrical living

with "PLUG-IN" strip

When planning "built-in" comfort features for your new home,
don't neglect the electric wiring. With "Plug-In" Strip you can
give your homes the ultimate in free-and-easy electrical living...
luxurious convenience for mere pennies more than ordinary
wiring. In addition, you can save on rough-in wiring, fixtures
and even baseboards by installing "Plug-In" Strip.

"Plug-In" Strip provides a s-p-e-c-i-a-l of electric outlets every
1'-6" all around the room...

WRITE FOR DETAILS

National Electric Products Corp.
1329 Chamber of Commerce Bldg., Pittsburgh 19, Pa.

Neat...Permanent...Architecturally Correct

"Plug-In" Strip is a complete, ready-to-use wiring system that
makes any home more livable, more salable! Type CF-2 for
constant service; Type CF-2-G for grounding equipment; Type
CF-3 for either constant service or wall-switch control. Listed
by Underwriters Laboratories, Inc.

WRITE FOR DETAILS

National Electric Products
1329 Chamber of Commerce Bldg., Pittsburgh 19, Pa.

BERMICO
The Modern Root-Proof Pipe for
Outdoor, Underground, Non-Pressure Use

"Moves Better!" Bermico doesn't gather dust in
slow-moving inventory. It turns over fast—returns
you a profit quickly. Easy to stock and stack. Strong,
cellulose fibre structure, pitch-impregnated, absorbs
jars and jolts without damage.

"Lays Better!" Bermico is simple and easy to install.
Convenient 8-foot lengths and a complete line of
bends and couplings make it a sweetheart to handle.
No cement, leading or joining compound needed. A
few hammer taps seal joints tight.

"Serves Better!" Bermico seals out roots—puts an
end to drainage problems—gives users a lifetime of
dependable, trouble-free service. Non-corroding,
resistant to acids, alkalies, sewage. Ideal for house-to-
sewer connections, septic tank disposal, downspouting,
farm drains.

Write Dept. HB-9 at our Boston office for information.

BROWN
COMPANY, Berlin, New Hampshire
CORPORATION, La Tuque, Quebec
General Sales Offices: 190 Commonwealth Street, Boston 14, Mass.
Dominion Square Building, Montreal, Quebec

250 AMERICAN BUILDER
It's tougher than my scooter.

You can paint it any color you like.

Even I never get cold feet now.

Permits carpet magic—wall to wall!

Smooth, unbroken horizontal lines.

...for a great idea to sell new homes!

You know it yourself...you've seen it happen—the houses that draw today's biggest crowds are those which offer something new, something different, something better than average.

Take Dunham Baseboard Heating for example. Here's a sales stimulating extra you can really merchandise...for more buyer appeal, for more sales profits...because it gives your homes the mark of custom quality at low cost.

Nationally advertised in House Beautiful and House & Garden, Dunham Baseboard is distinctively different. Modern, smooth-surfaced enclosure has inconspicuous air openings, fits flush with floor—no "cleaning under" problem. Complete line of accessories give installation neat, finished appearance.

See your local heating contractor for full information, or write today for your free copy of Bulletin No. 659-D-25, C. A. Dunham Co., 400 W. Madison Street, Chicago 6, Illinois.
Here's a QUALITY FEATURE that costs Nothing Extra...

Floors of...

WRIGHT RUBBER TILE

Many builders have found that Wright Rubber Tile actually costs less—when used in both kitchen and bath—than the floors they have been using.

More important, they have found that buyers quickly recognize floors of Wright Rubber Tile as a "quality feature" that makes any house more desirable.

The result is more profit and quicker sales. Why continue to install floors that your prospects are "fed up" with? Get on the bandwagon—use Wright Rubber Tile in the next houses you build! See for yourself how much quicker they sell. We are not kidding—try it!

WRIGHT MANUFACTURING CO.
5203 Post Oak Road
Houston 5, Texas

WRIGHT RUBBER TILE

Floors of Distinction - WrightTex—Soft Rubber Tile
                      - Wrightflor—Hard Surface Rubber Tile
                      - Wright-on-top Compression Cove Base

Dishwashers Feature Revolving Upper Rack

A new entrant into the automatic dishwasher field is Avco Manufacturing Company's Crosley Division which recently introduced three models with several features designed to increase efficiency and ease of operation.

The new front-loading unit has individually supported top and bottom racks which pull out separately on nylon bearings to facilitate loading. Impeller-driven hot water revolves the top rack 16 times per minute "to take the dishes where the sprays will surely hit them," according to F. F. Duggan, Crosley general sales manager for appliances. Rustproof steel racks have a protective vinyl covering.

New Crosley 48-inch automatic dishwasher-sink combination has sink to right of washer, a position the company believes is more convenient for right-handed persons who would normally use the right hand to scrape food particles off plates and the left hand to place them in the washer.

About seven gallons of water are used for the complete 34-minute cycle. It starts with a 30-second rinse to flush off food, follows with a 10½-minute wash period during which water is kept heated at 145-150 degrees, moves into three rinses to wash off any food which may have become redeposited on plates, and winds up with a 10-minute drying period, with fresh air heated to about 175 degrees contributing to the bacteria-killing action. Water is removed by a gravity drain after the wash period and two of the rinses.

The cycle can be interrupted at any time. It is said, without losing any of the water, by merely opening the door.

Capacity is listed as sufficient to hold a complete service for six people and, if room, pots and pans can be added without danger to dishes.

The three models include a combination sink and washer, free-standing unit and the type without a finished top for installation with other kitchen equipment under a common worktop.
which builder is right?

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

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

Builder B says: I use Curtis Silentite casements because:

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

Both builders are right. Whether you choose Silentite double-hung windows or Silentite casements, you get exclusive advantages that mean increased profits. Send the coupon for the whole story.
31 Years of Experience produce a lot of Firsts

First to create a sectional, upward-acting garage door — The "OVERHEAD DOOR" — 1921.

First to develop inclined tracks and hinges of graduated height for weathertight closure — the MIRACLE WEDGE™ — 1921.

First to produce hardware and tracks resistant to rust and corrosion — SALT SPRAY STEEL™ — 1936.

First to use a patented torsion-type spring counterbalance — as early as 1929.

First to design and produce a door with wide horizontal panels to blend with modern architecture — 1951.

First to design a five-section residential door for smoother, easier operation — 1951.

ANOTHER TED KAUTZKY ORIGINAL
Hundreds of architects and college instructors are every drawing made by this master of pencil and watercolor rendering for The "OVERHEAD DOOR" advertising. Write us if you would like an 11" x 17" print of this illustration for framing.

OVERHEAD DOOR CORPORATION
Hartford City, Indiana

MANUFACTURING DIVISIONS

Hilside, New Jersey  Cortland, New York
Nashua, New Hampshire  Lewistown, Pennsylvania
Dallas, Texas  Oklahoma City, Oklahoma
Portland, Oregon  Glendale, California
No. 77 Flexible Storm-Proof Door Hanger
Two wheels in tandem with hardened, anti-friction roller bearings carry each hanger. Flexible hinge-joint allows door to swing out, should anything bump against it. Carrying capacity 350 pounds. Japan or Hot Galvanized Finish. Packed one pair in a box, with bolts for attaching the hangers to door; also lag-screws and end-stops for the rail. Note rail and storm-proof cover arrangement.

No WEATHER TOO TOUGH for National Storm-Proof Door Hangers and Rail. Thousands of Hangers and millions of feet of National Storm-Proof Rail have been installed. That's why you find this hardware in use in all sections of U. S. and Canada, serving faithfully in all kinds of weather. We recommend that you inspect a sample at your National Dealer's—you will readily see its many mechanical and service advantages.

No. 88 Adjustable Storm-Proof Door Hanger—This Hanger can be simply and easily adjusted both laterally and vertically. Door is carried closer to the rail than with any other adjustable hanger we know of. Carrying capacity 350 pounds. Japan or Hot Galvanized finish. Packed one pair in a box with bolts for attaching Hanger to door; also lag-screws and end-caps for the rail.