BLUEPRINT HOUSE IN COLOR

Construction KNOW-HOW
Cuts Costs

Building Office Space
FOR $8.55 PER SQ. FT.
kwikset proves fast installation

during kwikset's lock installation contest at
NATIONAL ASSOCIATION OF HOME BUILDERS convention in chicago, january, 1953.

81% of the 616 contestants installed a kwikset lockset in 3 minutes or less*

* (installation did not include strike)

winning lock installation time

set by EARL M. HALLGREN, building contractor (above right) of
Des Plaines, Illinois. Emanuel M. Spiegel, new president of
the National Association of Home Builders is shown awarding the $1,000 Defense Bond first prize.

1 minute 35 seconds
GET TO KNOW AMERICA'S BIGGEST GARAGE DOOR VALUE

It costs you money to fuss around on the job, assembling and joining panels into a door.

LOWER FIRST COST... You can give your customers big value—the result of standardization and big volume production concentrated in one plant.

SAVES INSTALLATION TIME... STRAND'S one-piece door leaf does away with field assembly of single doors. Hardware is factory-assembled, and conveniently packaged—this is the quickest of all doors to install. Only ordinary tools needed.

STRONGER, MORE DURABLE... The STRAND Door, with the rugged strength of steel, is built for a lifetime of trouble-free service. This door assures permanently easy operation. Welded construction adds to durability—no bolts or screws to work loose. Steel can't ever shrink, swell, warp, rot, or sag.

GALVANNEALED... For rust protection, STRAND Doors are GALVANNEALED. This is a heavy galvanized zinc coat, heat treated at high temperature. Provides an excellent base for paint. No special priming coat needed.

Strand one-piece door brings you low first cost plus BIG INSTALLATION SAVINGS.

GALVANNEALED ALL-STEEL GARAGE DOORS

Strand one-piece door brings you low first cost plus BIG INSTALLATION SAVINGS.

Strand Doors are available in these types and sizes: 8' x 7' Receding (track) and Canopy; 9' x 7' Receding (track) and Canopy; 16' x 7' Receding (track) only. Order from your dealer, or mail coupon for information and dealer's name.

YOU'LL WANT THIS NEW BOOK!

GARAGE PLANS AND IDEAS is a new 32-page book of information and illustrations. Helps you plan your garage for appearance, economy and all-around usefulness. Includes 12 designs and floor plans by nationally known designers, how-to-build instructions, material lists, driveway sketches, etc. Also information about STRAND All-Steel Garage Doors.

Please send new 32-page book of Garage Plans and Ideas, available free to building professionals, only if this coupon is used. Also Strand Door information and dealer's name.

I am a □ Builder □ Dealer □

Name _____________________________

Address ____________________________

City __________________________ State ____________________________

MARCH 1953
Decidedly contemporary in design, yet extremely versatile, this Curtis New Londoner flush door gains additional interest from the smart new Curtis trim—one of several choices.

Fresh and original, these new flush door designs by Curtis can help increase your scope in adding distinction to the homes you plan. And the beauty of these doors is as durable as it is striking—thanks to their all-wood, moisture-proof construction that guards against warping or sagging.

Door designs shown here are available either with Curtis New Londoner hollow core construction or Curtis American solid core. These designs are only a few of the many Curtis offers, both for exterior and interior use. Curtis New Londoner hollow-core flush doors are available in wide widths for schools, hospitals and public buildings.
MARCH, 1953

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features

American Builder is a member of Associated Business Publications (A.B.P.) and Audit Bureau of Circulations (A.B.C.). Printed in U.S.A.

FRONT COVER—Four color photographs are by our staff photographers of Air Controls, Office, page 182; Blueprint House, page 68, and a low-cost Florida house, page 84.
Cool homes at minimum cost

Hunter Attic Fans

Simplified installation, improved design, new lower prices

- The Hunter Package Fan is the most practical and least expensive method of keeping a home comfortable on hot nights. It pulls refreshing breezes through every room in the house... drawing out hot, stagnant air. This compact unit is easily installed in any new or old home. It requires only 18" attic clearance... ideal for low-pitched roofs. Furnished complete with ceiling shutter and trim—no extras to buy or build. Sizes from 5000 to 15500 CFM (air deliveries certified) to fit any home size and climate.

Lower Prices—The new improved Hunter Package Fan is priced substantially lower than heretofore. Yet it has the same smooth, quiet operation and dependability that have made Hunter Fans famous the world over. Fan unit guaranteed 5 years; motor and shutter, 1 year.

Write for new 1953 Catalog

HUNTER FAN AND VENTILATING CO.
381 S. Front St., Memphis 2, Tenn.

How to make provision for attic fans in your homes

Step 1. Frame for ceiling opening

By framing and installing fan when home is built, no extra construction expense is involved. If installation is to be made later, framed opening can be temporarily plastered over or closed with plywood.

Step 2. Provide adequate louvers in proper location

On new construction it costs little to include adequate exhaust openings for attic ventilation. These may be gable louvers or porch, soffit or basement exhausts, depending on the design of the house and individual preference.
CONTAINING the home building industry's great nation-wide merchandising exposition in one week is becoming impractical for a number of reasons. One is that in large centers like Chicago where demonstration houses are scattered in an area 70 miles long and 35 miles wide, it is impossible for people to see all they wish to see in one or two week-ends and the evenings between them. Chicago never has tried to contain the event in a week. From the start it has extended over four consecutive week-ends, and sometimes five.

In some smaller cities it has been noted that from time to time the designated week coincides with some other local event, and builders have to hold national home week at another time in the month. For these some latitude is necessary to permit them to tie into the event at the national level.

Numerous builders and association executives have pointed to the hazard of depending on good weather for the designated week. Some have experienced a week of rain which badly dulled the potential benefits to both builders and the public. Others point out that early sunset in the fall, and in some time belts actually limits the visiting time to two week-ends, which is not enough to accommodate the crowds. These are in favor of a month.

To these reasons for changing to national home month, regardless of whether all communities used the entire month or only a part of it, can be added a host of potential promotion sources outside the industry. Many of these have been explored, and all agree that they can throw tremendous impetus behind the sale of houses in a national home month. None was interested in a National Home Week, and some stated that they felt a week to be too short a time for adequate promotion.

Many builders have stated that National Home Week is too short a time to permit them to get the greatest good out of the event. Some have pointed out that they do their heaviest selling in the summer months, that they would like the benefits of a National Home Month for the final sales drive, and to permit them to unveil their annual model for the year to come.

The only objection that has been raised is that it would be difficult to sustain publicity throughout a month. To this we can answer confidently that the added backing from sources outside the home building industry that is available for a month-long program will more than supply promotion and publicity material. The stage is set and the time is ripe to expand national home week to national home month if the industry is to take full advantage of the new sales horizons that lie ahead of it.
A $500,000,000 increase in Title I insurance authority is in the works for FHA. The Senate Banking and Currency Committee has approved a resolution to increase the maximum authorization from $1,250,000,000 to $1,750,000,000. Indications are that Congress will pass the resolution shortly.

This will bring new life to the "repair, alteration and improvement" business. Homeowners, lenders, builders and suppliers of materials will benefit. FHA exhausted its present Title I authorization last September, and the program has been at a virtual standstill since then.

A backlog of more than 290,000 loan requests, amounting to over $195,000,000, has built up in the past five months. The $500,000,000 increase, if approved by Congress, would carry the FHA improvement-loan program through June of 1954, according to the Senate committee.

Average improvement-and-repair loan under Title I has a 3-year maturity date and runs about $600. Since 1934, FHA has insured about 14,300,000 such loans, with a dollar amount of about $6,150,000,000.

The new top limit on Title I insurance authorization refers to total loan amounts actually received by borrowers. Example: If a loan note is $200, covering $190 advanced to the borrower and $10 "financing charge" retained by the lender, only the $190 would be charged against Title I authority. This was made clear by the Senate group.

Title I operations are scheduled to expire June 30, 1955. Congress has invariably extended this program, however, and probably will do so again. During 1951-1952, the volume of home repair and improvement work "far exceeded all earlier estimates," the Senate committee said.

Allocation of materials may be continued past midyear, but homebuilding won't be pinched because of it. That is the present thinking of industry observers here. The present controls law expires June 30. As a practical matter, builders have not felt the impact of material controls for several months.

President Eisenhower advised Congress early this month that existing controls should be ended, except for defense priorities and certain critical items necessary for defense. Senator Taft, the majority leader, has placed "limited extension of controls" on the pending legislative program before Congress.

Wage controls already are dead. Price controls are on the way out. The President told Congress he will not ask for extension of the wage-price provisions of the Defense Production Act. They will expire April 30.

Insight into the new administration's thinking on controls is obtained from the President's State-of-the-Union message: "The weight of evidence is clearly against the use of controls in their present forms. They have proved largely unsatisfactory and unworkable... Dissatisfaction with them is wholly justified."

Hope for an early tax cut has dimmed. The President feels it would be "unwise" to reduce taxes until expenditures can be reduced. Despite this, many members of Congress are saying they favor an income tax cut in the very near future.

Rent controls may continue in many areas. President Eisenhower asked Congress to continue such controls "in those communities in which serious housing shortages exist"—especially so-called defense areas.
INTEREST RATES continue in the spotlight. Hold-over officials from the Truman administration continue their support of present FHA and VA rates, but they agree some increase "may be necessary" in the future.

CONGRESS MAY DECIDE to duck the issue. After brief hearings early this month, Senator Capehart, chairman of the Senate Banking Committee, said the agencies already have authority to increase interest rates, and he is inclined to wait for possible action by the new administration.

REPRESENTATIVE WOLCOTT, chairman of the House Banking Committee, reflects the somewhat stronger view that prevails on the House side. He calls the present VA rate "utterly ridiculous," particularly in view of government policies that put upward pressure on all interest rates.

THESE POLICIES include the Treasury's plan to issue long-term bonds to refinance parts of the national debt. Such bonds will carry higher interest than the former short-term notes. Meanwhile, the Federal Reserve Board has upped its "discount rate," which tends to make all credit more costly.

INDIRECT CONTROLS over credit will be the principal weapon against inflation during the coming year. Some officials say it may be necessary to ask Congress for more authority in this field. They refer to old Regulation "W," which imposed heavy down payments on such things as automobiles and TV sets.

A DILUTE FORM OF REGULATION "X" is still on the books, and could be reimposed if housing starts exceed the 1.2 million rate for three consecutive months. This seems unlikely. But Congress could be asked to change this law, too.

HEARINGS on a stand-by controls bill begin February 16 before the Senate Banking and Currency Committee. This bill, introduced by Senator Capehart, would allow existing controls to expire on schedule. It would then recreate them on a stand-by basis "until 90 days after termination of hostilities in the Korean conflict."

VA AND FHA officials continue to knock down talk that VA's loan-guaranty program will be merged into FHA. This has been the subject of speculation recently. The new administration has not tipped its hand on changes in the "housing agencies."

FHA HAS RESTORED $16,000 as the maximum mortgage amount on single family dwellings under Section 203 of the National Housing Act. A maximum of $14,000 was fixed several months ago, because FHA wanted builders to produce more moderate and low-cost housing.

CONGRESS SHOULD PERMIT FHA to increase this maximum mortgage to $20,000, according to H. R. Northup, executive vice president of National Retail Lumber Dealers Association. This increase, he asserted, would enable families needing larger homes to obtain the benefits of mortgage insurance.

FNMA ENTERED 1953 with uncommitted funds totaling $1,085,000,000. Of this amount, $762,000,000 was earmarked for the purchase of mortgages on defense and military housing. A total of $294,000,000 was available for purchasing "other eligible mortgages"—i.e., those outside the defense or disaster category.

PRELIMINARY FIGURES for total housing starts in 1952: 1,131,300 units. While this figure still is subject to some revision, it seems certain that 1952 will emerge as the second best year on record. Only 1950, with 1,396,000 units, was better.

EMPLOYMENT in the construction industry is expected to remain high throughout 1953. The Bureau of Labor Statistics says new home construction will probably require between 850,000 and 875,000 full-time workers. This estimate assumes that "about a million new private non-farm dwelling units" will be started.

CONSTRUCTION ACTIVITY continued at a high level in January, according to the regular survey of the Departments of Commerce and Labor. Outlays for new "residential" construction were estimated at $826,000,000 for the month. This was a 15 per cent increase over the same month last year.

JANUARY HOUSING STARTS were estimated at 71,000 by the Bureau of Labor Statistics. This was a 6.6 per cent drop from December but was 6,100 units higher than January of last year. Seasonally adjusted rate of starts for January, 1953 was 1,157,000.
anticipate peak construction this year

CONSTRUCTION ACTIVITY this year is expected to reach a new peak, perhaps rising about one billion dollars over the 32½ billion dollars in 1952.

The outlook for a record construction activity in 1953 is based partly on the assumption that business will remain good, helped in part by increasing defense expenditures, at least in the early part of the year.

A peak of 22.2 billion dollars in 1953 expenditures for new private construction is anticipated, supported by a continuing high level of housing activity and expansion in commercial building.

About as many private dwelling units are expected to be started this year as in 1952, when the million unit mark was again exceeded. Prediction of an active homebuilding year is based primarily on the anticipated favorable economic climate and ready availability of mortgage funds.

Commercial building activity in 1953 will probably exceed that of 1952 by over a quarter, continuing the recovery evident in recent months as a result of improved material availability and removal of credit controls. On the other hand, private industrial building is expected to drop by about the same proportion, from last year's record outlay of about 2½ billion dollars as defense plant expansion programs approach completion.

A TOTAL OF 1,131,300 dwelling units were started in the United States in 1952. This is an increase of four per cent over 1951. In December, starts were up 25 per cent over the previous December, a continuation of the increase in residential starts that began in October, after the elimination of Regulation X.

Dollar value of construction increased in 1952 in all categories except commercial, institutional and farm.

During 1952 there were price increases in common brick, cement, and furnaces. There were decreases in dimension lumber, flooring, bathtubs and insulation board. The price of doors, paint, asphalt shingles, window glass and nails remained unchanged.

Construction labor won an increase of six per cent in hourly wages. At the end of the year the average construction laborer was working 38.7 hours per week and his weekly earnings were $92.26.
Acme sliding door frames for standard 4" stud walls

**completely packaged**
Acme frames are manufactured only by mills dealing directly with the factory. They come completely packaged including face jamb and split jamb.

**quickly assembled**
Three parts only—easily put together and set in rough stud wall.

**strong frame**
Heavy gauge angle iron stiffeners guarantee rigidity of split jamb. Strong galvanized steel track has already been installed at the mill.

**rubber wheel**
The graphite core eliminates the need for lubrication and guarantees smooth, quiet operation. 100% natural rubber face provides permanent resiliency.

**simple adjustment**
Quick adjustment is made by means of the threaded eyebolt. The machine screw with lock washer locks hanger to the plate—cannot get out of adjustment.

ACME APPLIANCE MANUFACTURING COMPANY
35 SOUTH RAYMOND AVENUE • PASADENA 1, CALIFORNIA

MARCH 1953
ON and OFF the RECORD

AN UNDERGROUND DOG RUN might sound like a strange subject to discuss in a professional building magazine, but it does have a place.

IN LINCOLN, NEBRASKA, recently we were treated to our first view of one at the home of Irving Peterson, retiring president of the local home builders association.

PETERSON has a leggy, leaping beauty of a hunting dog which, let loose, likes to run, and considers hurdling neighbors’ fences a part of running. When Irv built a new house on a relatively small city lot he had no idea of giving up the dog, and he was determined that the dog would not become a neighbor pest.

HE SOLVED the problem by building a dog house with the top at outside grade, and the entrance through a trap in the sidewall leading from the ground-floor recreation room.

LEADING FROM the dog house is a 25-foot (more or less) tunnel. Exit from the tunnel is a ground level runway about 30 feet long. It is fenced and roofed. It provides adequate exercise space, eliminates the need for walking the dog in the morning and evening, protects the neighbors, keeps the dog warm and dry in inclement weather, and hides the dog house.

IT’S A GOOD and inexpensive idea for keeping a dog in a city neighborhood.

LOS ANGELES LIKES electric garbage disposers. Of an estimated 300,000 units sold in 1952, the Los Angeles area took 50,000—one in six. Four-fifths of the residence units in the area are equipped with disposers.

NICK MOLNAR, newly elected vice president of NAHB, recently participated in a debate with Ernest J. Bohn, Cleveland's foremost proponent of public housing. Nick, with his characteristically excellent choice of words, and unshakable logic, easily had the best of the duel. Then, on the same evening he addressed the annual banquet of his local association with one of the best speeches home builders have heard anywhere in the past year.

AT THE SAME meeting, C. J. (Phil) Filson was awarded a citation for being the outstanding associate member of the association during 1952. The award came on the eve of Phil’s departure for Detroit to become sales manager, builder division, home appliance division, The Murray Corporation of America. Phil was cited for being most helpful to the association.

HIS NEW JOB, while not so announced formally, is recognition of the outstanding sales and organization talents his host of friends among home builders have long recognized.

ESTIMATED MONEY invested in savings and loan associations at the end of 1952 was 19 billion dollars. This is an increase of three billion.

SOBERING NOTE in this age of plenty for Americans comes from the President’s (Truman) Materials Policy Commission appointed in January, 1951.

DIFFICULT TASK undertaken by the Commission was to estimate the uses and sources of materials as of 1975.

THE COMMISSION reports that “in area after area the same pattern seems discernible: soaring demands, shrinking resources, the consequent pressure toward rising real costs, the risk of wartime shortages, the ultimate of an arrest or decline in the standard of living we cherish and hope to help others attain.”

THOSE COMANS of Durham, North Carolina have a way of making news locally and nationally by just being themselves.

IT’S WORTH REMEMBERING that the Coman Lumber Co. came into being during the war when Jim Coman decided he needed a

(Continued on page 12)
This is Our Record

The builders of Carson Park Mutual Homes believe that the following information should interest you whether you contemplate buying a home now or in the future; whether you buy it from us or from any other builder. The builders of Carson Park Mutual Homes have built more homes in the last ten years than any other builder in the United States.

Inasmuch as a home purchase is one of the greatest investments that a family makes in its lifetime, we are very proud to make this statement.

Every one of the thousands of homes that we have built and delivered to satisfied home owners is worth more money today than the day our customers took possession.

This is Our Policy

This is what we have learned from experience about a house, and this has become our policy: To build the best possible house for the money. To forego and leave out the frills and gadgets that just dress up a home but that have no intrinsic value and actually make for additional upkeep.

We have learned that in Southern California the nights are damp and that the best way to build a house is to have it raised off the ground so that there is an insulated air space between the floor of the house and the earth. To build with a sub-floor of wood and a hardwood floor above costs more money than a concrete slab, but is it our opinion that it is better construction, and that's how we will build.

We have learned that a family grows, and while parents and children are young it may be satisfactory to eat in the kitchen. But later on a definite dining area is a necessity and our policy is to build each home with a dining room.

We have learned that the kitchen best serves its purpose when it is used for the preparation of food and that a separate room is required for laundry work. We will continue to build all our houses with a kitchen and a service room.

We have learned that a plaster house is safer and more durable than a house built with dry wall, and although more expensive, we will continue to build with plaster.

We have learned that the best materials available are best in the long run. Cast iron bathtubs are better than light steel plumbing fixtures and cedar shingle roofs are better than composition roofs. Although these features are more expensive, we will continue to build with the best.

We have learned from long experience that the house we deliver should look, and should be, better than the house we show as a model. We shall continue our successful policy of showing you what you will get and then giving you a house that is even better.

This is Our New Year's Resolution

We have a fine reputation with our customers; with the various City and County home building authorities; with the various Federal agencies that have to do with home financing and insuring, and it is our definite New Year's resolution to continue to merit that reputation.

THE BUILDERS OF CARSON PARK MUTUAL HOMES
6741 EAST CARSON STREET .. LAKewood, CALIFORNIA

The manufacturers of CERTIGRADE RED CEDAR SHINGLES gratefully reproduce the above advertisement of the world's largest home builders. The statement originally appeared in metropolitan Los Angeles newspapers early this year.
It’s no secret…

BENNETT BUILDS
A BETTER
FIREPLACE

Thousands of experienced builders and architects depend upon the complete line of Bennett Fireplace Supplies — to save construction time, cut building costs and assure full satisfaction on every job! Every piece of Bennett fireplace equipment is designed from the builder’s viewpoint... engineered for ease of installation, economy and top performance in the home. Build with Bennett — and you’ll build a better fireplace!

Benefire® Fireplace Unit
— for a perfect fireplace every time

The simplified, standardized, recirculating fireplace form that includes scientifically designed firebox, throat, damper, down-draft shelf, heating chambers and smoke dome—all combined into one fool-proof unit! Heavy boiler plate construction throughout, in 6 sizes—every size lays up with standard brick, with no costly cutting or fitting. Fits any mantel design...circulates heat evenly... guaranteed not to smoke. To build your next fireplace quicker, easier, at less cost—build it around a Benefire Unit!

Bennett Standard Dampers

Bennett fireplace engineers... specialists in fireplace design for over 25 years... have built into these Bennett throat dampers dozens of proven performance and construction features! Two types available... of boiler plate steel or lifetime cast iron—both make your job easier, produce a finer fireplace at lower cost. See these Bennett Dampers—and the complete Bennett line of ash dumps, clean-out doors, lintel bars, etc.—at your supplier’s.

The amazing new Benefire Universal Damper

The exclusive new damper that puts “unusual” fireplace design within the reach of all! Any one of six basic fireplace types, including projecting corner, three sided openings, etc.—in a full range of sizes—can be economically built around BENEFIRE. Gives plenty of added sales appeal to your homes—at very little added cost!

See your supplier...
or write Dept. C for catalog

On and Off the Record
(Continued from page 10)

business for his three sons when they finished fighting a war. The lumber company and its building operation are successes, and so is the partnership of father and sons.

A WHILE AGO the Durham newspaper carried a photograph and story of Bill Coman receiving a plaque from the Durham Sertoma Club for distinguished achievement in obtaining a Scout cabin for the local cerebral palsy hospital.

A COUPLE WEEKS later John Coman, who is also an artist presented a painting of Governor-Elect Umstead to the Governor’s wife. When the Comans are not serving the community activities, they are merchandising building materials and building houses.

IT MAY BE that home builders will have to interest themselves actively in the mounting highway death toll. As new home sites are developed farther and farther from the cores of cities, more and faster automobile driving results. There is not much point in selling houses only to have a fair proportion of the new buyers killed trying to get back and forth to and from work, because driving facilities are not adequate. The condition might require some pressure on local and state highway commissions to rectify outmodeled highway systems and driving controls.

REMODELING is again a subject of widespread interest. It always is when there is a suspicion that the market for new houses may subside a little or a lot.

A WORD OF CAUTION is not amiss to the builders without experience in this field. It’s a dangerous one, and it requires both knowledge and skills not needed in the relatively simple art of building new structures.

TO BEGIN WITH, the matter of estimating is full of hidden danger. Before a remodeling contract is signed on an estimate, it is absolutely essential that every possible facet of the job has been explored.

(Continued on page 14)
Owners are having second thoughts about insulation's

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

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

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

A Balsam-Wool insulated house is a better buy today—and tomorrow. WOOD CONVERSION COMPANY, 119-33 First National Bank Bldg., St. Paul 1, Minnesota.

*Balsam-Wool

Sealed Insulation

On and Off the Record
(Continued from page 12)

and that every possible break down in the estimate has been made.

EXAMPLE was afforded in a recent job by an amateur. He had to remove a five-foot strip of baseboard, and replace it later. In his estimate it did not occur to him that if the carpenter ruined the piece in removing it, a duplicate would have to be procured. That’s exactly what happened, and since the particular piece had been installed 75 years before, matching the run was a very expensive operation.

THAT’S ONLY a little thing, but a lot of little things like that can happen on the same job. Unless the estimate is loaded with profit for contingencies—possibly to a point where the customer cannot afford the job—there is a good chance of losing a lot of money.

THEN, THERE’S the matter of protection from charges of damage. Let’s say you are going to add a wing to a house. When you get through the owner tells you that your workmen have caused a lot of plaster cracks in the adjacent room. If the plaster is cracked and you have not examined it before starting the work, you’re probably stuck for a new plaster job in that room—and you may not have been to blame.

ALSO, DON’T forget that in old houses the builders generally used a great quantity of cut nails. If you have to remove some of this old carpentry work, you’ll find that it will cost several times as much to remove as more recent work. And, don’t forget that before you got the job, there may have been a preceding remodeling job done by an amateur who has left some hidden and unsuspected conditions that will cost a lot to rectify before you can proceed.

THIS IS NOT intended to dissuade anyone from attempting remodeling. But it is intended to warn the beginner that there is a lot more than readily appears on the surface to this business of remodeling. It’s profitable business, if the builder knows what he is doing. It’s quick bankruptcy if he doesn’t.
Brixment is permanently waterproofed, during manufacture, with the most effective air-entraining waterproofing agent known. The presence of this waterproofing can be demonstrated by making the crater test shown in Figure 1. Its effectiveness in preventing the passage of water through Brixment mortar can be demonstrated by making the test shown in Figure 2.

The waterproofing in Brixment gives you three practical benefits which are not available in ordinary cement-and-lime mortars:

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

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

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

These advantages will be described in detail, in subsequent advertisements. Watch for them!
Louisville Cement Co., Louisville 2, Ky.
January and February residential building seems to bear out the general forecast of more than 1,000,000 new homes for 1953.

Earlier concern about "spot-recessions" in those industries supported by the defense program has faded rapidly as the positive programming of President Eisenhower has become evident.

The prospect of public building being stimulated, (to offset the mid-year decline in defense spending), adds to the general picture of sound economic planning. Continued rise of savings is seen as a definite stabilizing factor and a solid buffer against a business slump.

The public will have the money to buy homes in 1953—but—we are entering a highly competitive market. Two things will make it difficult to sell homes which are either over-priced or lacking in charm and convenience; 1) Since 1945, new home construction has topped marriages by about 1,000,000. 2) The birth rate during 1930-36 was low.

Modernization and maintenance will be responsible for a larger share of building activity in 1953. Approximately 20 million American homes are now 30 years or older, and a large share of these require substantial investment. Because of the flurry of new building during the past five years, both builders and material suppliers have neglected sales effort in the modernization field. Many building material manufacturers are now making a strong bid for this market. In metropolitan areas, numerous builders who have until recently avoided participation in modernization projects, are now announcing their availability for this kind of work.

Much controversy centers around forecasts regarding 1953 mortgage money. Overall it appears that it will be increasingly difficult for builders to secure 4% and 4 1/2% money but that in most sections an adequate amount will be available for sound mortgages returning 5% and more. This financial development will tend to discourage large merchant building and may accelerate activity by the small speculative builder.
In almost all areas of the country, there will be volume building of homes in the $15,000 class—fewer homes will be built for the $20,000-and-over market and fewer for the $11,500-and-under buyers. This, according to Mr. Francis Nicholson, of California Builders Supply Co., will be particularly true on the West Coast, where about one-tenth of the U.S. population resides and where about one-sixth of the country’s residential construction will occur in 1953.

For the first time in ten years, some rental units are now going begging. In scattered areas, substantial concessions are being made to induce rental prospects. While this is not true on a widespread basis, it is a definite indication that the general critical need for shelter has passed.

Offsetting this development is a general increase of enthusiasm for home ownership. Some economists are predicting that by 1970, 75% of all American homes will be owner occupied. Pride of ownership has become a strong factor in individual plans. During 1953 this urge will be accelerated by the lifting of rent controls now in effect.

1953 homes offering maximum “features” at a fair price will sell after the buyers have shopped the field. It will be difficult to sell run-of-the-mill homes located in big residential developments.

Anthony Mainieri, President of General Woodcraft Co., Inc., North Bergen, New Jersey, reports that East coast building is showing much greater individualized styling than in recent years. “Architects,” Mr. Mainieri says, “are speaking with more authority. For example, they may specify three or four different window types for a single house. It used to be that we could fill all the openings in a house with double-hung units, but now we’ve added horizontal-gliding and awning windows to the line we manufacture.”

Ted Stengel, who heads up R-O-W Wholesale Distributors, Inc. of Norwood, Ohio, says that “For some time, the trend in the Cincinnati area was toward metal windows. This trend now seems to be turning to wood, perhaps because people are spending more time in the home and have more opportunity to appreciate the natural beauty of this material.
IT PAYS TO SPECIFY ELJER RENEWABLE BRASS

This is an illustration from Eljer's new Brass Parts Catalog... a 24-page booklet featuring unusual service and reference information. It shows a quick, easy and accurate way to order parts. Also, it gives unmistakable proof of these two facts:

1. The premium quality and superior design of Eljer Renewable Brass is unequaled.

2. The high degree of standardization and interchangeability of Eljer Renewable Fittings assures fast, economical repair or replacement from a minimum parts inventory.

All working parts of Eljer's two, exclusive, renewable units... for exposed and concealed body fittings... are standardized. They are precision made to be interchangeable today or in years to come. Worn parts can be replaced quickly with new-condition results. You'll find it pays to specify Eljer Renewable Brass.
Spiegel Elected President of NAHB

Hughes and Molnar are new vice presidents; Burkhard is treasurer; Stringfellow, secretary

Emanuel M. Spiegel of New York City and New Brunswick, N. J., nationally-known housing authority, was elected president of the National Association of Home Builders at their annual Convention and Exposition held in Chicago in January.

The 47-year-old builder was chosen at the annual NAHB Convention and Exposition to succeed Alan E. Brockbank of Salt Lake City, the 1952 president.

The builders' convention, attended by a record-breaking crowd of about 18,000 persons from all parts of the United States, also elected Richard G. "Dick" Hughes of Pampa, Texas, as first vice-president of NAHB.

Second vice president: Nicholas Molnar, Olmsted, Ohio.
Treasurer: Paul L. Burkhard, Glendale, Calif.
Secretary: V. O. Stringfellow, Seattle, Wash.

Spiegel An Officer Since '47

Spiegel, second generation home builder with more than 20 years' experience in home building in the Metropolitan New York and Northern New Jersey areas, was first vice-president of NAHB in 1952 and has

(Continued on page 21)

Dickerman Appointed Executive-Director

John M. Dickerman, newly-appointed Executive Director of the National Association of Home Builders, has built a nation-wide reputation in the complex field of housing since he joined the Association as its legislative director in May, 1947.

An old hand on the Washington scene, Mr. Dickerman has served as the home building industry's chief liaison man with Congress and its fount of information on the day-to-day status of housing legislation. His background of experience in the workings of government fitted him naturally for one of his principal roles in NAHB's Washington headquarters—consulting with various Federal housing agencies on new housing regulations and interpreting them for the nation's builders.

Mr. Dickerman also is an authority on mortgage financing and has made outstanding contributions to the industry and the general public in promoting slum clearance and rehabilitation throughout the United States.

From December, 1951 to May, 1952, during the illness of Frank W. Cortright, Mr. Dickerman served as acting executive officer of the Association.

Born in Hope, Arkansas, on August 21, 1914, Mr. Dickerman picked up an extensive knowledge of America long before he was old enough to vote. His family travelled extensively during his boyhood, with the

(Continued on page 21)
FOR THIS GREAT, NEW STYLE IN ASPHALT TILE!

MATICO Confetti!

HURRAHS—from America’s value-wise home buyers. They really go for gay, festive, colorful Confetti. It’s high-style flooring at low asphalt tile prices... easy to clean... lasts for years!

APPLAUSE—from leading decorators. They welcome the fresh, new styling that gives them wide freedom in creating exciting decorative schemes.

A ROUSING HAND—from builders everywhere. Confetti is a brand new aid to home sales. Builders can now “trade up” their homes, “trade down” their budgets... save on installation costs. And Confetti is ideal for on-grade, slab construction homes. Fortified with polystyrene plastic for bright, enduring colors... extra toughness and resiliency.

Confetti is available in 10 high-spirited colors, in 9” x 9” tiles of 1/8” thickness. Write department 5-3 today for full details and specification data.

MASTIC TILE CORPORATION OF AMERICA
Member: Asphalt Tile Institute
Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.
Spiegel . . .

(Continued from page 19)

held top-flight offices in the association since 1947.

A law school graduate of St. Lawrence University, Spiegel is widely known throughout the industry and in recent years has been one of its principal spokesmen before Congressional committees and other groups concerned with housing.

He erected a number of New York City apartment houses while practicing law during the 1928-40 period, and went into home building on a full-time basis in 1940. He moved up rapidly to national prominence as one of the best-informed men in America on every phase of the business—construction, merchandising, financing and legislation.

New Brunswick, N. J., Builder

NAHB's new leader has built more than 1,000 single-family homes and several apartment developments. He is now engaged in a low-cost project at New Brunswick known as "Rutgers Village," which will contain about 400 one-family homes and a shopping center.

Spiegel was a founder and charter member of the Home Builders Association of Northern New Jersey and served as its president for two terms in 1947 and 1948. He also was a regional vice-president and executive committee member of NAHB during that period.

Hughes Builds in Five Cities

Hughes, who was born near Borger, Texas, in 1905, also has been projected into the national housing spotlight in recent years through his NAHB activities. He was treasurer of the association and chairman of its military, defense housing, and budget committees in 1952. Previously, he had served as NAHB secretary and chairman of its regional vice-presidents council.

As first vice-president of NAHB, Hughes will succeed Spiegel as chairman of the important legislative committee.

Molnar a Veteran Builder

Molnar, who served as NAHB treasurer in 1948 and NAHB secretary in 1949, is a veteran Cleveland, Ohio home builder with 35 years experience and 2,000 homes behind him. A champion of free enterprise, he has devoted a large portion of his free time fighting what he calls "the champion of all socialism—public housing." He enjoys the dual-honor of having been named the outstanding member for the year 1952 of both the Home Builders Association of Cleveland, and the Cleveland Real Estate Board.

Burkhard, prominent California builder-political leader, has just completed a year as NAHB secretary. Currently, he is mayor of Glendale, California, and also the successful builder-developer of a large tract operation in mushrooming Antelope Valley (California).

Dickerman . . .

(Continued from page 19)

result that he patched together his elementary and high school education in a medley of classrooms scattered across Arkansas, California, Florida and Illinois.

He finally settled down long enough to work his way through the University of Illinois via such ingenious campus enterprises as managing an orchestra, running a typing service, organizing students' eating clubs, and selling Christmas cards in wholesale lots.

Emerging from the University in 1940 with the degree of Bachelor of Laws, after securing a Bachelor of Arts Degree in 1938, Mr. Dickerman worked for a number of business organizations, including Republic Steel Corporation, and did a brief term of government service in the U. S. office of the Alien Property Custodian before becoming General Counsel and Washington Representative of the Airline Pilots Association in 1943.
LOW-COST HOUSING EQUIPPED FOR LUXURY LIVING

with Hotpoint Electric Appliances

Gunnison Homes Now Feature Hotpoint Electric Kitchens and Home Laundries

Gunnison Homes have always enjoyed an enviable position in the field of low-cost, prefabricated housing. A variety of models, factory produced, offer values that have proved highly desirable in community building. Gunnison has featured conveniences and comforts such as continuous-loop perimeter heating...plenty of closet space...picture windows...overhanging eaves...roomy kitchens...spacious living rooms...utility rooms...and other optional features such as Thermo-Pane window walls...window bays...garages and breezeways.

Now, recognizing the intensity with which all-electric kitchens and home laundries are winning the favor of America's homemakers, Gunnison has wisely decided to include Hotpoint Electric Appliances in their homes. Thus, additional "buy-appeal" has been added and homemaking in Gunnison Homes becomes more joyful.

This is an outstanding example of how luxury living can be provided in low-cost housing. Kitchens and home laundries can be just as modern in modest homes as in stately mansions. The increasing desire for ownership of Hotpoint-equipped low-cost homes proves the wisdom of this investment. Today's homemakers are demanding the conveniences found only in all-electric living. Builders, with an eye to quick turnover, have learned this and are profiting by providing it.

Hotpoint, pioneer of All-Electric Kitchens and Home Laundries, believes that the counsel they give builders on scientific kitchen and home laundry planning can prove invaluable to you. Your inquiry will be given prompt and thorough attention.

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American Builder
Goal for 1953—Housing For 1,000,000 Families

American builders in 1953 face the task of providing more than 1,000,000 families with the best housing that modern science and craftsmanship can devise—and at the lowest possible cost.

That industry goal was set by New Jersey builder Emanuel M. Spiegel as he assumed office as President of the National Association of Home Builders.

How well the industry succeeds in meeting the twin objectives of high production and high quality, he said, will be a major factor in determining whether the nation goes forward to new heights of prosperity or slips back into a recession.

Spiegel, chosen to succeed Alan E. Brachbank as head of NAHB, expressed confidence in continued prosperity for the home building industry and for the nation as a whole.

Prosperity Will Continue

"The post-war prosperity which the United States has enjoyed is based upon solid foundations," he said. "More than 62,000,000 Americans are employed at the highest wages in our history, and the great majority of them are working in peace-time industries, not in war plants.

"National income is at a record height, consumer savings are on the rise, and the American standard of living is advancing at a rate undreamed of a generation ago.

"Our population, which represents our real strength, also is expanding at a surprising rate—it increased by 3,000,000 in 1952 to a record 157,000,000. And we in America, unlike Red China, for example, do not regard those additional mouths as liabilities, but as potential customers for the products of our farms and factories.

"Those facts of American life have especial significance for the home building industry. A prosperous, expanding population bent on the peaceful improvement of its living standards means a vast potential market for new and better housing."

1,000,000 New Homes Needed

"An annual production of 1,000,000 new homes is now a minimum supply for this nation. Under favorable economic and mortgage finance conditions, that target can be raised to 1,500,000 homes annually in the years immediately ahead. And in another decade, when the bumper crop of war babies born during the 1940's will be reaching maturity, it is not inconceivable that there will be a continuing demand for as many as 2,000,000 new houses a year."

 Builders Urge FHA to Lower Down Payments

Two hundred forty-four of the nation's leading home builders believe FHA demands too much down payment for a $12,000 "average" house, according to a statement issued by Emanuel M. Spiegel, NAHB president, at the same time he released his policy statement.

A survey among 260 builders showed most of them in agreement on the need for revising FHA down-payment policies. Spiegel said the builders think FHA could facilitate home ownership among lower income groups if it would cut that down payment.

High taxes and living costs prevent the average family in the "upper low" and "lower middle" income brackets from saving enough cash for a big down payment on a home, Spiegel said.

See Production Doubled

Some builders questioned in the NAHB survey predicted a lower FHA down payment would double production and sales of low and medium cost housing. Others guessed FHA building would go up from 10 to 50 per cent. All agreed it would be a big break for prospective home owners with steady incomes but little cash in the bank.

Spiegel said the "average" house in 1940 cost about $6,000, and the FHA minimum down payment was $600. The same house today costs about $12,000 with a $2,400 down payment. Inflation has doubled the cost of the house, but FHA has quadrupled its down payment requirement.

Most builders polled by NAHB favored a flat 10 per cent down payment on the $12,000 home. Spiegel said. This would restore the pre-war down payment-to-sales price ratio.

The 16 dissenting opinions came from builders who argued that a $1,200 down payment would not give the buyer sufficient equity in a $12,000 house and would make his monthly payments too high. One Detroit builder said more houses probably would be sold, but many buyers would not be able to keep up monthly payments.

FHA Loan Limit Raised to $16,000

Foley Sees New Regime Effecting Changes

Amendment of the National Housing Act to boost the $14,000 top limitation on FHA loans to $16,000, its former level, was revealed by Federal Housing Commissioner Walter L. Greene at the general NAHB convention with all the effect of a delayed action bomb.

Unexpectedness of the announcement by Greene, who said the action has just been validated in Washington, was met with comparative quiet, then a soft undercurrent which steadily increased as the full effects of the pleasant surprise struck home.

Foley, King Also Speak

Greene reported the relaxed limit for FHA insurance at the close of a talk during a 13-man panel discussion of "The Mortgage Outlook for 1953." The panel also included such experts in the field as HHFA Administrator Raymond M. Foley and VA Loan Guaranty Director T. B. King, as well as prominent bankers, savings and loan officials, builders and insurance men. Franklin Burns of Denver, chairman of NAHB's mortgage finance committee, moderated.

HHFA Administrator Foley declared that with the new Republican administration in office, there will be "adjustments," but he added that many of these same adjustments would have been made anyway. These changes, he said, will be tied with the national housing need.

With the present prospects of one million or more housing starts, he concluded that there is available an adequate money potential for mortgage financing of these units.

VA Loan Guaranty Director King disclosed that of the three million loans made since the war, the GI program financed one out of four. The problem in the year ahead, he said, will be the availability of money for GI loans, since it is hard to secure GI money for houses in many sections of the country. It has further been impaired, King added, by reports that the GI interest rate will be changed by the new 83rd Congress.
You need a line in the water, bait on the hook, to catch new business. Equip your homes with Auto-Lok windows and you'll land quick sales at quality prices...for higher net profit.

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See the performance proven Auto-Lok features at your dealer's today. Then you'll know why you can't afford to build with any other window.

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NEWS

Industry Holds 'Do Nothing' Role
Keenan Charged

A challenge to home builders to "show the way" in slum clearance, urban redevelopment and erection of low-rent housing was thrown at the industry during the convention.

Joseph Keenan, Secretary-Treasurer of the Building Trades Department, American Federation of Labor, said the home building industry has been "cast in the 'do-nothing' role." He spoke at a general session.

"We believe that some public action in this field is necessary to achieve a good home for every American family," Keenan declared. "The private housing industry has, by its own default, helped to demonstrate that fact."

"We support and advocate a comprehensive housing program, with public action and assistance to help fill the gap where private industry cannot meet the need unaided," Keenan said.

Suggests Two Approaches

The labor official is presently serving as Assistant Administrator, Office of Labor, Defense Production Administration. His remarks on urban rehabilitation were made while discussing "common problems" in the housing industry.

Keenan suggested two possible approaches to the slum problem: Proper maintenance of good structures, thereby preventing their decline, and "reforestation" of existing slum areas.

"I submit to you that this question of urban rehabilitation as it stands today is not, in its essence, a contest between public and private agencies, but between action and inaction, promise and denial—with the industry cast in the 'do-nothing' role," he said.

Sees Top Heavy Volume

The housing industry has done a fine job of meeting demand in the higher income brackets, but it has failed to make decent housing available to families in the middle and lower-income brackets, Keenan declared.

"Housing construction today is top-heavy—with too much volume at the top of the economic scale where the need is least, and too little at the middle and bottom where the need is greatest," he added.

Extend National Home Week For a Month

The need for flexibility in timing due to local conditions in some cities, and the increasing trend toward a series of consecutive week ends instead of a single week proves the need to change NATIONAL HOME WEEK to National Home Month. Without exception, dozens of home builders and chapter executive officers who were questioned at the recent NAHB convention agreed that the change in name is simply a recognition of an accomplished fact. Others hailed the change as one that will give them new opportunities for greatly expanded programs.

Of singular significance is the fact that for the first time 1953 will see one of the leading home magazines directed to consumers actively promoting National Home Month to its millions of readers. The magazine, Better Homes & Gardens, announced at the convention that its more than 3½ million "buy-minded" readers will have National Home Month brought dramatically to their attention through the Better Homes & Gardens Five Star No. 2309 promotion.

Basis of the promotion is the agreement by more than a score of selected home builders to construct Five Star Home No. 2309 and exhibit it as part of the NHM program.

When the original proposal for NATIONAL HOME WEEK was made by American Builder's Editor, Ed Gavin, it was stated that the full promotion and merchandising benefits of the idea would begin to be realized when some powerful consumer home magazine projected the idea beyond the scope of NAHB, the readership of the professional building press, and the range of metropolitan newspapers.

The Better Homes & Gardens promotion will fill that need.
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GRILLE

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AND TRIM

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CALKING
COMPOUND

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WEATHER STRIP

WEATHER
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FOR STEEL
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PLASTIC
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OKLAHOMA CITY 1, OKLAHOMA
NEW No. 300 KEY-IN-KNOB

Priced to sell!

Here is a feature-packed sales leader of the Dexter Line. Top quality, backed by the famed Dexter Lifetime Guarantee — at a popular price! Available Master Keyed at slight additional cost. May be ordered Master Keyed or Keyed alike with any other Dexter Disc Tumbler Sets. Write for a Dexter factory representative to call on you.
Analysts Predict 1953 Will Be Another Big Year
Caution Builders, However, to Keep Starts Well in Line With Sales Prospects

A trio of professional analysts predicted a rosy long-term future for the national economy, with new house building expected to continue at a level close to that of 1952 at the opening general session of the Convention. These experts were Miles L. Colean, Washington Economist; Ewan Clague, commissioner of the U. S. Bureau of Labor Statistics; and Arthur M. Weimer, dean, School of Business of Indiana University.

Colean stated that housing starts in December 1952 for the first time exceeded a rate of 1.2 million a year. 1953 is starting off, he said, at an extraordinary pace. He added a note of warning to this optimistic situation by pointing out that if houses are started now at a rate to strain the money supply later on, a disrupted market could result. On the other hand, if builders at this time keep their starts well in line with sales prospects and loan prospects, they should not only be able to escape trouble but assure a successful 1953.

Colean’s advice is to watch prices, watch conditions in the money market. Demand is still strong, he said. It only needs careful handling to keep it that way.

Money Market Will Be Tight

The tight mortgage money situation was fully recognized by all three experts, and this is expected to continue at least through the first half of the year. Home mortgage borrowers will probably continue to have stiff competition from the revival of commercial building, even from expanding industry, and from government. The attitude of the Federal Reserve appears to be that this stage in the current business boom is no time for loosening credit.

1953 Will Be A Consumer Boom

Ewan Clague emphasized the point that the present boom in American business is dependent on the consumer and is no longer defense-created. He said that the levels of cash expenditures by government and business are remaining stable, but consumer expenditures are rising. The American consumer in 1950 made expenditures of some $180 billion, while the figure now stands at $220 billion. Income in 1952 stood at $240 billion.

Clague sketched a picture of national prosperity at an all-time high for a full-employment economy with a stable purchasing power. He places home building as a consumer goods industry, occupying a position in between capital and production. For '53 he sees an adequate supplies situation, a possible shift to greater emphasis on rental housing, stable prices and stable income.

However, the year will require more attention to geographical factors, he said. Some markets, for instance, may this year begin to feel the effect of overbuilding. Clague called builders’ attention to a new publication which may help with this problem. It is called “Dwelling Units Authorized by Local Building Permits,” and is issued by the Bureau’s Construction Statistics Division.

A More Spotty Market

A definitely more spotty housing market was also predicted by Dean Weimer, who stated that the year may not end quite as well as it has begun for new home building. Some housing markets may be definitely less good than others, due to rising competition, lessening in the intensity of demand and the shift that is occurring from a sellers’ to a buyers’ market.

On the whole, though, Weimer joined fully in the enthusiasm for the prospects of American business. He said that we have accepted the idea that we have a dynamic and expanding, not a static, economy. This outlook should help greatly to maintain a high level of activity throughout the decade of the 1950’s, and is a long-range factor that has a deep impact on short-term planning.

Weimer said that the home building rate in the last quarter of 1952 was 15 percent higher than for the last quarter of 1951, but that this high momentum would probably ease by the end of 1953. He foresees stable costs and stable prices for new houses, sliding prices for older houses.

MARCH 1953
The planners of the United Nations General Assembly Building have used Permalite for two important applications. Permalite, the leading perlite aggregate, was specified in plaster for fireproofing the structural steel; and in concrete for insulating roof fill. As a result, the maximum 4-hour fire rating for supporting steel has been achieved; and the roof has been insulated by lightweight concrete. For insulation, fire-resistance, lightweight and better workability, plan to use Permalite on your future jobs. Permalite meets rigid specifications of Underwriters’ Laboratories fire test. Frequent production control tests assure uniformity and consistently high quality in these aggregates. Complete data in our bulletins PA-26, PA-7 and PA-9.
2,000 Got Valued Tips At How-To-Do-It Show

The Grand Ballroom was filled to overflowing for the how-to-do-it show at NAHB Convention. 2,000 delegates saw the big stage converted into a job site, with carpenters, masons and other craftsmen demonstrating their know-how in various stages of the building process. A 24-foot roof truss was built on the spot in 15 minutes, a brick wall laid, lumber was graded and measured for moisture content, dry wall construction was applied and taped, and insulating board sheathing was applied. Lloyd H. Yeager, director of NAHB's Research Institute, emceed the show, with running comment by experts who supervised each demonstration.

Two-Ply Dry Wall System

Lloyd Yeager of the Gypsum Association, Chicago, introduced a two-ply system of dry wall construction, using %"-inch gypsum wallboard in horizontal application. The first ply is applied vertically to the framing, while the finish ply is applied horizontally, i.e., the length of the finish board is at right angles to the framing members. He recommended this system for its strength, ease of finish, and saving on the time that must be spent on joint work.

It is highly important, he said, that the framing should be true and flush with the plates top and bottom, and that the lumber be dry. The first boards in this two-ply system are nailed to the framing with a regular gypsum wallboard nail. This is a 4d nail which is non-coated and 1½-inches long. The boards should be nailed 6 to 8 inches on center for walls, and 5 to 7 inches on center for ceilings. Start nailing in the center of the board and nail outward. This prevents warping of the board. Yeager stressed that lath nails should never be used for dry wall application and that the wallboard must be securely anchored to the framing. He recommended pressing with the left hand against framing member while nailing the board with the right hand.

SCR-Brick in Masonry Act

With the help of a bricklayer and a carpenter S. H. McNall of the Structural Clay Products Institute showed fine points in laying a brick wall. The new SCR-brick developed by the Institute was used in this demonstration. It is claimed that use of this new unit makes possible masonry home construction for about the same cost as wood.

McNall stressed that brick should never be shifted or moved after it has been laid in the mortar, since this

SCR brick panel, with S. H. McNall of Structural Clay Products

breaks the bond between brick and mortar. The 10 hollow cores which are a feature of the SCR-brick act to anchor it firmly in the mortar and prevent any buckling tendency which would require tapping the brick into place.

These cores also pay off when it comes to anchoring the roof plate to the wall. The anchor bolts for the plate are run down six courses (Continued on page 35)
Profits can be had by buying from $3.00.

Curv-TITE glass jalousie

After frame is set plumb and true insert glass holder harness in place.

Method of insertion of glass into glass holders showing glass length compensating spring.

Complete assembly showing ease of installation of screens or storm sash.

Simplification and labor saving dollars mean satisfied customers and profit dollars for you. The CURV-TITE jalousie is as easy to install as any type of window made. Eighty-two billion dollars are spent in remodeling every year; this is your key to that potential market. Step by step illustrated instructions with every unit make it the builder's dream.

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Now your home can have decorator beauty outside. Thanks to Ruberoid's new Color-Grained Siding, both new homes and old are following the trend to color.

Even more exciting than the two-tone decorator colors and texture is the fact that here is a modern asbestos material that offers longer-lasting beauty, greater durability, protection and economy than ever before. Color-Grained Siding is surprisingly low in cost. And its low first cost is the last . . . because the colors stay bright and clean (thanks to its Duroc protective finish) . . . it never needs painting.

Your dealer or contractor will be glad to give you a free estimate on re-siding with Color-Grained Siding. Ask him, too, about Ruberoid's new Shado-Wedge, an asphalt undercoursing strip that gives added weather protection and enhances Color-Grained Siding's beauty with rich, deep shadowlines.

See the beautiful blends of Color-Grained Siding at your building supply dealer, or mail coupon for descriptive folder.

Color-Grained Siding

with exclusive Duroc finish.

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THE SATURDAY EVENING POST

March 14th
Are you profiting from the most popular siding development in building history?

**RUBEROID**

**Color-Grained Siding** and **ShadoWedge**

Color-Grained Siding® started the big trend to color, then topped its superior decorator-designed color and texture with a new sales feature...Duroc protective finish, for lasting color-freshness, dirt and moisture resistance.

Now, Color-Grained Siding has added customer-appeal when combined with Ruberoid's new ShadoWedge**...the perfect siding combination. ShadoWedge adds a new dimension to color and texture...deep shadowlines.

No builder can ignore the growing use and acceptance of asbestos siding. No builder can ignore the trend to the exterior use of decorator colors. No builder can ignore the great advance in building economy, quality and beauty of color and texture made by Ruberoid's new Color-Grained Siding. In combination with ShadoWedge, it's the perfect sidewall material. It's nationally advertised and demand is growing. For a plus sales feature and real building economy, put Color-Grained Siding and ShadoWedge in your plans now. Send coupon below for complete information.

*Patent Nos. 2307733, 2307734, others pending
**Patent No. 2394379, others pending

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COMPANY ____________________________________________

ADDRESS ____________________________________________

CITY ______ ZONE ______

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The RUBEROID Co.
through these cores. The brick does not have to be cut to accommodate the bolts.

As the wall is being laid, metal fur- ring clips are inserted by the work- man. When the wall is finished, fur- ring strips are attached to these clips and nailed to the plate at top, and the wall is ready for interior finish- ing.

**Economical Roof Trusses**

The construction of a roof truss suitable for use in a small house was supervised by Alden K. Smith of the Timber Engineering Co., Washington, D.C. Smith said that this type of roof construction was economical as well as versatile for gabled-house con- struction, but lost economy if used with other types.

A special jig was used on the stage of the ballroom to build a 24-foot truss with a roof slope of 5 to 12, for groove- ing top chord of truss.

2-foot spacing. Smith's carpenters, fully powered with power tools, quickly cut out the various members of the truss using two 2 by 6's of 14-foot length, two 2 by 4's of 14-foot length, two 2 by 4's of 12-foot length, two small scabs (1 by 4's), wedgefoot connectors and 1 1/2-inch bolts. The only nailing used in put- ting the members together was for fastening the two scabs in place.

**Measuring Moisture in Lumber**

R. F. Luxford, lumber expert from the Forest Products Laboratory, said that moisture content of lumber has an important effect on its strength. Green framing lumber will be less strong than properly seasoned lum- ber. The shrinkage which will occur in it will damage the frame of the house and weaken joints.

Luxford introduced two types of meters to measure moisture, one of the resistance type, the other of the radio-frequency power loss type. The resistance type is most commonly used. A board was measured with both meters and was found by one meter to have a moisture content of 17 per cent, and 19 per cent by the other. Moisture content of lumber being used in house construction should not be over 19 per cent, Luxford said.

The how-to-do-it series concluded with demonstrations on the use of insulating board as sheathing, di- rected by Charles M. Gray of the Insulation Board Institute; and on con- crete work, by S. R. Westby, man- ager, House and Cement Products Bu- reau of the Portland Cement Associa- tion.

**New F & W Pump Gives**

40-70% More Water at Less Cost!

Whatever your customers' requirements, there's an F & W Water Pump to meet them exactly. All offer outstanding advantages in long-life, dependable service, low-cost opera- tion, and minimum maintenance. Shown here are just 3 of the scores of models in the com- plete F & W line. The Varijet (above) de- livered 40 to 70% more water, yet reduces motor load and power consumption thanks to F&W's exclusive, patented ejector. No other pump approaches its performance for shallow well operation at normal capacities and pressures. All F & W pumps are individually tested before shipment. So . . . remember F & W means Flowing Water at its best, and...

F & W Means Flowing Water by FLINT & WALLING MANUFACTURING CO., INC. 366 Oak Street, Kendallville, Indiana

**Need Emphasized For More Progress In Building Codes**

Some progress—but more needed in 1953. That was the gist of a re- port on building code problems made at the Convention by E. J. Burke, Jr., chairman of the Building Codes Com- mittee, NAHB.

"We spent a tremendous amount of time last year, and we met with some success, but there is still a long, long way to go," Burke said. He made his report at a morning general session of the Convention.

"During 1952 we encouraged local associations of NAHB to set up their own Building Code Committees." Burke continued. This was not always too successful, he said, because the strongest and most aggressive men were not named to these com- mittees.

Burke insisted that building codes have a "tremendous effect upon our business," and he urged builders to review their own codes and "let us know your problems."

"We, as builders, must protect home buyers from those things which add to the costs, and we must see that our codes will let us use the best ma- terials obtainable," he added. "The central idea is that we must build better homes for less money."
NEWS

'Changing Times' Seen as Four-Way Challenge to Retail Lumber Dealers

Four factors are bringing about "changing times" which challenge the ability of retail lumber dealers as merchants and managers, declared Frank H. Morin, retiring president of the Northeastern Retail Lumbermen's Association, at its 59th annual convention held Jan. 26-29 in the Hotel Statler, New York.

The Fulton, N.Y., lumber dealer listed the following reasons for the change:
1. Easy sales we enjoyed during the war and postwar days now come a little harder.
2. Productive capacity has more than doubled.
3. New kinds of products are aggressively seeking a market.
4. Operating costs have been pushed upward by inflation while selling margins have grown thinner.

In addition, Morin disclosed a recent survey "showed that 63 per cent of customers are lost due to untrained sales people, as compared to only a 14 per cent loss because of high prices. He credited Northeastern's personnel training programs at the University of Massachusetts and the New York State College of Forestry, where over 600 students have completed the course, with easing this situation.

Three Don'ts for Managers

Richard Sanzo of Dun & Bradstreet, New York credit rating organization, recommended to the convention delegates "three commandments of good financial management—don't overbuy, don't overtrade, don't overextend"—which, he said, "lay the groundwork for the avoidance of excesses and are the foundation for sound rules of business living. A credit loss of one transaction, he warned, will wipe out the profit on from 25 to 50 similar transactions.

Paul S. Collier, executive vice president, pointed out that dealer members must meet strong competition from other industries if they are to get their share of the consumer dollar. In their favor, he added, is a modernization market for 1953 which is estimated to have a potential value of "from five to seven billion dollars."

Resolutions adopted by the convention urged repeal of the excess profits tax; declared approval of the "open-end" mortgage as a means of financing residential and commercial property improvements, and recommended that Congress restudy the public housing problem, allowing no such project to be started unless first approved by public referendum on the community affected.

The convention also suggested that Congress take steps to equalize freight charges by individual manufacturers to delivery points of buyers. "Abolition of the basing point system," it charged, "has interrupted the normal commercial flow of building materials, resulting in severe and recurrent local shortages of such materials and particularly of Portland and mortar cement."

First President from Vermont

J. Harold Stacey of Windsor, Vt., former speaker of the Vermont House of Representatives, was elected president, to become the first Vermonter to head the association. Other officers chosen included Deyo W. Johnson, Ellenville, N.Y., first vice president; Arthur Clifford, Bridgeport, Conn., second vice president; Jay LeFevre, New Paltz, N.Y., third vice president; Joseph E. Hollingsworth, Lowell, Mass., fourth vice president, and Oliver J. Veling, Buffalo, treasurer.

Registration reached 4,567 at the time of the closing address by Dr. Norman Vincent Peale, pastor of the Marble Collegiate Church, New York, and a prominent author and lecturer. There were 120 exhibitors.

Private Enterprise Puts On 'A New Face for America'

Rehabilitation of blighted areas, not public housing, is the answer to slum clearance and prevention, said G. Yates Cook discussing "A New Face For America," in a discussion session.

Cook, director of the Housing Bureau, Baltimore City Health Department, explained that rehabilitation of existing units encourages people in surrounding areas to clean up their property whereas public housing incites them to let it degenerate in hope that their property will also be purchased by the government.

The success of this idea was demonstrated by Cook who described the "Baltimore Plan," origin of the idea of rehabilitation, and by Builders Milton J. Brock, George Goodyear and Alex Truehaft, who told how it had been adapted for use in Los Angeles, Calif., Charlotte, N.C., and Cleveland respectively.

Cheaper Than Medical Care

"Any city can clear up slums if it will," said Cook, "and do it at less cost than it is now spending for free medical care in its slums."

In Pasadena's "Operation Junkyard," private enterprise program to rid the city of slums and blighted areas, the expense was borne by the existing departments with the addition of only two people to do secretarial work. Houses which had required it were demolished at a cost of only $2.90 each.

Cook told how the plan worked in Baltimore as an example of how it has been done in other cities and can be done anywhere. Baltimore, the nation's sixth largest city had the problem of decentralization, he said, a belt of rock bottom slums surrounding the downtown area spreading into a surrounding blighted area, followed by circling upper middle income homes, and a periphery of new housing. The dual standard of law enforcement in the inner and outer areas had fostered a public attitude which encouraged slum growth.

Enforcement by Complaint

Enforcement was by complaint only, Cook continued. If complaints came from good neighborhoods they were quickly followed up. Complaints even of rat bite cases in the slum neighborhoods from hospitals brought little response from enforcement agencies. Equalizing city law enforcement was a major step in the plan.

With a comprehensive program utilizing the housing code, the build-
ing code, and the zoning board, health and fire department rules Baltimore launched its “Plan” for rehabilitating existing sub-standard housing. A housing court was set up, and public opinion rising from newspaper coverage of its activities put the plan into action.

Remodeling Seen As Peg For Future Business

Remodeling will be an important future consideration in builders’ overall operation and they will find it well worth their while, according to the panel discussion on the subject moderated by Edward G. Gavin, editor of American Builder.

The future will well establish remodeling as a business, said George Jaeger, Dayton, Ohio, builder, especially when rent control is ended so that owners will be better able to afford modernizing apartments, adding an extra bedroom, remodeling the kitchen, etc.

Citing a good profit potential in this field, Donald L. Cederlund, Grand Rapids, Mich., said remodeling, unpredictable as other building activities, will have to consider the problem of increasing livability in older houses.

A Specific Business

The large Chicago organization, Community Builders, of Skokie, Ill., was represented by two authorities—one in the finance department, Patrick Welsh, while F. Clare Hinkley spoke on the firm’s architectural aspects, specifically in the field of remodeling.

This company has brought remodeling to the status of large-scale industry as a result of extensive operations covering a 50-mile radius of Chicago. Hinkley declared that remodeling has become a specific business, especially when it is being operated on a large scale.

This large organization he said, believes remodeling requires definite problems of merchandising, the same as other types of building operations. As the operation grows, expansion is necessary, using classified newspaper ads, radio, and television programs. Advertising is keyed to the season; e.g., in winter more stress is given to inside carpentry and masonry, rather than outside work.

Certain aspects of remodeling, he continued, can be described as maintenance or repair. In cooperating with owners who state their desire for remodeling a house, Community Builders can advise the owner, using such services as before-and-after photographs, architect’s sketches, etc.

During the next year, the building industry will be hearing a good deal about grade-naming of lumber. The idea is to replace the present grade numbers with more truly descriptive grade names.

A good many people in the light construction industry feel that grade designations such as No. 2 common, No. 3, and No. 4 give the public the impression that they represent inferior quality and that those grades therefore are undesirable because they discourage sales. As a result, it often becomes necessary to use grades which greatly exceed minimum requirements for strength and safety merely to satisfy the buyer or owner. This adds to the cost of the job and creates an imbalance in demand.

The National Retail Lumber Dealers Association, through its Board of Directors, has endorsed the principle of grade names. For purposes of discussion, it has suggested the following names:

No. 2 Common or better known as “Construction grade.”

No. 3 to be known as “Utility grade.”

No. 4 to be known as “Economy grade.”

Perhaps those suggested names can be improved on. The aim should be to decide on grade names which give the buyer a more accurate impression of true quality than is gained from the grade numbers now in use.

Other industries have faced this same problem. The meat packing industry, for example, does not have adopted “prime,” “choice,” and “good” as grade names. “Choice” certainly impresses the buyer more favorably than would a designation such as “No. 2.”

Getting general agreement on and acceptance of grade names obviously will be no easy task. Numerous difficulties may arise that can be ironed out after many hours of discussion. In addition to getting agreement among manufacturers and retail lumber dealers, the idea must be explained and sold to architects, builders and contractors, government agencies, building code officials and others.

Inertia must be overcome and tradition must be surmounted, but the construction industry has successfully met even stiffer challenges in the past. There is no great urgency, but on the other hand there is no good reason for delay. Any proposal which is calculated to make our products more acceptable and palatable to the public and lower the cost of building merits the support of everyone concerned.

Here is an example of public relations at its best—it helps everyone and involves no out-of-pocket expense. If you can improve on the grades suggested, write us.

Tax Counselor Service Recommended for Builders

Without proper legal advice and guidance in problems which involve expert tax knowledge, builders, particularly those in the large scale development type of operation, may find themselves at a great disadvantage. Sylvinus Fe!‘- attorney, of Felix, Douglass and Griffin, Oklahoma City, said in a panel session at the Convention. He urged that each building firm utilize the services of a tax counselor to simplify its tax procedure.

The benefit of the multiple-entity operation in its relationship to builders was stressed by John J. Griffin, partner in the same law firm. He indicated the advantages of using two, three or even four corporations in financing a large operation, as a means of limitation of risk. The builder can further expand his borrowing limits by spreading the number of his corporations.

Griffin also said there were certain disadvantages in using the multiple-entity operation, due to Federal tax laws currently in effect which act as “silent policemen,” such as the recent law which prevents the split-off of assets into separate corporations.

Present legal status of the so-called “collapsible corporation” was covered in considerable detail by Charles Melvoin of the legal firm of Altshuler, Melvoin and Glasser, Chicago. The law taxes as ordinary income (not capital gain), he said, the profit which a stockholder receives from the sale of the stock to a corporation as well as the liquidation of a “collapsible corporation,” if:

(Continued on page 41)
exclusive!
Why Home Owners Will Prefer the Ceco 3\textit{in}1 Window

1. The Ceco 3\textit{in}1 Window is the strongest Prime Window with sash balances and stainless steel weather stripping plus combination screen and storm panels offered as a unit package.

2. Exclusive permanent weather seal, nothing make-shift, nothing to deteriorate, wear out or replace. No window can match it in preventing air and cold infiltration.

3. Self-storing storm window and screen changed as easy as raising an arm.

4. New Beauty...made of lustrous aluminum,... modern design complements any architecture.

5. Lasts a lifetime...made of ageless aluminum. Prime Window is all welded construction.

6. Ease of operation. Prime Window raised or lowered with finger tip.

Why Builders Will Prefer the Ceco 3\textit{in}1 Window

1. The Ceco 3\textit{in}1 Window is the strongest Prime Window with sash balances and stainless steel weather stripping plus combination screen and storm panels offered as a unit package.

2. Easy to install...no fitting or trimming of the Prime Window.

3. Easy to anchor Prime Window. Better engineered Ceco anchoring hardware comes with the unit.

4. Built as a unit...sold as a unit with price including all hardware, sash balances, lock, pull down, screws, closures, channels and weather seal.

5. All welded frame and sash in the Prime Window.

6. One source of purchase for the 3\textit{in}1 unit. Time and money saved in buying.

So be sure this new Ceco window creation is in the homes you build. You can be sure it will improve any home and cost will be competitive.

CECO STEEL PRODUCTS CORPORATION
Offices, warehouses and fabricating plants in principal cities
General Offices: 5601 W. 26th St., Chicago 50, Illinois
Garden apartments are springing up all over the country! How are they building them? With reinforced concrete . . . of course. Here is the type of construction ideally suited to suburban development. Reinforced concrete spells economy to its owner because it is weather-resistant; requires minimum maintenance and repair. It also means cooler summers and warmer winters . . . less danger from fire.

The advantages of concrete reinforced with welded wire fabric . . . beauty, strength and durability . . . cannot be duplicated in any other type of construction. And the advantages of welded reinforcing fabric . . . providing strong steel members closely and uniformly spaced . . . cannot be duplicated when it comes to speed and economy in building. Be sure to specify reinforcing fabric with the same care as you order your concrete mix.

Specify Clinton Welded Wire Fabric. It meets all A.S.T.M. requirements and is available in proper sizes and weights for all reinforcing needs.
Four-Point Home Sales Method Outlined in Panel

Four basic ways to sell a house was a key topic in a panel discussion moderated by Al LaPierre, Seattle builder, at the NAHB Annual Convention. These steps were outlined by Samuel G. Russell, vice president of the Burns Realty and Trust Co., Denver, under the key word, “aida,” as follows:

1. Attract “attention.”
2. Arouse “interest.”
3. Create “desire.”
4. Inspire “action.”

Russell said it is up to the builder to use all available methods for creating attention—from erecting billboards and flags for use on suburban subdivisions to running display ads in newspapers, using radio, television, direct mail, even hand bills.

Custom-Built Sales Up

Moderator La Pierre declared that the sales market for houses was only good through the proper appeal made to potential customers when competition was keen. Whereas a few years back, the custom-built house was a comparative rarity, only about 30 per cent of present starts in the Pacific Northwest territory are of the standard “package type” house and about 70 per cent of them are now custom-built.

Builders, he added, must come up with new and strikingly different buildings, as the market is becoming saturated with “old type” houses. There will be more modern production design, too, he hinted, with such features as glass walls, color coordination between walls and furnishing in the houses that will sell in the future. “No more sun-baked houses on sun-baked lots,” he said, implying that among other features, lawns, shrubbery, flowers, outside features as grills and fireplaces would be accepted as standard in the houses of the future.

Point Up Superior Items

As to the interest angle, Russell said the builder must find something new to call attention to points of superiority in his particular house. Such creation of desire, he pointed out, can be used successfully in selling a house by playing upon prospects’ desire to move into a new home, by stressing the neighborhood, schools, local transportation and other features. He advocated the bringing of the potential home owners’ attention to some point of particular interest and continuing to repeat this theme. A further desire angle, he stated, was mentioning scarcity.

William H. Hannon, sales manager of the Fritz Burns organization in Los Angeles, said “There is no magic formula for selling.” He contended the human element is the most powerful single factor in selling a home and all points of departure must be made with that fact in mind. Everyone who comes to look at a new house or development is a prospect and should be treated accordingly.

Prospect Cards

Enumerating various devices which his organization used to sell several thousand homes in a few years, Hannon mentioned the “prospect set” of three cards—white, yellow and pink—with duplicate information on each, one for the salesman, one for the organization, and one for the sales manager’s particular use.

Then there is the “memory jogger,” he continued, which keeps a customer who may be losing interest up-to-date on the activities of the building firm. Once the customer evinces real interest, however, the California realtor goes “all out” by presenting to the home owner not merely floor plans of his house, but a set of post cards with the floor plan of his house on the back, to mail to friends and relatives, a map of the entire new tract development, showing the orientation of particular homes, with the new owner’s list filled in red, with street address indicated. A building commissioner’s report is required in the state of California, so the new home owner gets a copy of this, also by courtesy of the realtor.

Tax Service

(Continued from page 37)

1. The stockholder owns more than 10 per cent of the outstanding stock (this includes stock owned by any members of his family);
2. If the sale of the stock or liquidation of the corporation occurs within three years from the purchase of the property or completion of the project;
3. If 70 per cent or more of the gain from the stock sale or complete liquidation arises from the property which the corporation purchased or produced.

MARCH 1953
Modular Coordination
Next Building Step

Ed Gavin, American Builder editor, introduced modular coordination of building materials as a theme for discussion by a panel composed of Vaux Wilson, Griffith S. Clark of the Homasote Co., and Frank L. Cowton, Denver builder. Appearing before the general session, Gavin called modular the great star in the merchandising solar system of the future.

Radiating confidence and enthusiasm for what home building can do in the competitive market that is ahead, Gavin coined a phrase to express his view: "There's always a market if the package is right."

Five-Way Package

For home builders, the "package" is made up of (1) location, (2) design, (3) equipment-materials-appliances, (4) construction, and (5) price. Gavin centered attention on the fourth of these factors by stating that modular coordination of materials used in the building of a house would be the next great step forward for this part of the package.

Vaux Wilson traced the development of the search for a module which would simplify the complex dimensioning of building materials and parts, and the final acceptance of Albert Farwell Bemis' 4-inch module. Using this measure as the basic one for all building parts simplifies the whole building process, Wilson said, and gives a precision of control over the job which can be obtained in no other way. It also makes possible precutting without waste, speeds production, results in greater profit for the builder.

Frank Cowton testified to the benefits resulting to the builder who uses modular. He said that a switch can be made from traditional to modular without slowing up a program, provided careful planning is done.

Nelson Heads NAHB
Executive Officers Council

Lawrence Nelson, executive vice-president of the Minneapolis Home Builders Association was elected president of the Executive Officers Council of NAHB at the association's annual convention and exposition. Other officers elected are Frank Steudlein, Memphis, vice president; William Gillis, San Francisco, secretary; and Earl De Laittre, Cincinnati, treasurer.
Here it is . . . the builder's answer to merchandising homes in today's market. The luxury of decorator colors plus the economy of steel Youngstown Kitchens lets builders meet the demands of selective, value-seeking buyers.

America's leading artists and decorators have joined Youngstown Kitchens to offer you Controlled Color Kitchen Decorating . . . the exciting new way to give your homes decorator-planned kitchens . . . dramatic sales appeal.

This is just one of the many ways Youngstown Kitchens stays alert to help you merchandise your homes. Get full details of Controlled Color Kitchen Decorating from your distributor. Or write Builder Sales Division, Mullins Manufacturing Corporation, Warren, Ohio.

Youngstown Kitchens CONTROLLED COLOR KITCHEN DECORATING includes:

- Handsome new draperies in a wide choice of exclusive designs and patterns for exciting kitchen beauty, plus . . .
- Colorful wall covering in Varlar, the stainproof wall covering, for beautiful decorator-planned kitchens with . . .
- Attractive decals in 22 exciting designs, made by the largest decal maker, allow your prospects endless decorating combinations and . . .
- Colorful Cabinet tops with new genuine beauty-bonded FORMICA added to give prospects their choice of the 4 greatest cabinet top materials: Formica, Youngstown Kitchens Cushion, linoleum and edge-grain maple.

Two-page, full color spread in McCall's for April and one-page, full-color ads in other national magazines will start prospects looking for this exciting new color program in your homes.

Also see McCall's editorial pages in March for the complete story.

MARCH 1953
In today's modern planning, fences are considered an integral part of home community development. This applies to either a builder's group project or the individual custom designed home.

There is more to fence planning than picking a type out of a fence builder's brochure. The fence cannot be treated as a thing apart. It is an integral feature of the landscaping plan, and when used with a glass walled house, it becomes a part of the architectural scheme as well.

Several aspects of fence planning should be considered before starting to set posts. Here are some of them.

PRIVACY . . . Privacy is the first function of fencing in many areas. The customary way is to rim the boundary with a tall screen. There are, however, more imaginative ways of accomplishing the same end. The fence may be built as a series of baffles without regard for the property line. It may be swung around an outdoor living area in a curve, or angled across at a slant. Short baffle fences can be built next to rooms that look out into the garden, providing extra walls for them. The degree of privacy obtained will be affected by the type of fence chosen. Maximum screening is given by board fences, horizontal louvers, close-set grapestakes; medium, by vertical louver, board and board, spaced slats; least by lattice, picket, post and rail.

SECURITY . . . The oldest service of the fence is that of protection—to keep animals or people out or in (Continued on page 46)
METALS ARE THE BEST INSULATORS

AGAINST HEAT AND COLD IN BUILDING SPACES

Ordinary iron is about 4 times better insulation in an air space against heat rays than asbestos, asphalt paper, brick, plaster, wood, slate, tile, rockwool, enamel. Aluminum, brass, gold, silver, and many other metals are 20 times better.

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

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

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

The facts contradict most people’s preconceptions.

THERMAL FACTORS, TYPE 6 INFRA

Up-Heat C0.099, R11.23 equals 4 1/4” DRY Rockwool
Wall-Heat C0.073, R13.69 equals 5 3/4” DRY Rockwool
Down Heat C0.044, R22.72 equals 9” DRY Rockwool

INFRA INSULATION, INC.
525 Broadway, New York, N. Y.
PHONE: WO 4-2241

MARCH 1953
FENCES . . . what they will do for the house

—and it still serves that purpose today. Tall fences offer greater protection against intruders than low. An open type fence, such as picket, post and rail, even louvre and board-and-board, will admit animals of various sizes. For ultimate security, metal chain-link fencing offers the most protection.

WEATHER CONTROL . . . Properly designed fences can help to control sun, wind, and frost, although no fence will protect against all three. To control sunlight it is necessary to reduce glare with panels of plastic screen or glare reducing glass. The rays can also be filtered with a basket weave, louvred or board-and-board fence.

There are two ways of controlling wind. To shut off wind but not the view, use panels of clear glass. To break up a strong wind use a wind screen made of closely spaced slats with a slanting baffle attached to top.

Frost protection can be gained by designing the fence with openings to let out cold air. Frigid air flows down hill and collects behind obstacles. Unless released it will damage plantings at that point.

WALL FOR OUTDOOR ROOMS . . . Fences can be used as walls to create outdoor rooms. Short free-standing fences, built within the garden will provide the required walls. They can be set along the edge of property or in a corner. Set in middle of the rear lot it can separate the activities of the service yard, gardening center and outdoor living room. The divisions give more usable space for outdoor work and play.

Two fences of this type, each 12 and 18 feet long respectively can provide interesting placement variations. Joined together these sections can be made to form an L, thus affording protection from prevailing winds. Even more versatile forms are the T and the exploded T in which the walls do not quite meet. The in-between space can be left open for passage.

BOUNDARY DEFINITION . . . There are points along the property line where screen fencing is out of place. In most subdivisions, the front yard cannot be blocked with a tall fence. A low fence, such as post-and-rail or a picket fence, is often needed around the front of the garden to identify the property line and protect lawn and plantings. A light rail fence can be used as a separation between properties and, if strategically placed, can be used as a traffic barrier.

Costs of the different types of fencing are difficult to determine. Availability of materials are a factor. In general, fences built of materials that are also in demand in the building trades will cost more than those that utilize less sought-after woods.
SAVE TIME—From rough opening to finished door in 40 minutes or less — it’s possible with the new packaged Hasko K-D Door Unit. Everything — door drilled for lock, frame notched for header, stop cut exactly to size, trim mitered and cut to size, hinges installed on frame and door, lock set, shingles for shimming, and nails — is included in the Hasko Package. With no sawing, chiseling, planing or boring to do, the carpenter merely takes a hammer, level, and nail set to case and hang the door. Instead of four hours skilled labor cost on each door you have less than three-quarters of an hour.

SAVE MONEY AND WASTE—Skilled craftsmen using mass production methods get factory cut precision into these units. Quality trim and that mill-made look are part of the Hasko K-D advantages. All waste lumber is absorbed in the reasonable cost of the units. Skilled workmen don’t waste time running to the lumber pile, sawing, chiseling, boring and fitting. Their time can be used on more important tasks requiring their experience and know-how. The labor cost saved lowers the estimate and speeds construction time.

GET BEAUTY AND DURABILITY PROVED BY TEST —Over a million Hasko flush doors have been made and installed. Time and weather have proved their dependability. Strict factory tests maintain their quality. All Hasko doors are made of select, kiln-dried lumber and beautiful veneers permanently bonded to one another to produce the finest in quality and strength.

See Your Supplier or write Haskelite for More Information on the New K-D Unit
LETTERS

information please

Sir: The January 5, 1953 issue of Life magazine describes a "Trade Secrets" house being built by different builders throughout the country.

I would appreciate your forwarding any information at hand as to where plans and specifications can be obtained and also whether American Builder plans to feature the house in the near future.

John Mack, Elmira, N.Y.

The American Builder does not plan featuring the Trade Secrets house at this time. In our December, 1952 issue we featured the Trend house (page 80). These houses are very similar. Architect for the Trend Home is Ned Cole of Austin, Tex. Cole was one of the principal voices in the designing of the Operations Trade Secrets house featured in the picture magazine. Plans can be obtained from him.

It is interesting to note that no matter who prints a story of a house the inquiries are always sent to the American Builder.

—The Editor

modernize this plan

Sir: ... I remember the days when my father used to read the American Builder in 1895 ... I wonder if you would look over a plan of a house we would like to build. Could you give us the most modern layout.

Robert W. Johnson, Los Angeles, Calif.

Concerning the sketch of your proposed home, it was quite a challenge. The sketch below is our concept of modern arrangement within the periphery of the original.

Sir: We were greatly pleased to receive your telegram telling us that the Memphis Home Builders were awarded first place in Group II in the National Home Week competition.

While the results were great during National Home Week, the celebration sparked home buying in this area so that it has carried us over into a strong and healthy market. Today 67 per cent of all houses under construction are sold before completion and several less than 94 homes were completed and unsold four months ago.

Our builders are completely sold on National Home Week and we express our thanks and appreciation to you and your fine magazine for having made this great industry program possible.

Frank Steudlein, Exec. Vice-president, Home Builders Assn. of Memphis

Letters

Greatly pleased

Sir: The January 5, 1953 issue of Life magazine describes a "Trade Secrets" house being built by different builders throughout the country.

I would appreciate your forwarding any information at hand as to where plans and specifications can be obtained and also whether American Builder plans to feature the house in the near future.

John Mack, Elmira, N.Y.

The American Builder does not plan featuring the Trade Secrets house at this time. In our December, 1952 issue we featured the Trend house (page 80). These houses are very similar. Architect for the Trend Home is Ned Cole of Austin, Tex. Cole was one of the principal voices in the designing of the Operations Trade Secrets house featured in the picture magazine. Plans can be obtained from him.

It is interesting to note that no matter who prints a story of a house the inquiries are always sent to the American Builder.

—The Editor

Sir: We were greatly pleased to receive your telegram telling us that the Memphis Home Builders were awarded first place in Group II in the National Home Week competition.

While the results were great during National Home Week, the celebration sparked home buying in this area so that it has carried us over into a strong and healthy market. Today 67 per cent of all houses under construction are sold before completion and several less than 94 homes were completed and unsold four months ago.

Our builders are completely sold on National Home Week and we express our thanks and appreciation to you and your fine magazine for having made this great industry program possible.

Frank Steudlein, Exec. Vice-president, Home Builders Assn. of Memphis

(Continued on Page 50)
Customers who settle for nothing less than the best, select this "deluxe" Rubber Roller Catch by National Lock. Designed primarily for use on wood and metal kitchen cabinets, this quality-made catch and strike ensemble provides many years of smooth... positive... silent action.

Catch has elongated mounting holes... Strike has marker prongs... two features that spell easy application. Housing, Spring and Pawls are made of steel. Catch, Strike and Screws have durable rust resistant finish. Complete ensemble is individually packaged for ease of handling and identification. Priced right for profit! Order these Catches from your jobber NOW. Immediate delivery.

Ask your jobber about these other in-demand items

- SERIES "410" NATIONAL LOCK ASSORTMENT
- No. 24 WOOD SCREW ASSORTMENT
- NATIONAL FUTCH LATCH
- A-80 BRASS ASSORTMENT

DISTINCTIVE HARDWARE... all from 1 source

NATIONAL LOCK COMPANY
Rockford, Illinois • Merchant Sales Division

MARCH 1953
A BEAUTIFUL SOLID BRASS KNOCKER

...BUT INSTEAD OF KNOCKING

It Chimes

SUBURBAN MODEL
No. 840

Completely Non-Electrical... No Wiring

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

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

NATIONAL MODEL No. 850

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

METROPOLITAN MODEL No. 890

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

Letters...

(Continued from page 48)
cupboards are placed on two side walls opposite each other for the convenience of the housewife. Changing and relocating the closets makes them better serve the occupants of the house. Opening up of the dining and hall areas adjoining the living room is also desirable. An accordion type door can be installed here.

We have designed the floor plan for basementless construction. We did not see in your sketch any basement stairway. As a rule the editors of the American Builder do not render this service. However, your being a subscriber since 1895 makes us desirous to serve you. You are one of our long time friends.

—The Editor

Thank you

Sir: We want to thank you for the wonderful article that appeared in the December issue. (It's The Electric Age—Are Your Houses Wired To Meet It Dec. 1952, p. 87). Mr. Arquilla thought the article was unusually good.

Leland E. Graham,
General Manager,
George Arquilla Co.,
Chicago, Ill.

We're publishing your speech

Sir: We are using the text of your speech for an article in the January issue of our new state magazine, The Ohio Builder, and at the present time the copy is at the printers. They will return it in a few days and we will send it on to you.

I thought you might like to know that we have received many favorable comments on your speech in Akron.

A. H. Falace,
Exec. Vice-president,
Ohio Home Builders Assn.,
Columbus, Ohio

The above letter refers to a speech made by the American Builder's Architectural Editor Arthur V. Hansen.

—The Editor

Letters to the Editor should be sent to Edward G. Gavin, Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill. Your comments are invited.
Ruggers, lightweight Bundyweld Tubing can be formed by one man, mounted by two. Joining is swift and sure. Coils lie flat and straight, are plastered over quickly. Tough steel resists accidental damage.

Show your heels to competition . . . with Bundyweld Ceiling Radiant Heating

These days you know you have to offer bright, modern kitchens and bathrooms in your houses. Buyers know it, too. . . take it for granted. You need a new payoff to sell them today.

And here it is . . . Bundyweld Ceiling Radiant Heating. It's your key to sales, your way of showing your heels to the competition today and for years to come.

Do you know a prospect who wouldn't be excited by all these extras in a new house? Cozy comfort in every part of every room. Clean, fussless heat in a system that actually costs less to run. It's new enough to be exciting, yet has been proved in homes all over the country.

Your prospect will probably have heard about this sensational new heating system. Millions have. Bundy ads in Better Homes and Gardens, American Home, and House Beautiful have drawn a deluge of requests for literature. And from every part of the nation people are writing for the names of builders and architects who handle Bundyweld Ceiling Radiant Heating in their localities. You'll want this Bundy literature, too. Send for it now.

Radiant Heating Division
BUNDY TUBING COMPANY
Detroit 14, Michigan

SEND FOR FREE LITERATURE!

Name
Company
Address
City
Zone
State
YOUR CUSTOMERS KNOW
HEATILATOR
FIREPLACES

AMAZING FIREPLACE
circulates heat... will not smoke!

There's only one HEATILATOR FIREPLACE

appearing in March issue BETTER HOMES & GARDENS

This full page ad is only one of the hard-selling advertisements in the nation-wide Heatilator* Fireplace campaign. Your potential new-home customers are being pre-sold on Heatilator units in big ads like this in 16 leading national magazines.

Over 30,000,000 people will be reached by Heatilator advertising in March alone. This kind of continuous pre-selling assures customer acceptance of every Heatilator unit you specify in your building plans. Helps you sell homes faster.

Twenty-six years of continuous national advertising has made Heatilator the best known and most wanted fireplace. You know before you build that your customers will be satisfied!

Protect yourself against fireplace grief. Assure correct construction... perfect operation! Specify Heatilator Fireplace in all your building plans. Comes complete ready to install.

Mail coupon today for folder and specifications.

*Heatilator is the registered trademark of Heatilator, Inc.

HEATILATOR FIREPLACE

Heatilator, Inc.  
633 E. Brighton Ave  
Syracuse 5, New York

Please send me A. I. A. folder on Heatilator specifications.

Name ____________________________

Address __________________________

City ____________  Zone ______ State ____________

how to design and build
a MOCK HOUSE

Ceiling was 2x6 pine, t&g; framing was 1x6 pine. Mock fireplace is striking (see drawing for detail)

Occupying (literally) the center of the stage at San Francisco's Western Living and Home Exposition held last fall, this "theme" house was built full scale but included only living room, patio and carport. It was designed by architects Campbell & Wong to stretch 48 feet across the front of the main stage of the Home Show auditorium.

Materials used simplified construction, and consisted chiefly of 4x4 posts, 4x8 beams, and much glass. The scheme taken as a whole is a clever solution to the problem of how to go about erecting a dummy house for Home Show exhibition.

The Home Show was staged jointly by the Associated Home Builders of San Francisco and the Northern California Electrical Bureau. Total attendance was 78,000. When the Show was over, the theme house—known as Pacifica—was taken down and sold to a florist.

Bricks used in walls were laid in running bond, with gray color mortar and raked joints. Orange-red Richmond brick floors were laid flat in sand.
New Service Entry for Modern Basements

Service-way provides easy, direct access from outdoors!

The new Heatilator® Service-way is one of the most desirable convenience features for modern homes. This improved service entry makes it easy to get things in and out of the basement, without going through the house.

The Service-way makes basements convenient for storage. Lawnmowers, garden tools, bicycles and storm windows can be kept in basement... easily taken in and out when needed.


The Service-way adds to property values... worth many times its moderate cost. See it at leading lumber and building supply dealers. Made by the makers of famous Heatilator Fireplace.

Mail coupon for folder and specifications on the new Service-way.

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

Finger-tip control... Special double-action spring suspension counterbalances weight of steel door.

Heatilator, Inc.
583 E. Brighton Ave.
Syracuse 5, New York

Please send me A. I. A. folder on Service-way specifications.

Name

Address

City Zone State

Architect Builder Dealer

March 1953
"BIG PROFIT," says N. J. Dealer

"I used to be afraid to handle ornamental iron, so I sent my business to local iron shops. A year ago, I investigated Coffman 'Standardized' ornamental iron. When I discovered how easy it is to stock, the profit I had been missing, I started to include it on the material estimate sheets for our builders and contractors. We all learned that Coffman standardized ornamental iron is easier to install than a door or a window. Now all of us are making profit we previously overlooked! Now all of us are Coffman boosters!"

—R.H.J., Newark, N. J.

If you are not stocking Coffman porch posts or rails, you are missing easy profit! Investigate today! Remember there is a stock size Coffman post or rail to fit any porch or entrance.

FREE: Write for descriptive catalogue on all Coffman products and complete information on our amazing free airmail blueprint service.

America's Largest Manufacturer
of Ornamental Iron

The R. J. Coffman Co., Inc.
Dept. AB-3 ORLANDO, FLORIDA

American Builder

Top Profit Item
Coffman "Standardized"
ORNAMENTAL IRON

Easy to Handle
Easy to Install

how would you do it?
ideas for the man on the job

fast removal
of wood scraps

For the shop cutoff saw, two holes can be cut into the saw table for the fast removal of scrap. The wood box below the table can be taken out when it is full.—O. W. Johnson, Spokane 41, Wash.

mitering
edges of
plywood

For mitering the edges of plywood with a small table saw, first make a scrap of wood to fit the miter gauge slot of the saw table. Tack this scrap of wood to the plywood the distance from the miter line to the slot. Make the necessary tilts and run the plywood through face up.—William E. Chupp, Riverside, Calif.

faster fitting of
doors to threshold

First fit the sides and top of door to the jamb. Install the hinges and make two dots on the lower right corner of the door level with each other. Take the door down by removing pins from the hinges. Next install threshold. Then measure from the top of the threshold to the dot on the door jamb. This distance measured from the dot on the door to the bottom of the door will show the cutoff necessary. It is best to leave a slight bit of clearance. On the other side of the door you can measure from the hinge.—Roy Loveless, Connell, Wash.
HERE’S LEIGH’S ANSWER to your need for a handy, built-in metal cabinet. Costing less than wood, it installs flush into any wall, is correct depth for dry wall installation. Gives much-needed “extra” storage space women appreciate. Double-protected heavy gauge steel, white finish may be painted to harmonize with room colors. Four adjustable shelves. Ideal for bathrooms, kitchens, hallways, closets, anywhere in the house. Size: 357/8" high, 135/8" wide, 33/4” deep.

NOW, AT LITTLE COST, you can install adjustable shelf supports anywhere in your houses — and use them to boost sales! Ideal for built-in bookcases, cupboards, window gardens, miscellaneous use. Cost less than wood, install in half the time! Complete set, including 4 supports, 8 brackets and screws packaged in attractive carton. Two sizes: 18” (19” overall) and 24” (25” overall). No cutting or fitting required. May be used in multiples in extra high cupboards. Supports finished in baked beige enamel, clips electroplated. Packed 1 set per carton.

Look at the Full LEIGH Line of Building Products that Sell Homes! Leigh Building Products are the out-of-the-ordinary built-in features that make your home stand apart from competition — and attract buyers. All Leigh products are of heavy gauge metal, save you money in initial cost and labor. Ask your dealer for LEIGH BUILDING PRODUCTS today!

LEIGH BUILDING PRODUCTS DIVISION
AIR CONTROL PRODUCTS, INC.
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Leigh Building Products include: Door Canopies * Mail Boxes and Chutes * Built-in Garbage Containers * Clothes Chute Doors * Window Awnings * Window Shutters * Screen Door Scrolls and Grilles * Adjustable Closet Rods * Recessed Shoe Racks * Built-in Dust Chutes * Flower Boxes * Milk and Package Receivers * The Industry’s Most Complete Line of Ventilators

MARCH 1953
how would you do it?

ideas for the man on the job

porch shelf for plants

Shelf space for plants and flowers may be provided by securing a board to the top edge of the screen cross frame. A 45 degree wood bracket can be fastened to the shelf and cross frame member for the required support. Shelf ends can be rounded or if corner shelves are to be installed they can be mitered.—Arthur N. Nelson, Kansas City, Mo.

scaffold horse does double duty

A scaffold horse if cut in two and fastened with a door hinge can also serve as a scaffold jack. The two sections also make moving and storing easier. Saw horse is cut in half leaving equal parts 1 and 2. Door hinge 4 is fastened to the horse with pin 5 in the upward position.—Warren W. Howe, Longview, Wash.

a group of assorted suggestions

(1.) Dip all new building hardware in self shining wax before applying and paint will not adhere to the surface.
(2) Tiles can be scored with a glass cutter to get an even break.
(3) Scotch tape is ideal to shim up door hinges. Tape will not fall off and is easily built up to any thickness.
(4) Glue sand paper to scrap lumber for sanding blocks.—Werner Kraatz, Santa Cruz, Calif.
Hammer home the advantages of this

NEW STRI-COLOR

...in Flintkote Sidings for 1953

WEATHERED WHITE *

...with embossed striated surface texture...
gives your customers wonderful single or combination color effects!

Stock up now ... so you'll be ready for the first call of spring.
Home owners, contractors and dealers will love WEATHERED WHITE which has just been added to Flintkote's beautiful and already very popular line of STRI-COLOR® Asbestos-Cement Sidings, the sidings that made such a hit last year.

Flintkote Stri-Color Sidings are perfect for modern new construction... or for modernizing existing houses.

Use them for mono-color jobs, for two-tone effects, or in combination with stone, stucco, brick, etc.

Stri-Color Sidings ... protected by Flintkote water-repellent, stain-resistant DURA-SHIELD® Finish won't rot or burn.

Stock up now!

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

* A trade-mark of The Flintkote Company

FLINTKOTE

the extra years of service cost no more!
Big mill production at Crossett equips you to meet the crucial need for heavy and light construction—promptly. Architects, engineers and contractors are discovering that timbers and piece stuff adequately meet load specifications including those for long spans.

CROSSETT Heavy Timbers Meet Engineered Specs

Experience has proved that engineered timber construction also withstands emergency winds and seismic loads. It resists combustion, free from the hazards of load-bearing collapse under extreme heat. All Crossett timbers are engineered to specified stress values for timbered or laminated truss designs. Excess safety factors are provided with Teco ring connectors and grids. Timbers available in untreated, Wolmanized, treated and creosoted stock.

removing stuck storm windows

In the early spring when storm windows have swelled due to excessive moisture they can be removed easily if screw eyes have been placed at the bottom ends. A hammer claw fastened to the screw eye is used to pull the storm window.—Author unknown

keep your saw off the ground

Put a saw cut on either or both ends of the saw horse and place the saw there when not in use. You might also find a large cut handy for a square at the other end of the horse.—G. A. Heffelfinger, Lehighton, Pa.

CASH FOR JOB SHORTCUTS—American Builder will pay five dollars ($5) in cash for each shortcut or job pointer accepted for publication. Send all material to the Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.
Here are three Richmond closet combinations—newly improved in modern style and operation. New grace has been added to their lightweight design. They're easier to clean...have quiet, positive flushing action. Most important, they feature concealed twin jets. These added features are one more great reason why it pays to specify and install Richmond.

Remember, whatever your needs: vitreous china closet combinations, lavatories and urinals; enameled cast iron bathtubs, lavatories and kitchen sinks...all in "whiter-white" or pastel colors...choose Richmond. You'll get the widest possible range of sizes and styles, the finest in modern design, engineering and skillful manufacture.

See your wholesaler or Mail Coupon Today

Richmond Radiator Company
17 East 47th Street, New York 17, New York
Please send me additional information on Richmond fine plumbing fixtures. No obligation, of course.
NAME
COMPANY
ADDRESS
CITY. ZONE. STATE
We are plumber wholesalers plumber contractors building contractors.
Many windows of Ponderosa Pine, as made by various manufacturers, have established outstanding records of performance and endurance. But today there's even greater assurance of quality and value—the new commercial standard (CS 190-53) for stock double-hung wood window units, approved by the Commodities Standards Division, U.S. Department of Commerce! Here are some of the quality features you'll find in Ponderosa Pine windows manufactured in accordance with this standard:

**PRESERVATIVE WATER-REPELLENT TREATMENT!**
All wood parts are water-repellent preservative treated after cutting, in accordance with the NWMA minimum standards which require an average penetration of the end grain of 1\(\frac{1}{2}\) inches.

**EFFICIENT WEATHER-STRIPPING!**
All units are weather-stripped to allow a predetermined minimum of air infiltration. That means real protection from heat, cold and dust.

**EASY OPERATION!**
Units have balances permitting easy operation of both sash upward and downward, capable of holding either sash stationary in any position. Balances may be spring, spiral, pulley and cord or pressure weather-strip.

**QUALITY GLAZING!**
All glass in 1\(\frac{1}{8}\)-inch sash is bedded in putty or glazing compound or, in lieu thereof, putty glaze using a secondary putty rabbet on reverse side. All windows are face putted.

*PLUS...*
Quality standards specifying grade of lumber used—thickness of lumber, nailing of joints, and many other construction advantages.

For complete information about the new Commercial Standard, write:

**Ponderosa Pine**

**WOODWORK**

38 South Dearborn Street
Chicago 3, Illinois

AWWA Seal Products Meet New Standard

The American Wood Window Institute Seal of Approval appearing on double-hung wood windows means that the wood window unit that bears it equals or exceeds the new U.S. approved Commercial Standard in all respects.
ASBESTOS SIDING?

3 reasons why you should insist on Johns-Manville SMOOTHGRAIN

1 Superior Styling . . .

Viewed from any angle, Smoothgrain has a rich, grained texture, yet its surface is smooth and resistant to soiling. Colors are beautifully styled in deep autumn shades or smart springtime pastels. The pleasing grained texture and lasting colors are achieved by colored ceramic granules deeply embedded in the asbestos cement siding.

2 Outstanding Quality . . .

The J-M manufacturing process gives Smoothgrain Siding dimensional stability—resistance to shrinking—tight joints that won’t open up later on. Furthermore, the built-in texture is so striking, that you can hardly see face nails and vertical joints.

3 Best Known Name . . .

The Johns-Manville name has been the standard of quality for 95 years. Color ads in national magazines and the Bill Henry Radio News Program are constantly building preference for products which carry the J-M name.

For full information about Smoothgrain Asbestos Siding and other J-M Building products, write Johns-Manville, Box 60, New York 16, N. Y.
"I want to tell all my builder friends that Murray means top quality, and invite you to see for yourself. And I personally promise that Murray will give you every co-operation in solving your problems. Try us!"

(Signed) Phil Filson

Even a minimum Murray kitchen gives a small home a look of luxury. Outstanding workmanship, subtle lines that make work and storage space look greater, make the whole kitchen seem more spacious—these are what swing the discerning prospect!

Quality means excellence of materials, rigidity of frame, perfection of fit, absolute adherence to dimensional specifications. Attention to quality in each unit of Murray's wide kitchen line is what gives a Murray kitchen that look of outstanding quality.

In big kitchens, for luxury homes, a broad sweep of bright Murray units says excellence and quality for a home just as surely and commandingly as smooth riding says it for the very finest of automobiles. See the units themselves and compare!
Move heralds complete program of support for builders... in planning, promotion and pricing of Murray's beautiful line of top-quality cabinets and cabinet sinks

With the formation of a new builder department, Murray is putting the most experienced men in the builder-kitchen field to work for the builder, to expedite for him the planning and supplying of top-quality, top-appeal Murray kitchens.

Their job will not simply be to persuade builders to install Murray kitchens, but also to help the builder in every way to take full price and sales advantage of these beautifully styled, solidly built units.

It will be their responsibility to help builders plan maximum appeal into minimum space and budget; to slant advertising appeals toward the builder's prospects; to supervise the preparation of promotional material for the builder's use; to streamline the flow and pricing of Murray steel kitchen components to the builder.

Full support of the new department is a matter of rigid policy with Murray... as quality construction, superlative materials and workmanship, and styling excellence have always been. Be sure to get in touch with Murray's Builder Department about your present project—and about your next project before your planning is complete.

*Get the full details by writing*

**MURRAY**

THE MURRAY CORPORATION OF AMERICA

Home Appliance Division

"I want to tell all my builder friends that Murray means top quality, and invite you to see for yourself. And I personally promise that Murray will give you every co-operation in solving your problems. Try us!"

(Signed) Phil Filson

NO LINE OF KITCHENS OFFERS HIGHER QUALITY, MORE STRIKING BEAUTY THAN MURRAY KITCHENS

There's a greater difference between kitchens than a catalog or photograph can show... or high-pressure promotion can hide. Be sure to examine and compare all lines carefully before you decide. Your prospects will...

Even a minimum Murray kitchen gives a small home a look of luxury. Outstanding workmanship, subtle lines that make work and storage space look greater, make the whole kitchen seem more spacious—the qualities that swing the discerning prospect!

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NEW! COLOR-SEALED

COLOR-SEALED CAREYSTONE IS MADE IN WHITE AND SEVERAL ATTRACTION COLORS.

"TORTURE TEST" IN CAREY WEATHER-O-METER proves top quality and performance of Color-Sealed Careystone Siding, under conditions of blistering heat, freezing cold, soaking rains.
The color is permanently sealed in by an exclusive Carey process that seals out rain, dirt, grime, stains!

Perfected by Carey engineers after years of development, Carey’s exclusive sealing process gives Careystone a lasting, armor-tough surface that protects the color from fading . . . repels water . . . resists dirt, grime and discoloration. Careystone is rot and vermin proof, too. Never needs paint, is incombustible. And, for that real luxury touch, it is deeply textured with a vertical striated design of exceptional beauty.

You’ll like the ease and economy of installing Careystone, too. Put it on right over wood, using face nails; over gypsum or fiber board sheathing with the Carey Shadow-line channel system. Or, right over the old siding when remodeling. Give your homes dramatic new beauty and fresh sales appeal, with Careystone. See Color-Sealed Careystone asbestos siding at your Carey dealer. Or, mail the coupon for detailed literature and samples.
William and Mary College Specifies Upson Panels

William and Mary College, founded in Williamsburg, Va. in 1639, famous as the birthplace of Phi Beta Kappa and the Alma Mater of three presidents of the United States, marked the first step in a contemplated remodeling project with the completion of the remodeling of the interior of Tyler Hall, a dormitory built in 1916.

C. M. Major, college architect, specified Upson Kuver-Krak Panels for the ceilings after a thorough investigation of all products in the field. The fact that Upson Kuver-Krak Panels are applied directly over cracked plaster without visible face nailing was an important factor in his decision.

In all, 16,000 square feet of Upson Kuver-Krak Panels were used in Tyler Hall, plus moldings, decorative blocks and Upson Floating Fasteners.

Complete Home Shipped Overseas

The manager of an Israel paper mill at Hadera has a brand new home. The seven room, two bath house was made in the United States by the Knox Corporation of Thomson, Georgia—crated in sections and shipped overseas. The Israel Company made only one change in standard prefabrication. Upson Strong-Bilt Panels were specified for all interior walls and ceilings when the company found that these sturdy, 7-ply thick panels are pre-finished and water-proofed through every fibre. The completed home was transported from Georgia to Brooklyn aboard a special trailer and from there it was shipped to Israel aboard the freighter "Yaffa."

Lumber Dealers Go to School

Many a universities are now offering a special 30 day training course for retail lumber dealers. Representatives of the major building industries are invited to discuss their particular products. The Upson Company of Lockport, New York was selected to discuss the laminated fibre industry.

Quarterly Staff Meetings Help Dealer Boost Sales

A quarterly meeting of the sales staff of the Dykes Lumber Company, New York City, to help them keep abreast of the latest developments in the industry has paid off in increased sales. Recently, Roy Walton of The Upson Company described the many features of the new Upson Ceiling Tile.
CLAY TILE...FINEST FRAMEWORK FOR FOOD SERVICE

Wherever food is handled, prepared or served, certain basic requirements for the surrounding surfaces must be met: maximum maintenance economy, extreme durability, utmost resistance to grease, food acids and cooking fumes... plus the handsome good looks that stimulate both employee morale and repeat customer business.

Clay Tile meets all these standards—as in this beautiful new clay tile cafeteria. Glazed tile will keep the walls permanently beautiful and easy-to-clean. Unglazed tile on the floor will carry heavy traffic indefinitely with minimum cleaning care and maximum wear resistance.

If you design, plan or build food service areas, you'll be rewarded by a fresh look at clay tile. Clay tile is proof against water, fire, staining and scratching. The increasingly wide range of clay tile colors and designs assures unique decorative possibilities for restaurants, cafeterias, diners, commercial kitchens and other areas.

Consult your Tile Handbook for technical information on types and sizes.

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

The Modern Style is

Washable and they stay put!

UPSON Ceiling Tiles

Washable with ordinary soap and water because they are waterproofed ... stay new looking because they are pre-finished in a beautiful ivory color. Equally important, 7-ply, laminated Upson Ceiling Tiles (12" sq.) are exceptionally strong and rigid ... easily applied with matching color pins. The completed ceiling has high insulation value, high light reflecting qualities ... and the trim, modern look of square corners and shad-o-beveled edges.

THE UPSON COMPANY 913 Upson Point, Lockport, New York
Please send me booklet and information on Upson Ceiling Tiles.

WILLIAM AND MARY COLLEGE SPECIFIES UPSON PANELS

William and Mary College, founded in Williamsburg, Va. in 1639, famous as the birthplace of Phi Beta Kappa and the Alma Mater of three presidents of the United States, marked the first step in a contemplated remodeling project with the completion of the remodeling of the interior of Tyler Hall, a dormitory built in 1916.

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In all, 16,000 square feet of Upson Kunver-Krak Panels were used in Tyler Hall, plus moldings, decorative blocks and Upson Floating Fasteners.

COMPLETE HOME SHIPPED OVERSEAS

The manager of an Israel paper mill at Hadera has a brand new home. The seven room, two bath house was made in the United States by the Knox Corporation of Thomson, Georgia—crated in sections and shipped overseas. The Israel Company made only one change in standard prefabrication. Upson Strong-Bilt Panels were specified for all interior walls and ceilings when the company found that these sturdy, 7-ply thick panels are pre-finished and waterproofed through every fiber. The completed home was transported from Georgia to Brooklyn aboard a special trailer and from there it was shipped to Israel aboard the freighter "Yaffa."

LUMBER DEALERS GO TO SCHOOL

Many large universities are now offering a special 30 day training course for retail lumber dealers. Representatives of the major building industries are invited to discuss their particular products. The Upson Company of Lockport, New York was selected to discuss the laminated fiber industry.

QUARTERLY STAFF MEETINGS HELP DEALER BOOST SALES

A quarterly meeting of the sales staff of the Dykes Lumber Company, New York City, to help them keep abreast of the latest developments in the industry has paid off in increased sales. Recently, Roy Walton of The Upson Company described the many features of the new Upson Ceiling Tile.
CLAY TILE...FINEST FRAMEWORK FOR FOOD SERVICE

Wherever food is handled, prepared or served, certain basic requirements for the surrounding surfaces must be met: maximum maintenance economy, extreme durability, utmost resistance to grease, food acids and cooking fumes... plus the handsome good looks that stimulate both employee morale and repeat customer business.

Clay Tile meets all these standards—as in this beautiful new clay tile cafeteria. Glazed tile will keep the walls permanently beautiful and easy-to-clean. Unglazed tile on the floor will carry heavy traffic indefinitely with minimum cleaning care and maximum wear resistance.

If you design, plan or build food service areas, you'll be rewarded by a fresh look at clay tile. Clay tile is proof against water, fire, staining and scratching. The increasingly wide range of clay tile colors and designs assures unique decorative possibilities for restaurants, cafeterias, diners, commercial kitchens and other areas.

Consult your Tile Handbook for technical information on types and sizes.

Tile Council of America, Room 3401, 10 East 40th Street, New York 16, N.Y. or Room 433, 727 West Seventh Street, Los Angeles, Calif.
Chief among the features of this design is the roof treatment, particularly the shed-type roof that extends over the bedroom wing. The combination of shed and gable roofs has been done very successfully here, giving the house unusual character. The window treatment is also unusual and gives the house personality. Louvers above the corner windows in bedroom wing extend to roof soffit and give ventilation to attic area.

The plan introduces a number of innovations that have become standard with this builder. The family room adjoins and becomes a part of the kitchen and is accessible from foyer, living room, garage and garden. It is the hub around which the life of the house revolves.

The garage, which is oversized, is planned as a multiple-use area. It can be used as a children’s playroom, hobby room, or workshop in addition to car storage. Its ceiling is covered with wood grain gypsum board, and walls are painted.

A good deal of thought has gone into the planning of traffic circulation and room arrangement. Living room can be neatly by-passed by going through family room, kitchen and utility room to get to bedrooms. The same applies to garage when coming from the other end of house.
One of the baths is strategically placed with doors leading to utility and bedroom to serve small children coming in from out of doors.

Ceilings of all rooms are flat with the exception of living and family room where portion of ceiling follows the contour of roof, balance being flat. Wood beams form a regular pattern on the ceiling of these two rooms.

Walls are of frame construction placed on an 8-inch concrete foundation. Four-inch thick concrete slab extends over entire floor area. Portion of front wall of house is veneer built up of Roman brick.

Balance of walls are cedar shakes. White aggregates are used in the formation of the built-up roof surfaces of house. Interior walls and ceilings are drywall with double thickness on ceiling.

The house is placed on a 90x144 foot lot. It sells for $36,000 including range and separate oven, washer, dryer, carpets, drapes for all windows and incidental items such as fireplace screen, tools, etc. Equipment and lot are listed by builder at $4,000 each, leaving $28,000 as the price of house.

Area of house, garage and entrance stoop totals 2,400 square feet: 1,810 for house, 550 for garage and 40 square feet for entrance stoop. Considering garage and stoop for estimating purposes at one half their area, the total would be 2,105 square feet. Reproduction would cost $13.30 a square foot.
## Quantity List of Materials

For American Builder Blueprint House No. AB 189

John R. Worthman, Inc., Builder

### General Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>House — Type</td>
<td>frame</td>
<td>1,810 sq. ft.</td>
</tr>
<tr>
<td>Area</td>
<td>18,100 cu. ft.</td>
<td></td>
</tr>
<tr>
<td>Garage — Area</td>
<td>550 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Cube</td>
<td>5,550 cu. ft.</td>
<td></td>
</tr>
<tr>
<td>Height taken for cube was 10 feet</td>
<td>178 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Porch — Area</td>
<td>242 lin. ft. — 3'0&quot; deep</td>
<td></td>
</tr>
<tr>
<td>Height taken for cube was 10 feet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Excavating

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trench for foundation</td>
<td>242 lin. ft. — 3'0&quot; deep</td>
<td></td>
</tr>
<tr>
<td>Chimney and column footings</td>
<td>1 — 3'0&quot;x10'0&quot;</td>
<td></td>
</tr>
</tbody>
</table>

### Cement Work

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations</td>
<td>725 cu. ft.</td>
<td></td>
</tr>
<tr>
<td>Concrete Work</td>
<td>2,800 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>4&quot; wire reinforced</td>
<td></td>
</tr>
<tr>
<td>Sidewalks &amp; Terrace</td>
<td>450 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Anchor Bolts</td>
<td>500 lin. ft. 1/2&quot; round reinforcing rods,</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>250 lin. ft. 1&quot;x24&quot; fiberglass insulation,</td>
<td></td>
</tr>
<tr>
<td>&amp; Terrace</td>
<td>2,800 sq. ft. 6&quot;x6&quot; #8 wire mesh</td>
<td></td>
</tr>
</tbody>
</table>

### Masonry

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>brick</td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td>200 sq. ft. Roman brick veneer</td>
<td></td>
</tr>
<tr>
<td>Window Sills</td>
<td>70 lin. ft. stone</td>
<td></td>
</tr>
<tr>
<td>Chimney</td>
<td>115 sq. ft. Roman brick,</td>
<td></td>
</tr>
<tr>
<td>Faux Lining</td>
<td>200 cu. ft. common masonry</td>
<td></td>
</tr>
<tr>
<td>Cap</td>
<td>20 sq. ft. 4&quot; conc.</td>
<td></td>
</tr>
<tr>
<td>Fireplace</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Throat and Damper</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lintels</td>
<td>200 lb. 1/2&quot;x8&quot;</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>24 lin. ft. ceramic tile in tub alcove</td>
<td></td>
</tr>
</tbody>
</table>

### Millwork

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows — Type</td>
<td>awning, double hung and casement picture window</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>aluminum and wood</td>
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</tr>
<tr>
<td>Windows Glazed including trim</td>
<td>3 — 40&quot;x80&quot;</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>3 — 40&quot;x64&quot;</td>
<td></td>
</tr>
<tr>
<td>2 — 2 lt. 32&quot;x16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 — 2 lt. 32&quot;x12&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 — 2 lt. 32&quot;x24&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 — 2 lt. 24&quot;x16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 — 72x48&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special of 4&quot;x4&quot; construction in garage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior Doors — Material</td>
<td>wood</td>
<td></td>
</tr>
<tr>
<td>Sash door 1 — 3'0&quot;x6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sash door 2 — 2'8&quot;x6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slab door applied mouldings</td>
<td>1 — 3'0&quot;x6&quot;</td>
<td></td>
</tr>
<tr>
<td>Garage Door</td>
<td>upward acting 1 — 16'0&quot;x7'0&quot;</td>
<td></td>
</tr>
<tr>
<td>Exterior Millwork</td>
<td>at garage 2 — 2'6&quot;</td>
<td></td>
</tr>
<tr>
<td>Latticework</td>
<td>7 specials</td>
<td></td>
</tr>
<tr>
<td>Louvers</td>
<td>7 specials</td>
<td></td>
</tr>
<tr>
<td>Interior Doors — including jambs and trim</td>
<td>5 — 2'4&quot;x6&quot;</td>
<td></td>
</tr>
<tr>
<td>2 — 2'4&quot;x6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 — 2'6&quot;x6&quot;</td>
<td></td>
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### Carpenter

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
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</thead>
<tbody>
<tr>
<td>Foundation Plates</td>
<td>240 sq. ft. 2'x4&quot;</td>
<td></td>
</tr>
<tr>
<td>Studding and Plates</td>
<td>28 — 2'x 4&quot; — 7'0&quot;</td>
<td></td>
</tr>
<tr>
<td>52 — 2'x 4&quot; — 12'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 — 2'x 4&quot; — 16'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>140 — 2'x 4&quot; — 8'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120 — 2'x 4&quot; — 10'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 — 2'x 6&quot; — 6'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 — 2'x 6&quot; — 14'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 — 2'x 6&quot; — 16'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 — 2'x 6&quot; — 26'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80 — 2'x 6&quot; — 8'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 — 2'x 8&quot; — 18'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 — 2'x 8&quot; — 20'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 — 2'x 8&quot; — 18'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 — 2'x 8&quot; — 8'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 — 2'x 6&quot; — 6'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Sheathing</td>
<td>3,750 b.f.m.</td>
<td></td>
</tr>
<tr>
<td>Side Wall Sheathing</td>
<td>1,300 sq. ft. insulating sheathing</td>
<td></td>
</tr>
<tr>
<td>Side Wall Materials</td>
<td>12 squares wood shakes</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>12 squares wood shakes</td>
<td></td>
</tr>
<tr>
<td>bottom wood beams 230 — 1&quot;x8&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>460 — 1&quot;x6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofing — Hardwood</td>
<td>185 sq. ft. oak block</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>290 sq. ft. cork</td>
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<tr>
<td>Exterior Material</td>
<td>450 sq. ft. plywood</td>
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<tr>
<td>Sheeting</td>
<td>108 — 1&quot;x8&quot;</td>
<td></td>
</tr>
<tr>
<td>Eaves</td>
<td>280 — 1&quot;x8&quot;</td>
<td></td>
</tr>
<tr>
<td>40 — 1&quot;x6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulation</td>
<td>2,000 sq. ft. insulation</td>
<td></td>
</tr>
</tbody>
</table>

### Sheet Metal

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gutters</td>
<td>145'</td>
<td></td>
</tr>
<tr>
<td>Downspouts</td>
<td>40 lin. ft.</td>
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</tr>
<tr>
<td>Flashing</td>
<td>1&quot;x8&quot;</td>
<td></td>
</tr>
<tr>
<td>Chimney</td>
<td>1&quot;x8&quot;</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>40 lin. ft. metal edging</td>
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</tr>
</tbody>
</table>

### Interior Walls

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area to be covered</td>
<td>7,000 sq. ft. drywall</td>
<td></td>
</tr>
</tbody>
</table>

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*This quantity list will be subject to variation depending on the common practices in various sections and municipalities of the country, the techniques of individual builders, the types of materials available locally and cost factors. The list published here is a suggested one, complete enough so that it can be used in arriving at a reasonably accurate estimate of the quantities and cost of materials that will be required to complete the structure. It was prepared by experts at the Edward Hines Lumber Co., Chicago.*
DESIGN NO. 189
AMERICAN BUILDER BLUEPRINT SERIES
DESIGNED BY

JOHN P. WORTHMAN, INC
215 W. LEITH ST.
FORT WAYNE, IND

SIMMONS-BOARDMAN PUBL. CORP., 79 W. MONROE ST.
CHICAGO 3, ILL.
decentralized living

This $21,490 house is from a community of 74 new houses being built by the Carnoy-Wolter Construction Corp. near White Plains, N. Y. Its plan is a direct response to a marked interest of buyers in what Hendrick Wolter calls “decentralized living.” Look at the plan and see how it works.

Sets of bedrooms are located at opposite ends of the house, one set having direct access to a rear entrance connecting with the garage. These rooms can be used by teen-age children, who can go and come without disturbing parental entertaining in the rest of the house; or these rooms can become headquarters for houseguests or in-laws who are living-in. Another advantage is that small children can occupy bedrooms 3 and 4 without being disturbed by activity in other parts of the house.

Heat is forced warm air, GE Airwall system. Standard-size Thermopane is optional for all windows.

Designed by Hendrick Wolter and Architect Henry J. Moger, Jr., this model also has versatility as one of its virtues. Without changing the basic layout it can be turned, flipped, use one- or two-car attached garages and breezeways, or switch fenestration.
This house is being featured this year in the building program of the Standard Building Company of San Francisco. It sells for $46,500 and is marked by the compact verticality so distinctively the product of building on the hillsides of the Golden Gate City.

Exterior finish is wood frame with cement stucco over wire mesh, with rustic redwood for the second story. Interior finish is one-half-inch gypsum drywall. Floors are oak throughout, parquet being used for living room, hall and dining room. Sound-proofing is a feature of walls and ceilings. Walls have blanket insulation, and ceilings are floating.
When confronted with the problem of a suitable design for a corner lot, Hill Barnett of Montgomery, Alabama uses this forthright house in brick veneer on concrete slab, with knotty cypress detail.

The house is placed diagonally on the lot, with the carport wing parallel to the side street. This gives backyard privacy and frontyard prominence on both streets.

The house has hardwood floors, plastered walls and ceilings, except for the living-porch, which has knotty cypress paneling on the walls. Dining room walls are papered, and living room walls are painted to match the background of this paper. Other rooms have both paint and paper.

The house is equipped with dishwasher, washing machine and custom-made wood cabinets.

The heating system is forced warm air with ducts which will accommodate the addition later of an air conditioning unit.
Both plot plan and design for this house are unusually good. The 60-foot lot has dictated placement of the carport (or garage) as a wing which projects at the front of the house. Yet this wing is handled in such a way that it does not detract from the mass of the house proper, but complements it. The flat roof is responsible for this happy result.

Service and play area is skillfully placed. Although the main living areas are oriented to the garden at rear, the front entrance has not been played down. The small front terrace, brick planting box under front windows, and the flagstone walk around planting area give importance to the approach to the house.

The round window in the utility room is cleverly made a part of the design for the front entrance. Note also the placement of the kitchen ventilating fan, where it makes use of the fireplace flue. Heating is by radiant coils in the slab.

The house proper has 1089.19 square feet. Designed by Edward A. Dwyer, it is being built by W. E. Edwards in Endicott, N. Y. He is marketing it for $11,900 with carport, or $12,500 with garage. The price includes a $1,000 lot. Variations in elevation on this plan are easy to do. Edwards has worked out three of them.
This plan for a big house has in mind the needs of a family for the right balance of space at various stages of its life. To start, the front "bedroom" on the first floor can be used as a den or all-purpose room.

Similarly, the bedroom and bathroom at the left end of the second floor can be unfinished at first, serving as storage room until another bedroom is needed.

Later, when the children go away to school, or marry, the second floor can be closed off, to be used only when needed. This eases the full-time servant problem.

L. M. Gundersen is using this plan to sell for $50,000 in the Shaker Heights district of Cleveland. The design is by George Howard Burrows, Gabriel and Hinman.

Siding is clapboard, with stone at the front. Heavy hand-split wood shakes are used on the roof. Thermo-pane clear glass windows face the garden from the main living room. The heating system is a winter air-conditioning unit to which a refrigerated cooling system can be added at a later date. Basement includes a recreation room with fireplace, plastered ceiling and painted walls.
getting the luxury look in a tract house

Heckes & Hurst, merchant builders in Sacramento, California, develop some 200-300 medium-priced houses a year in tracts of 50 sites or more. This model, designed by A. M. Dreyfuss, is from the firm's latest project and sells for $13,500. Its custom-built "feel" is a potent salesman. Here's a list of some of the fine points:

- Hardwood floors
- Full used-brick fireplace
- A dining room
- Both tub and tiled shower stall in bathroom, with a seat in the shower
- Wood wainscot in den
- Wood veneer on fireplace wall
- Lights in all closets
- Folding doors between dining room and living room
- Purchaser's choice of wall colors, tile, linoleum, wallpaper and exterior trim
- Large double garage

Heckes & Hurst placed 30 houses like this on sale in a 92-plot tract late last November. By Christmas, 44 houses had been sold, financed 50-50 between VA and FHA.

Copyright 1952, Heckes & Hurst
The L-shaped design makes possible a merging of terrace into a sheltered porch arrangement at living room end.

**plan for privacy**

This house was planned so that most of its rooms would face a paved terrace protected from public view. The house was placed so that the terrace side gets morning and early afternoon sun, and protection from the prevailing west winds. Priced at $23,500, the house was built by the David D. Bohannon Organization at San Mateo, California.
TWO HILLSIDE HOUSES
planned to take advantage of view

ARCHITECT:
Huson Jackson, H. Seymour Howard, Jr., Assoc.
New York City, N. Y.

BUILDER:
County Homes
Tappan Hill.
Tarrytown, N. Y.

House with river frontage has service units toward highway

FLOOR PLAN
BASEMENT PLAN

AMERICAN BUILDER
These two houses are part of a group, eventually to number about twelve, to be built in Yonkers, N.Y. They are particularly interesting because of their use of very steep sites, and the manner in which the houses have been made to conform to the general contour of the land. One house is located below the road, and the other is located above the road and approached from below. Both will have views of the Palisades and the Hudson River.

Both houses make excellent use of the river frontage by facing principal rooms in that direction. Bedrooms and living rooms are placed on upper level; the lower level, more than 50 per cent exposed, is devoted to playrooms, utility rooms, open terrace, and, in one house, a large garage. Extended roof overhang on living room side gives protection from the sun.

Houses are constructed of masonry for the lower floors and frame above. Both are placed on a 75x100 foot lot.
sale of contemporary styles surprises builder

DESIGNER:
William H. Weist, South Bend, Ind.

BUILDER:
Place and Company, Inc., South Bend, Ind.

Large storage carport and concrete drive is included with the contemporary model though it is an extra in the standard model. Outside storage area has 40 square feet.
Medium priced ($13,500) contemporary has three bedrooms, living room, kitchen, all-purpose room, and bath and a half. Exterior material is stained shingles. Color is a green-gray.

Selling 20 contemporary styled houses in 20 days in conservative South Bend, Indiana, proves there is a market if the package is right. The builders, Place and Company, were skeptical so, to be safe, they dramatized their 1952 conventional model in case the contemporary didn't go.

Sales were not hampered even though the new style sells for approximately $1,500 more than the company's conventional design. Many buyers changed their minds after signing purchase contracts for the '52 model. They wanted the contemporary. Cost difference can be attributed to:

1. Greater size — 112 more square feet
2. Larger lot
3. Storage carport and concrete drive

The new design has many features that industry leaders are including in their 1953 models.

An all-purpose room off the kitchen can be used for dining or family recreation. Purpose of this room is to include the housewife in the activities of the family while she goes about her daily chores.

The middle bedroom is convertible. The 10x16 room can be divided...
Merchandising?

The concern's method of visual merchandising has brought a somewhat negative answer from Andy Place, secretary. The builder has constructed panels in each room of the model house showing methods of construction and the materials used. In reply to its effectiveness Place stated, "The housewife doesn't give a hoot for the panels. What she wants to know is—How pretty is the house? What is the down payment? What does the kitchen look like? Does it have enough closets?"

Extra long (10x18 feet) bedroom is convertible. Room can be divided with accordion type partition. The builder includes framing for horizontal track but not partition by an accordion type partition. This enables the house to have either three or four bedrooms. As a children's room, the partition can be closed at night and opened in the day for a large play area.

As in all Place houses the windows are double glazed insulating glass, and plumbing facilities include a bath and a half.

The South Bend concern did not discontinue its present ranch type design in favor of the new contemporary. They dressed up the 1952 standard model and added improvements that would increase sales effectiveness in the 1953 market. Additions to the conventional model include $214 worth of material and labor with a sales price increase of $100. The new features are described below.

**improvements on '53 conventional**

**HEATED BATH TUB** is raised one inch off the floor. A warm air heating duct has been placed under the tub to warm it and the room.  
Cost .......................... $10

**ELECTRICAL ADDITIONS** include additional lighting fixtures in the kitchen and the bath. A smarter looking globe fixture was placed in the hall and a wall on-off switch was installed in the half bath.  
Cost .......................... $44

**MEDICINE CABINET** has sliding mirror doors and is copied from one used by Hutchinson and Carey of Denver, Colo.  
Cost .......................... $25

**BATH FIXTURES** have been improved. An aerator mixing lavatory faucet and trip lever wastes have been installed. A reverse flow toilet replaces a wash down style.  
Cost .......................... $10

**KITCHEN BASE CABINET** with a chopping block top has been added.  
Cost .......................... $10

**RAKE AND EAVE** overhang materials and labor add up to $100  
**TOTAL** ........................ $214

Closeup photo of rake shows construction. Ridge is extended two feet. Rake styling was copied from Al La Pierre in Seattle.
Rake roof and overhang is new to this year's standard model. Many interior extras have been added to spur sales.

Wood paneling and chopping block kitchen base cabinet are new. Extras such as these are believed to be what 1953 buyers will want.

Large medicine cabinet has sliding mirror doors. Cabinet is shop built by builder. Mirrors are shipped ready for builders' installation.

Bathtub in all 1953 models has heat duct placed under it to warm tub. Tub is raised one inch so warm air can also heat room.

Trade secret idea for exteriors is the use of striated plywood below windows in place of cedar shingles.

BRAND NAMES PRODUCTS USED

- American Standard plumbing fixtures and hot water heater
- Conco furnace
- Dexter hardware
- Firtex wall sheathing
- Formica kitchen counter surface material
- Kitchen Maid kitchen cabinets
- Lightolier lighting fixtures
- Majestic furnace
- Minneapolis-Honeywell heating controls
- Monarch doors
- National Gypsum insulation and wall board
- O'Brien Paints
- Ra-Tox folding doors
- Rubberoid shingles
- Sisalkraft building paper
- Walton plywood roof sheathing
do you know how to ORGANIZE YOUR BUSINESS?

PART 2

A PRELIMINARY AGREEMENT should be used with every sale

What do you do when the time has arrived to take the order? The preliminary sketches are fine, the client has decided the lot is just right, discussion seems ready to jell into something definite. It's the psychologically "right" time to get the client to sign something. What should this something be?

Use a Preliminary Agreement form which ties things down and provides a basis for getting out the working drawings. The form for such an agreement can be written for use with three types of contracts—firm price, fixed fee, or cost plus. Shown here is a preliminary agreement written on the fixed fee basis. The 5 per cent deposit required here is to cover the salesman's salary and office expense, advertising, specialty designing and floor planning, sketching, drafting, blueprints, specifications, contracts, cost-breakdowns, file preparation, rough final estimating, counseling and checking on new materials and prices, assistance in procuring a loan, checking site for utilities, soil conditions, topographical and boundary survey, engineering and decorating services—in short, everything done by the builder to assist the client in his building program.

All sketches should be held by the builder until this preliminary agreement is signed.

fixed fee contract

THIS AGREEMENT made at Fort Wayne, Indiana, this, day of..........................195........by and between John R. Worthman, Inc., an Indiana corporation, hereinafter called the Builder, and

hereinafter called the Owner, witnesseth, that whereas the Owner intends to erect a

hereinafter referred to as "Building and Appurtenances," on the following described real estate belonging to the Owner in Allen County, State of Indiana:

and the Builder has outlined, and submits herewith, tentative plans and specifications and gross estimate, which being approved by the Owner hereby, are now made a part of this preliminary agreement:

NOW, THEREFORE, for the considerations hereinafter named, the Builder and Owner agree as follows:

The Builder shall prepare and furnish to the Owner, within (30) days from the date hereof, building documents, including final Building Agreement, detailed specifications, plans, blueprints, and building data in accordance with the tentative plans and specifications which are a part hereof, and to provide Owner with one set of said documents for Owner's records together with such additional sets of said documents and data as may be required as exhibits should Owner want them for purpose of loan application. Builder shall also make necessary preliminary studies, attend necessary conferences with the Owner, and give all reasonable assistance to the Owner if he so desires in procuring said loan to finance construction. The original sheets for the final plans are to be kept on file by Builder.

Upon presentation of said documents, or within 60 days from the date hereof if a construction loan is to be obtained, (more time may be allowed if mutually agreed upon and the time of such extension endorsed hereon in writing by the parties hereto) the Owner agrees to execute with Builder the regular Building Agreement unless by reason of national emergency, governmental restrictions, or other conditions and causes beyond the reasonable control of either of said parties it is deemed by either party to be inadvisable to proceed further. Such Building Agreement will stipulate that the Owner shall reimburse and pay the Builder his cost for all labor and materials used in the construction of said Building and Appurtenances, including costs of permits, heavy equipment, and other special expenses, separate contracts, bond if any, and insurance premiums, as set forth in the regular form and in addition thereto the Owner shall pay the Builder as a fixed fee for its construction services and overhead expenses the sum of

Dollars ($.........) plus a sum equal to fifteen per cent (15") of the actual cost of additional work and changes, if any, in plans and specifications, from date hereof.
The Builder estimates that the time required for construction from the date same is commenced to completion to be a period of ___ days and that the estimated gross construction cost is ___ Dollars ($___). It is understood and agreed, however, that said construction period and building cost are very careful and detailed estimates, but they are not to be construed as guarantees. Should it become necessary or practical to do so, the Owner agrees to fully cooperate with the Builder in using alternate materials and equipment other than those specified and shown, and the Builder agrees to exercise good judgment, and to furnish efficient business administration and superintendence and to use every reasonable effort to secure the execution of the work in a sound, expeditious and economical manner consistent with the interests of the Owner.

The Owner herewith pays to the Builder the sum of ___ Dollars ($___), being 5% of the above gross estimate, the receipt of which is hereby acknowledged in advance of (and in addition to the Building Agreement) which will cover the cost of Builders preliminary work and services described herein: provided, however, if for any reason said Building Agreement is not executed and the parties deem it inadvisable to proceed further, said sum shall be retained by the Builder as compensation for the preliminary services, conferences, studies, and preparation of said building documents provided for in this preliminary agreement.

IN WITNESS WHEREOF, we have hereunto subscribed our names this ____ day of 195____.

JOHN R. WORTHMAN, INC., BUILDER

BY

John R. Worthman, President

owner

home trade-in guarantee

This is an ingenious and uncommon form which can be used in dealing with the man who very much wants to build or buy a completed new house but worries about disposing of his present house. The builder guarantees a minimum trade-in price (usually 85 per cent of appraisal) for the client’s present house, this amount to be applied on a new house to be built on the owner’s lot or a lot furnished by the builder. This will usually meet the required downpayment on the new house.

As things actually work out, the client will invariably sell the old house well before the required time to build the new house. Thus no actual trade-in or transfer of title need be consummated. Should the old house not be sold, the owner has the option to continue to own the two houses, or turn in the old one at a discount of approximately 15 per cent of the gross price.

THIS AGREEMENT, made this ____ day of ________, by and between JOHN R. WORTHMAN, INC., hereinafter known as Builder, and the Owners, WITNESSETH:

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

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

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

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

2. That the Owners will receive such sale value of said Property by way of credit upon said Contract, (minimum credit has been given for $_______)
3. The Builder and the Owners will both use their best efforts to sell said Property for the best price and upon the best terms obtainable, and the Owners agree to sell and convey to such purchaser as may offer the best price and terms for said Property, whether such purchaser is obtained by the Builder or by the Owners, provided the Purchase Price shall be not less than $ net to the Owners, and the terms of sale satisfactory.

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

5. In the event that no purchaser is obtained for said Property on satisfactory price and terms that will yield a Purchase Price to the Owners of not less than said $ on or before days from date hereof and prior to possession by the Owners, the Owners will have two options: Option #1—to convey to the Builder (subject to same conditions of sale under Article #6 hereof) the said Property in full payment of the credit provided for in said Contract as above set forth and up to the full sum of $: or Option #2—to pay to the Builder the sum of $ cash and retain title to said Property free of any further obligations under this contract.

6. Said Property, Lot , in , being a subdivision to the City of Fort Wayne, Indiana, shall be sold subject to the taxes due and payable in the of 19 and thereafter, all appurtenances, including screens, storm sash, shades, awnings, carpets, permanently installed mirrors, and linoleums, now used on said Property, to go with the Property, and on making such sale, the Owners shall furnish an abstract of title to the Property showing a good and merchantable title and free from all liens and encumbrances, excepting current taxes, and mortgage balance as heretofore set out.

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

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

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

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

JOHN R. WORTHMAN, INC.

By: ................................................................. Builder

................................................................. Owners

NEXT INSTALLMENT WILL APPEAR IN THE MAY ISSUE — THE BUILDER'S "JOB BIBLE"

plan books help the custom builder sell one-floor houses

Every custom builder collects sample plans which can be used as a starter in the discussions which lead up to a final selection by the client of an arrangement which meets his needs. John R. Worthman of Fort Wayne, Indiana, successfully uses the following system for organizing such plans.

Every one-floor plan can be reduced to one of three basic types. Prepare three large books of plan types, one for each type. Let "A" designate those plans in which the sleeping area is adjacent to the kitchen department. "D" will designate plans in which the sleeping area is divided from the kitchen by

Plans are slipped between cellophane envelopes inserted in large ring-binders. The open book is full of "AD" plans. "A" and "D" plans are kept in other two

living room and/or other rooms. "AD" is a plan in which the kitchen is both adjacent to the sleeping area yet divided from it.

Collecting and presenting plans on this basis save time when the client first comes into the office. What is his scheme of living? Does he insist that the bedrooms be separated from the kitchen department, or is he an "A" or "AD" man? This can be determined in a few minutes conversation. Then the builder can bring out the right plan book, and the job has been smoothly launched with a minimum of fumbling around.
HOW LONG WILL IT LAST?

The life of any product depends on many things. The way it's designed and engineered. The quality of its material. How it's made.

Every Ro-Way garage door is designed, engineered and built of fine quality materials—for a long life of dependable, useful, trouble-free service.

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Take Ro-Way construction...mortise and tenon joints both glued and steel doweled...sections rabbeted for weather-tight joints...millwork both drum and hand sanded...hardware both Parkerized and painted for maximum protection.

And Ro-Way materials. Fine west coast lumber carefully selected for quality. Heavy gauge steel hardware completely designed and fabricated on special machines in the Ro-Way plant.

Ro-Way built is—built to last. For a long, long life of satisfying service, specify Ro-Way Overhead Type Doors for all garages.

ROWE MANUFACTURING COMPANY
720 Holton Street º Galesburg, Illinois

MARCH 1953
moisture and condensation

This house is a ranch type with plastered walls, wood floors and basement heat. There are 18 inches of crawl space under the house at all points. It has been built about one year. I was called back by the owner who said the roof leaked. The plaster was set in one room although it hadn't rained or snowed for several weeks. On examining the attic, I found condensation forming on the underside of the roof batts. The walls of the house are covered with reflective insulation under rock, sheathing is vapor sealed, and ceiling is insulated with balsam wool. There are six vented openings under the floor joist. The hipped roof has seven vents under the roof edges and one at the peak of the roof. Indications are that most of the moisture is coming from the washing and bathing habits of the people. The space under the house seems damp. Which would be better, to cover the dirt under the house with asphalt paper or to nail the paper to the floor joist?

N. B. P., Effingham, Ill.

Past investigations have shown that a considerable amount of moisture enters where a crawl space exists under a house and where the dirt is not covered. The amount of moisture which may be given off from the crawl space is equivalent to approximately 100 pounds per 24 hours per 1,000 feet of floor. This is more than ample to cause excessive humidity conditions within the home which is supplemented by ordinary living conditions due to cooking, washing, etc. To correct this condition, a 45 pound layer of roofing similar to that used for the exterior of roofs should be applied over the entire ground surface of the crawl space. All joints should be overlapped and sealed with asphalt mastic. Likewise, the paper should fit snugly around the inside perimeter of the foundation and, if possible, mastic should be applied at these points. In order to alleviate the conditions immediately, I suggest that ventilation be provided in the living quarters. This can be accomplished by continually operating a kitchen ventilating fan until the moisture condition subsides. If a fireplace is available, the damper should be opened to increase the air circulation by infiltration through the windows. If neither of the preceding methods are possible, two windows at each end of the house to provide cross ventilation should be opened approximately one to one and one-half inches from the top.

Prof. C. E. Lund.
University of Minnesota.
Minneapolis, Minn.

fitting angular members

My problem is to fit the roof soffit around a circular column or supporting post where the beams come in on an angle on the column. The angle might be a hexagon, heptagon or any angle for that matter and the post could be off-center. I understand the principle of fitting around a square column. If possible, could you work the operation in sequence numbers.

V. K., Philadelphia, Pa.

Assume A is a given hexagonal column in plan and B a front view cut by a given plane x.y. If we number the corners of the column 1 to 6 and project the points of the column where they intersect the plane x.y., we establish the side view C. If it is desired to establish the shape of the column along the plane x.y., it is necessary to take an auxiliary view perpendicular to the plane. If the figures 1 to 6 are projected into such a plane, auxiliary (Continued on page 94)
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...modern heating equipment

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Completely automatic, fully-enclosed Reznor PACs are easily installed as single or group-controlled unit heaters that clean the air as they heat it.

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You can put it in the basement, utility room, attic or any crawl space. Reznor PAC, handsomely encased in grey-green cabinets, mounts on wall, floor or ceiling. 75,000 BTU unit takes up about 22" x 23" x 40" space. Bigger capacity units are slightly longer.

get the facts now about fast-selling new multi-purpose REZNOR PAC

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Please send installation book and catalog on the new PAC heater.

WORLD'S MOST ACCEPTED NAME IN GAS HEATING EQUIPMENT

MARCH 1953
view D is established. This method of projection can be applied to any plane cutting any shape of column. It is only necessary to establish a sufficient number of points and properly project them into the desired auxiliary view.

framing the roof

We want to build a school in units with two class rooms to a unit. Each unit will be 24x60 feet. We want a one way roof with the rafters running the 24 foot width with a four foot rise in roof. There will be a two foot overhang on the high end and five foot of overhang on the low end. Mahogany will be the wood used and we can get this in only short lengths of 12 feet or possibly 16 feet. For this reason I think it best to make some kind of a laminated rafter. Can you suggest the best style of rafter for me to keep the cost down? How big must this rafter be? The decking will be mahogany 1-inch tongue and groove with a 100 pound roll roofing applied.

W. D. A. Huntington, Ind.

Using a 1-inch t&g deck would mean a closer spacing of rafters—a maximum of 30 inches. With 30 inch spacing, rafters would have to be 6x10 inches. Using 1½-inch t&g deck and a spacing of four feet, the rafters would be 6x12 inches.

a smoke problem

Two years ago I installed a Coleman Blend Air Oil furnace and a hot water heater in my house. These two units are on the same flue. The chimney which is on the outside wall of house contains a double flue, 12x12 for fireplace and 8x8 for furnace. Each flue has a 25 degree offset. The fireplace is used only when the furnace is not operating.

Since installing the furnace and water heater the outside of the chimney is covered with soot. The furnace smokes continuously. The smell of gas is very noticeable outside. The inside of the furnace is always coated with soot. Since then I found that the chimney draft gauged less than four wherever it should be at least six. The chimney has been checked and no leaks were found. I have been told that the trouble is two units on one flue. Can you give me a clue to the soot trouble?

L. J. M. Van Buren, Me.

The test of the chimney draft with the description of the chimney, seems to prove that the fundamental fault is in the chimney. This is confirmed by the soot accumulations. For some reason the burners are not getting enough air to assure complete combustion. Soot is carbon in the hydrocarbon molecules of the fuel that is not burned, and the reason it doesn't burn is because it does not get enough air.

Assuming that the furnace and water heater each has a six inch smoke pipe connected together as shown in Figure 1 on the sketch. There are several things that can account for the trouble. First, when the manufacturer of heating equipment decides on the size of the smoke pipe to use, that decision is based on the requirement of the combustion apparatus. When these pipes are joined together as shown in Figure 1, it makes the six inch pipe running from the junction to the chimney carry the total products of combustion from both burners, whereas its size is only enough to care for one. Second, if the water heater pipe connects to the side of the furnace pipe at a 90 degree angle as shown in Figure 1, there's bound to be a great deal of turbulence due
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FBTFJ
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alias, "The Hinge that Won't Wear Out"

Description: Has flat button tips, which give hinge the clean-cut simplicity of modern
design. A hole in lower tip makes pin removal as easy as tapping a nail; saves time,
preserves finish on hinge and woodwork. For outswing exterior doors hinge may be
equipped with set screw in barrel to prevent illegal entry (specify NRP, non-removable
pin). Full-Jeweled® Ball Bearing assembly eliminates lateral as well as vertical wear;
with weight of door supported both ways on ball bearings, it is practically impossible
for hinge to wear out.

SPECIFY STANLEY FULL-JEWELED BALL BEARING BUTT HINGES on your next building job — you'll
be amply rewarded.

The most famous doors in the world swing on STANLEY HINGES

MARCH 1953
Double Action (Continued from page 94)

Dragshovel | ivi? sitar eae

running to the chimney and still further reduces its carrying capacity. If it is impractical to run the smoke pipe from each of these units directly to the chimney, then make the connection as shown in Figure 2. This will give a smooth flow of the products of combustion and the enlargement of pipe between the junction and the chimney will take care of both heaters.

In regard to the chimney, let's assume that fireclay flue linings are used. If so, what about the joints at top and bottom of each offset? It is often found that flue linings are set as indicated in Figure 3, where the joints are not mitred but are left square as shown at (A) in Figure 3. There is liable to be an opening from one due to another at this point. All flue linings should have their ends mitred equally as indicated at (B). Space is often left between the flue lining and the brick, shown at (D) in Figure 3. This permits air to flow through the loosely fitted joints.

To find out if there is an opening between flues build a smudge fire in bottom of furnace flue. (Damp excelsior or partly dried grass usually gives a very good dense smoke.) As soon as the smoke begins to flow freely out of the top of the furnace flue, cap it quickly with a piece of wood. If smoke comes out of the fireplace or flue it is proof that an opening exists between the two flues. A satisfactory draft cannot be obtained until the fault is corrected.

G. A. Voorhees,
Technical Secretary,
N.W.A.H. & A.C. Assn.
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MARCH 1953
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Write for free catalog illustrating many of the homes and buildings in the Service.
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Builders who are active in farm construction report that they are receiving valuable assistance from the Weyerhaeuser 4-Square Farm Building Service. It enables them to erect professionally planned farm buildings that give greater satisfaction to farmers, while the blueprints and accurate material lists make for easier, faster construction.

Weyerhaeuser developed this Service with the cooperation of experts in many fields of agriculture—animal husbandry specialists, crop men, farm structures engineers, home economists and experienced farmers and farm managers.

Out of their knowledge and experience have come two basic requirements which good buildings must meet to be classified as truly modern and efficient structures.

First, they must meet functional or use requirements in order to serve as ideal farm tools. Second, they must meet standards of durable, economical construction.

The 204 designs in the Weyerhaeuser 4-Square Farm Building Service meet the exacting requirements for buildings of maximum use value, nominal cost and enduring service. They meet the needs of modern farming— which is under increasingly greater pressure to reduce production costs, increase yield and improve quality.

The 4-Square Farm Building Service, with its scores of modern designs, is ready for your use in serving farm prospects.

We will gladly send, on your request, the 64 page book titled, "Modern Homes and Buildings For The Farm" which illustrates and describes many of the Homes and Service Buildings. We will also send you the name of the Weyerhaeuser 4-Square Lumber Dealer in your community who has available complete blueprints and material lists for all the buildings in the Service. Write our Builders' Division.

Weyerhaeuser Sales Company
ST. PAUL 1, MINNESOTA

MARCH 1953
how to organize
A PARADE
of model
HOMES

Get started now on plans for National Home Month. This story of how builders in Houston, Texas do the job is a pace-setter for other communities.

Last November, the Houston Home Builders Association, taking a cue from Milwaukee where the Parade of Homes originated, staged the first Parade of Homes in that city. Twenty builder members of the Association built 25 houses in a one-street project in one of Houston's middle-income subdivisions. A 26th house was built cooperatively with donated materials and given away free as a feature of the promotion.

All the houses were in the $10,000 to $20,000 range, were completely furnished down to the last detail by various decorators and furniture companies, with no two houses alike.

The venture was a rousing success, appealing to the public imagination as nothing else along the new home ownership line in Houston ever has. In the eight days of the Parade over 100,000 people visited the houses. One hundred and sixteen new houses were sold directly from the Parade models, and every Parade builder made invaluable contacts with future buyers. The Home Builders Association made $18,500, built up good will, and, at the close of the show, announced that the Parade of Homes would be an annual event.

Begun too late to be correlated with National Home Week in 1952, Houston's '53 Parade will be held during National Home Month.

Houston's outstanding Parade stands as a model of how-to-do-it for this valuable promotion idea, which can be used either as the whole or a part of a National Home Month celebration, depending on the size of the community.

Getting Going

Leadership for the Parade of Homes came from H. T. Fenderbosch, executive vice president of the Houston Home Builders Association. He had begun to think and plan for a Parade of Homes almost a year before the project was voted on favorably by the Association's directors. The go-ahead action by the directors came early in June, 1952.

Five months elapsed between this kick-off and the opening of the Parade on November 2. The land was acquired on July 8 and ground was broken on August 6. Thus all 26 houses were built, landscaped and furnished over a period of three months.

Fenderbosch had picked out 30 builders as prospects to participate in the Parade. He convinced 20 of them to build a Parade house. Now that the ice has been broken, Fenderbosch doesn't expect to have any trouble getting all the builders he will need for the '53 Parade.

Ten different committees were appointed to work on the various phases of the promotion. The two-man team of Fenderbosch and his
assistant in the Association, T. C. Brennan, Jr., held things together and pushed the program forward.

Parade Policy

The Parade was set up as a on-site project, in order to create the appearance of a finished street in a model community and to get smooth control of visitor traffic.

Each house was decorated and furnished by local firms. The builder bought the carpeting and drapes; the rest of the furnishings were loaned for the show’s run by the cooperating decorators.

Each builder drew for the lot upon which he was to build. Lots were set aside for other features of the Parade, such as stage for orchestra, concessions tent, sanitary facilities, Parade of Homes office, rest tent, and the prize house that was given away.

Each builder was responsible for his house and lot. The HBA was re-

MARCH 1953
This meant that no builder could deviate from the Parade rules with responsible for the Parade area as a whole. During the eight day run of the Parade, each house was theoretically the property of the Association. This meant that no builder could deviate from the Parade rules without receiving permission from the Parade director.

Each builder used his Parade house garage as a sales office. Posters, pictures and plans were displayed, and literature distributed. While each Parade house was for sale, the prime objective was not simply to sell 25 houses but to promote the latest construction methods and new home ownership generally. Most of the builders decided not to sell their Parade houses until later. The few who did sell during the Parade made it clear to the buyers that the houses were to remain open through the last day of the show.

The Parade area was fenced in and an entrance built. Facilities for off-street parking were arranged outside the area. Landscaping was uniform and the Parade area was adequately lighted for night showing.

Visitors' hours were from 2 to 10 p.m. daily. On the last day, the Parade opened at 10 a.m. to accommodate the crowds. An admission charge of 25 cents was made for all adults. Children were admitted free when accompanied by parents.

Visitor traffic was carefully controlled. One or more persons were on duty in each house at all times to greet guests, answer questions and route the crowds. The HBA hired police protection to help direct traffic and supervise the Parade area generally.

No cars entered the Parade once the show opened, except for maintenance purposes after closing hour each day. Every morning each house was thoroughly cleaned, inspected and made ready for the day.

The Budget

Houston's budget, both estimated and actual, is shown in the accompanying exhibit. Staging costs will be cut considerably this year by eliminating (1) orchestra and entertainment, (2) sanitary facilities for the public, (3) wired music, (4) luncheon meetings for the participating builders.

Acquiring the Land

The HBA sent letters to all Houston subdividers and realtors requesting bids presenting lots in blocks suitable for the Parade. The Association stipulated that such lots must be fully improved, with paving, drainage and utilities in, and should be located conveniently.

The bid accepted was for the required number of lots in a 1,600-lot subdivision known as Edgewood Addition. The Association paid $1,000 per lot, the appraised value being $1,050 for VA financing, and $2,175 for FHA. Thus the Association benefited on price and the subdivider benefited by the attention which the Parade drew to Edgewood Addition.

The builders agreed to purchase the lots from the Association at the VA appraisal value, thereby giving the Association a profit of $850 a lot. This was used to help defray staging costs.

The Association borrowed the money to pay for the lots from a local banking concern. The builders in turn paid cash.

 Builders' Fees

To participate in the Parade, each builder paid the following fees and agreed to abide by the regulations established for the Parade:

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<thead>
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<tr>
<td>Miscellaneous</td>
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| TOTAL | $950 |

Plotting the Parade Area

This work was handled by a planning committee composed of seven HBA members. Two were builders, the others were architect, engineer and land planning consultants.

Advertising and Promotion

A Houston advertising agency was engaged to take full responsibility for publicizing the Parade. The agency sat in on over-all planning, making recommendations from the viewpoint of public relations.

The give-away house—$13,000 plus $2,000 in furnishings—was the center of much of the publicity campaign.

<table>
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<tr>
<th>Service</th>
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<td>Preview and Opening</td>
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| TOTAL | $18,500.63 |

| Budget | $54,800.00 |
| TOTAL  | $35,972.14 |
| PROFIT  | $18,500.63 |

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<table>
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<tr>
<td>PROFIT 18,500.63</td>
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</tbody>
</table>
A Kohler enameled iron kitchen sink will afford the housewife important specific advantages at the vital work center of her home.

The Kohler enamel, acid-resisting clear through, has a sparkling, smiling hue and finish, easy to clean and clean-looking, no orange-peel porosity of texture.

This superior enamel is safeguarded from strain because it is fused to a strong rigid base of iron, which also muffles noise.

Integral enameled drainboards—on both sides if space permits—provide convenient and sanitary self-draining work areas.

Other advantages of Kohler sinks are a full-length ledge with built-in soap dish, Kohler Duostrainers to make the deep basins water-retaining, a sprayer controlled by thumb pressure for rinsing.

Illustrated are five Kohler sinks for building into counter-tops. Other popular designs in the Kohler line are available for use with metal and wood cabinets. Kohler chromium-plated fittings match the fixtures in style and quality.

Kohler Co., Kohler, Wisconsin. Established 1873
The secret of a successful Parade of Homes is to make each house, inside and out, look as though Mr. and Mrs. Young Homemaker were actually living there.

The Little Touches Make It Go

“In my opinion, the answer to producing a successful Parade of Homes,” Fenderbosch states, “is to make each home, inside and out, look as though Mr. and Mrs. Young Homemaker were actually living there.”

As an example of this: an open Bible and a pair of reading glasses were placed on a nightstand in one of the bedrooms of a Parade house. Two visitors wrote a note on an envelope and placed it beside the Bible. It read: “It is little touches like this that have made your show such a success.” Before the Parade was over, 100 people had added their names to the envelope.

Fine Points in Parade Management

Looking ahead in the light of 1952 experience, Houston has concluded that its 1953 Parade of Homes will:

1. Omit orchestra, wired music, and/or entertainment. These aren’t necessary and increase staging costs.
2. Sharply cut down on luncheon meetings for Parade builders. These aren’t as effective as might be thought, and add to costs.
3. Cut out the cost of building sanitary facilities for the public.
4. Provide free parking arrangements.
5. Omit the printed plan book covering the entire Parade. Instead, each builder is expected to get a supply of hand-out sheets describing his house only.
6. Not necessarily include a give-away house. This idea definitely has two sides, pro and con.
7. Not use commercial display or include carports. They tend to cheapen the show.

Houston found the furniture companies very hard to sell on cooperating in the Parade program, “but they were made to see the value of this kind of promotion and have unanimously agreed to participate in all future Parades.”
The Wise builder knows that wider shakes cost less to apply

It's important to lumber dealers that the average width of the cedar shakes in a carton is a mighty essential factor to their Builder customers. When an applicator drives two nails in each shake*, it just naturally takes fewer nails, fewer hammer strokes, less time . . . when he uses shakes that have a generous average width. He covers more wall area with less effort, saves labor time and money . . . gets a better-looking wall for the money. You get a better satisfied customer, more repeat sales when you stock Fitite Shakes.

We take the time, the trouble, and spend the money to screen out the narrow, hard-to-use shingles before they ever get to the Fitite Shake machines. How do we use the narrow stock? Sure, we use it to supply you with colorful sample fans, so you get a double benefit from our policy of giving the builder the extra value of wider shakes. Sound sensible? You try 'em. Compare Fitites for width, for color, for customer satisfaction. You'll be glad you did.

WHOLESALE ATTENTION: If you are interested in the sale and distribution of our quality line of pre-stained shakes, write immediately to:

COLONIAL CEDAR COMPANY, INC.
600 WEST NICKERSON STREET, SEATTLE 99, WASHINGTON
This handsome building is located on a generous corner plot on the western outskirts of Toledo, Ohio. Its design and orientation take full advantage of this fact, as the building is made to face the corner. Placing the building back from the street as far as possible (still leaving room for parking behind the building) gives a better setting and provides a pleasant view out across a wide front lawn. Placement also helps to isolate the offices and examining rooms from street noises. The building was designed by Karl Buckingham Hoke for use by four doctors. The plan gives each doctor his own suite of consultation and examination rooms, but with certain common facilities such as doctors' and nurses' rest rooms, waiting room, office, toilet rooms, etc. The individual suites branch off from these mutual-use facilities.

The entire building is insulated with Fiberglas, and Fiberglas acoustical ceilings are used throughout. Floors are asphalt tile laid over a concrete slab. A central air conditioning unit provides heating and cooling for all areas. The windows are Pella casements with roll screens, but due to the all-year air conditioning, they are kept closed most of the time. Each doctor's office has walls of birch plywood with built-in cabinets and shelves. Corrugated asbestos was used in several instances, as for counter fronts and partial screens.

The building has 47,000 cubic feet and 4,340 square feet. It was built at a cost of $65,000 exclusive of land, landscaping and furnishings.
When they see two bathrooms of Briggs Beautyware—
they’re sold!

Millions of readers of national magazines are familiar with Briggs Beautyware through attractive advertisements like this one. They’re finding out about Briggs quality—and they’re buying Briggs Beautyware!

Watch your prospects beam with approval when you show them two bathrooms of Briggs Beautyware in color.

These days, more and more home buyers are coming to realize that the second bathroom is indispensable to modern living. And when the second bathroom—as well as the first—is equipped with smart, modern Briggs Beautyware plumbing fixtures in one of the four Briggs colors, you’re headed for quick sales.

Every Briggs Beautyware fixture—whether of acid-resistant, porcelain enameled formed steel or handsome vitreous china—has a mark of quality that won’t wear off. Briggs fixtures, as well as tarnish-proof chromium plated brass fittings, look new longer!

Specify two bathrooms of Briggs Beautyware in color—even in medium or low priced homes!

Plumbers all over America are sold on Briggs Beautyware’s light weight, sturdy construction and ease of installation. The Briggs Safety Bottom bathtub is easy to handle, economical to install. Yet, the Briggs tub will stand up under the hardest wear. And the special under-tub framework holds it firmly in position. ©1953

BRIGGS MANUFACTURING COMPANY • 3001 MILLER AVENUE • DETROIT 11, MICHIGAN

TWO BATHROOMS - a must in every modern home!
A RAINBOW OF SOFT COLORS

Yes — Roddiscraft plywood offers almost countless natural wood colors —

Browns — all shades — light, medium and dark.

Light blondes—tawny blondes — yellow, pink and reddish cast.

Light or Dark Tones —

There's a great variety of tones in different woods and within the same woods — a shade to meet every decorating need.

With Plywood Paneling You Can Emphasize —

Vertical lines — Horizontal lines — or have a Parquetry pattern.

RODDISRAFT PLYWOOD PANELING

Background for Beauty

BACKGROUND can make or break the appearance of any room. Build Roddiscraft plywood paneling into your homes — show it in your furnished model home — it's that extra touch of extra value and beauty that helps move homes.

Soft natural wood colors blend easily with color schemes — do not restrict the use of color in draperies and furniture — do not inhibit change.

Roddiscraft paneling is a permanent one-job installation. It saves costly painting, papering, scrubbing, redecorating every few years.

Forecasters agree that home buyers will demand more value for their money in '53. Roddiscraft hardwood plywood paneling gives extra value — beauty now and savings forever.

Roddiscraft

RODDIS PLYWOOD CORPORATION
Marshfield, Wisconsin

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Cambridge 39, Mass. — 229 Vroom St. Marshfield, Wis. — 115 S. Palmetto St.
Chicago 32, Ill. — 3665 W. 41st St. Milwaukee 8, Wis. — 4601 W. State St.
Cleveland 4, Ohio — 2717 E. 75th St. New York 55, N. Y. — 920 E. 149th St.
Dallas 10, Texas — 2000 Midlin St. Port Newark 5, N. J. — 103 Marsh St.
Houston 10, Texas — 3403 Sabine St. St. Louis 16, Mo. — 3344 Market Road
Louisville 34, Col. — 345 Williams Ave. San Antonio 9, Texas — 727 N. Cherry St.
San Francisco 24, Col. — 720 Williams St. San Francisco 24, Col. — 345 Williams Ave.

108 AMERICAN BUILDER
Year-round air conditioning offers the operative builder an opportunity to place houses in the "most interesting" relation to each other and on the natural contour of his land. Prevailing winds can be ignored. One or two walls may be windowless or nearly so, obviating fear of invading the privacy of neighbors.

That's the creed of David H. Oman, designer-builder of the 80-unit Valley Brook development in Falls Church, Va. "Except for air conditioning," he reports, "three quarters of the 80 lot locations could not have been used without changing plans or raising price."

Designed around air conditioning, the Oman-Neal, Inc., enterprise is said to be the first such project to have received full FHA prior loan assurance. Oman claims the $26,750 price is $3,000 less than comparable conventionally heated homes around Washington.
Living room is 26 feet long; becomes 12 1/2 feet longer when accordion-type double door is opened to add guest room space.

Fireplace hearth is two feet above floor. Exclusive of brickwork, wall and ceiling areas are Novoply laminated wood panels.

In a program geared at 40 units a year, Oman has completed ten, is finishing another ten and starting a third group. Each is a contemporary, tri-level home of eight rooms and three baths in 1,800 square feet of space, plus carport, sundeck, two terraces and a balcony. Units are equipped with a Servel gas-fired forced air system providing 96,000 B.T.U.H. for heating and 3.3 tons of refrigeration (40,000 B.T.U.H.) for cooling.

Valley Brook's tri-level is a variation of the split-level type so popular farther north in New Jersey and Long Island. Difference is in position of the "split," which extends from side to side, not from front to back. Either facade can be front and the carport plan can be reversed.

Around the exterior is a ten-inch cavity wall with 1 1/4 inches of glass fiber insulation placed in the 2-inch air space. Inside face is the actual wall surface in rooms, with wax or paint finish. Thus cost of furring and other interior finish is eliminated.

Interior walls above brickwork, also ceilings, are of U. S. Plywood's Novoply in the first ten units. Other wood walls are planned.

The roof has a 4 in 12 pitch with 3 1/2-foot overhang; is covered with asphalt in a pastel shade.

Wide accordion-type doors separate living room from study on second level; kitchen from dining room below. When open, there is a 38 foot 4 inch sweep across the house on each level. Three bedrooms on the top level all open onto a house-long balcony off sundeck.

Of most unusual design is the return duct under the big window walls. Such windows are double-glazed and fitted in a 2x6 frame which is part of the structural frame. Centered against the 10-inch cavity walls, this frame is set two inches beyond the inside wall edge. Oak block flooring on the slab and the slab itself are not carried beyond the inside wall line, thus leaving a 2-inch slot the length of each window at its base. This slot is actually a vent, fitted to a return duct. The 2-inch-high base molding strip hides the slot from view.

Estimates of the Washington Gas Light Co., which serves the area set $300 as the year-round cost; with $160 for gas to cover heating; $80 for gas, $50 for water to cover cooling, and about $10 worth of electricity to operate thermostatic controls. The Servel system has no compressor, which means the cost of gas is higher and that of electricity lower than that for other systems. The utility acknowledges its gas rate is a bit higher than the national average, but claims this is more than offset by its policy of prompt, free service for the life of the equipment.

110 AMERICAN BUILDER
View across kitchen to breakfast room-utility area in background. Accordion-type door shut off adjoining 14x16 dining-recreation room. When door is opened, kitchen is center of 38-foot, 4-inch first level area across house.

Section through house, showing position of the three levels

Special 6-foot-high copper hood, with sheet metal lining and asbestos fill, simplifies fireplace construction and eliminates much brickwork. Damper is at top of hood, with damper handle extending through wall to hall of third level.

**BRAND NAME PRODUCTS USED**

- American Standard toilets and bidets
- Bruce black railing
- Crane bathroom fixtures
- Fiberglas insulation
- Fleetkote reflective asphalt roofing
- Formica
- Gate City awning windows
- Hobart dishwasher
- Korkkist hardware
- Libbey-Owens-Ford Thermopane glass
- Mengel African mahogany doors
- Modernfold doors
- Servel all-year air conditioner, refrigerator, 45-gal. "Copper-ball" water heater
- Thermador cooking top and oven
- U. S. Gypsum drywall
- U. S. Plywood Novopoly
- Waste King Pulverator
- Westinghouse Laundromat
This modern flat and shed roof design was built by J. F. Hyland of Champaign, Illinois, using modular framing methods. The design is one of many prepared for the Lumber Dealer's Research Council by the Small Homes Council of the University of Illinois.

To reduce costs, large size sheet materials were used without unnecessary trimming. Approximately 20 percent less framing lumber was used because of modular dimensioning.

Windows, long a modular stumbling block, correspond to the module increment. Utility sash ventilators are used in conjunction with fixed glass. The 30-inch wide units fit in a three-stud width of 32 inches without expensive crippling. Headers are placed below the top plate eliminating the tedious operation of placing the small top cripples. The modular framing method permits the use of precut lumber and tilt-up construction. This system speeds the job and reduces labor costs.

Door rough-ins are the only non-modular header openings in the structure. As three-foot doors were used, it stands to reason they would not fit in a 32 or 48-inch opening.

The three bedroom house has 992 square feet of living area. Bedrooms are held to a minimum size. House has ample closets. The garage is two feet wider than needed to accommodate outside storage items.

The floor plan shows the layout of the house. The garage and living area are clearly marked. The bedrooms and hall are also indicated. The shed and flat roof design has a screened service yard facing the street. Living area is to the rear. Siding is board and batten redwood.
Here, however, construction was simplified. The door header was carried a full 3-stud length or 48 inches. The side cripple was moved over to allow for the 36-inch frame. Double cripples were nailed to those studs which support the header.

Architects for the Small Homes Council planned the house for an appearance of spaciousness by using large glass areas. Other features include a screened service yard facing the street, living area to the rear of the lot, a kitchen-dining pass-through, outdoor grill and indoor fireplace wall.

Living room fireplace wall has built-up hearth. Windows in the living room are floor to ceiling units. Above is fixed glass, below are sliding units that provide ventilation. Front entrance is to the left of the brick partition.

Outdoor grill was built in fireplace wall. The area has a concrete deck for an outside patio. Shed rafters cover patio and attach garage to the house.

The garage door matches the vertical redwood treatment of the house. Front door has sheltered entrance.

Brand Name Products Used:
- Andersen windows
- Bruce flooring
- Celotex wall sheathing
- Delco furnace
- Donnelly fireplace damper
- Formica counter tops
- Frantz garage door hardware
- Goodyear vinyl flooring
- Hess bathroom cabinet
- Johns-Manville building paper and insulation
- Kohler plumbing fixtures
- Rheem hot water heater
- Schlage hardware
- Seidlitz paint
- United States Gypsum wallboard

(1) Window framing has header below top plate. This eliminates expensive top crippling. (2) Doorway is not modular framed due to the preference for 3-foot entrance doors. Header is placed over a 4-foot span and supported by double studs. Stud at the right of the frame is moved over to allow for the rough-in of the door frame. (3) Double studs are used at the extreme ends of the window rough-in. Cripples below sill are longer than usual and 16-inch on center. (4) Single stud supports header at mullion. Less framing materials are needed with this framing method. Strength is not impaired.
MODULAR PRINCIPLES

in saw practices

chapter 15—laying out an accurate saw table

By Griffith S. Clark

Consideration of saw practices must involve a complete relationship between design, fabrication and field operation.

In cases where 100 per cent of saw work is concentrated at the field location, mistakes are corrected where they occur. This may involve replacement of parts and cutting to fit at the site. Most of these individual errors are not costly in their own right, but they do involve wasted materials and labor. Since a replaced member seldom finds its way to proper reuse, this is also a waste. In other words, double materials and double labor have been expended.

When the scope of work involves partial or total off-site fabrication, the mistake can prove costly. One of the most successful operators checked the costs of field errors which occurred on his largest operation. This involved the construction of 5,000 houses using 11 different designs varying from one to three-bedroom units. There was a severe contractual penalty for failure to complete within a six-month period. Exterior treatment called for a variety of siding widths. The fabricating plant was eight miles away from the nearest approach to the site. Every stock of lumber and siding was precut and assembled in sections.

A single error cost $50! As the distance from shop to job lengthens, this figure increases. It is mandatory, therefore, that mistakes be kept to the very minimum.

Modular Method Cuts Errors

Modular coordination, if intelligently followed, eliminates the chance for most of these errors! In order to understand this statement some review is in order.

Previous explanations in this modular control series pointed out that all masonry elements should be

FIG. 1—Details of Section A-A through saw table shown on next page
designed in nominal 4-inch increments, and that their actual placement in the field must conform. It was also stated that the wood line, or the sill placement, which is the beginning of the structure, would be placed 3/16-inch in from the exterior face of the masonry, when using a shingle or siding exterior involving 8-inch foundation walls. When stucco exteriors, metal lath, self-furring nails and a 10-inch foundation wall are used, the sill would be set in 2 3/16 inches. When brick veneer and a 12-inch foundation wall are used, the sill will be set back 6 3/16 inches.

This indicates that all sill members will be in 4-inch multiples except those terminating in a right angle direction at the extremities of the masonry wall. The latter members will be 3/16-inch less than the 4-inch increment. From this point upward in construction of a house, all exterior framing will fall in the same place.

Whether a design is for basement or crawl space, box sills will conform to the overall mud sill dimensions. All intermediate sill members will be in exact 4-inch increments, and terminating pieces will be 3/16-inch short of the module.

Girders rest in pockets within the masonry wall four inches in from the exterior face of the wall or on bonded masonry pilasters within the wall itself. It makes no difference whether it is eight, 10 or 12 inches thick; the similar face-to-face dimension will result in 4-inch multiples.

Joists which rest on the girder will butt, not bypass, and are in 4-inch increments. The same applies to the doubled joists, called trimmers, around all openings. Headers or right angle members to which the tail beams or short joist members are attached are cut to the inside faces of opposing joists, which means they are 14 3/4 inches long if between two adjoining joists, or this length plus 16 inches for each additional joist replaced.

(Continued on Page 116)
Wall section plate lengths will be in 4-inch increments or 3 16-inch less as are mud sills. When the section height is 5 feet 1 1/4 inches, the studs are 7 feet 10 inches. Lintels over openings and sill headers below are in 2-inch increments and are six inches longer than the sash or door size. Window jamb studs are four inches longer than the sash height. The sill cripples are 1/2-inch short of their nearest 2-inch dimension. When a 6-foot 8-inch door height is used and the heads of all windows and doors are in line, the head cripple will be 9 1/8 inches when a 2x4 lintel is used. The door jamb studs will be 6 feet 9 5/8 inches.

Sixteenth Inch Accuracy

This brief review reveals that certain procedures are in order at the saw table. Using the 4-inch module, certain fractions recur when the same condition repeats itself. These are always fractions of an inch. In carpentry, 1/16 inch is the smallest fraction observed. Therefore, saw operation must guarantee accuracy within a 1/16 inch tolerance. With these facts in mind, the problem of devising a saw table to produce these results is relatively simple.

The saw bench shown in plan and elevation in Figure 2 will operate successfully with either 2-inch or 4-inch controls. The 3-inch control will require different stop blocks, but these can be used on the same table.

Type of saw to be used must be considered first. Whether it is the swing, table, bench cut-off or radial type, passage of the saw blade across the table must be at 90 degrees with the backstop. All cuts must be accurately square, which requires that both the saw table and the bench be in the same place. To do this, first level the saw bench and make the table conform. Then stretch a line exactly parallel to the backstop of the table and make the backstop of the table exactly parallel to that of the bench and to the line. Of course, the table must be built of substantial material and well braced.

Starting Point for Marks

After the table has been attached to the saw bench frame, tack a 2x4 about one foot long in the path of the blade. Draw the saw across, cutting this piece to get a zero starting point for measurement. Using this as a starting point, proceed with a hand square and steel tape to make 4-inch markings on the back-stop for a distance of 13 feet.

Direction of these dimensions is governed by two factors: 1. hand of the operator (either right- or left-handed) and 2. the direction of flow of materials from source to use. In this instance, consider the sawyer to be right-handed and the material flow to be from right to left. Then, the zero location will be on the left face of the saw cut.

The backstop should be high enough to form an effective stop against the centrifugal thrust of the blade but low enough to remove a 2x4 flat without catching the fingers of the operator or helpers. It should also be furled off from the table to provide an effective spillway for sawdust and drips.

Stretch a chalk line three inches from the inside face of the backstop and mark clearly on the table. With a steel tape, mark accurately on this line every 2-inch dimension, starting with the first dimension beyond the saw bench. (Because of the metal frame and bolts of attachment, only bore through the saw bench for particular stops, principally the one for cutting head cripples.)

After these marks are made, outline with a sharp center punch and then drill with a 3/4-inch auger bit at right angles to the table and perpendicular in all directions. If these marks are drilled without punching, the differences in grain structure of the metal frame and bolts of attachment, only bore through the saw bench for particular stops, principally the one for cutting head cripples.)

FIG. 3—Enlargement of plan detail B. the area encircled in plan of Figure 2

(Continued from Page 115)
HOMASOTE COMPANY

HOMASOTE COMPANY, Trenton 3, N. J., Department 57C

Send detailed, illustrated literature on all Homasote-Nova products

Have representative contact us

Name: __________________________________________

Address: _______________________________________

City & Zone: __________________________ State: ______

My lumber dealer is: ___________________________

MARCH 1953
“EVERYTHING HINGES ON HAGER!”

C. Hager & Sons Hinge Mfg. Co. • St. Louis, Mo.
Founded 1849—Every Hager Hinge Swings on 100 Years of Experience
the wood will cause a serious deviation and result in inaccuracies. The center line of every other hole will coincide with the modular marks on the backstop. Mark every foot on the backstop with a steel die and fill the resulting depressions with black paint. Due to its density and usual evenness of grain, poplar makes an ideal material for the table.

**Positive Stops Save Time**

Various devices have been used for stops: C clamps holding a block to the table or backstop being the most common. But in the adjustment of this clamp, the sawyer will make the original attachment, nick a piece of lumber of the saw, and then stop and check the dimension before he proceeds to cut any number of pieces. During this time, the helpers are idle. Also, if extreme caution is not used in placing the uncut members, the continual jar against the stop will cause such a stop to move. As cutting proceeds, this would mean that the pieces would gradually become longer. To guard against this means continuous checking against a template at periodic intervals by the sawyer or a helper. No matter who does the checking, the flow of materials is stopped. If the average time required to check is one minute, and five checks are required during the operation and four sets are made per day, the total wasted time for a sawyer and two helpers is one hour.

Such waste can be avoided if stops are made as detailed in Figure 3. Use a 2x6 made of well cured oak. Each stop should be cut 14 inches long and the $\frac{3}{4}$-inch holes bored four inches apart, exactly in the center of the lengthwise direction and two inches on either side of the crosswise center line. This allows ample stock to trim later to the exact dimension. Insert the $\frac{3}{4}$-inch dowels and glue well. Kerf the exposed ends of the dowels with a fine-tooth crosscut saw and chamfer the end so that these dowels will fit snugly in the $\frac{3}{4}$-inch holes in the table.

A typical plate block and stud block are shown in Figure 4. Note that there are two wood screens in either end of the block which are countersunk and used for 1/16-inch adjustments. They are also used to compensate for different sets in the saw when resharpened.

**3 Stops for All Framing Cuts**

In making the blocks, the plate stop will fall exactly on a 2-inch line; the other end, when reversed, will extend 3/16 inch beyond the 2-inch line. This stop will cut all mud sills, box sills, joists, section plates, studs, lintels, sill headers and the window jamb studs.

Another stop should be made which cuts $\frac{3}{4}$-inch less than 2-inch multiples. This will cut all intermediate headers, while the other side should cut $\frac{1}{2}$-inch short of the 2-inch measurement, which will cut the sill cripples.

A third stop extending $\frac{3}{4}$-inch beyond the 2-inch line will cut the head cripples, while the other end should extend $\frac{3}{8}$-inch beyond the 2-inch line to cut jamb studs for doors.

Thus, these three stops with six fractional dimensions will cut all the framing members in the first floor framing, walls and first-story ceiling of a house. They can be identified by letter or number. The system of scheduling should include the dimension and length of stock, the stop identifying symbol and the position of placement.

**NEXT ARTICLE IN MAY**

will consider use of the saw along modular principles to turn out odd cuts, compound mitre cuts and roof rafter notching.
ANNOUNCING ONE OF BUILDING PROMOTIONS

THE BETTER HOMES AND GARDENS READERS’ CHOICE HOME
To be erected by top builders all over America

In the September issue of Better Homes & Gardens, the story of "the house our readers designed" will be dramatically announced to 334-million reader-families.

From past experience, we know how promptly and enthusiastically these readers will react to this newest BH&G Five Star Home. (They spent $88,000,000 in construction costs alone on a previous one!) And now, they have more reason than ever to spend more than ever on this new one!

10 Years of Study and the Tastes of 3-1/2 Million Families
From 1942 to 1952, many changes have taken place in home design preferences. But all of them have centered around a definite trend away from the traditional and toward the functional. Slowly, yet irresistibly, the American family indicated that it wants home design to be tailored to fit its new needs and activities, rather than fit its own activities into old concepts. BH&G anticipated this trend in 1944 by launching an editorial series called "How will you live tomorrow?" In the years that followed, this series provided a basis for constant research into the changing tastes of America. Finally, in 1952, the time came for a crystallization of these ideas. John Normile, Building Editor of BH&G, arranged a panel session with a group of intelligent couples in various age and income groups, each of whom were planning a new home. A careful analysis of this session was blended with the results of our 10 years of research—and the result was:

The Better Homes & Gardens READERS' CHOICE HOME
This home, to be known as Five Star Home No. 2309, is a basementless house with three bedrooms. It has several notable features such as a butterfly-type roof, a large play area for children just off their sleeping quarters, large glass areas, complete segregation of living and sleeping quarters—to mention just a few. With the two-car attached garage, the house has 2,049 square feet; without the garage, it has 1,629 square feet.

Special BH&G Nationwide Promotion Timed to Tie in with "National Homes Month" This September
Not only will BH&G "break" this story in its September issue (on sale August 26), but it will provide a host of other promotional aids to all those who participate in the building or furnishing of the Readers' Choice Home. These helps include:

1. Working drawings and material lists.
2. A brochure, "How to promote BH&G Five Star Home No. 2309 in your community."
3. Five newspaper layouts.
4. Layout for a 24-sheet billboard.
5. Sign layouts to be used at the homesite.
6. Direct mail pieces for builder's prospect list.
7. Glossy prints of the home exterior and interior.
8. Radio spot announcements.
9. Special display cards for placement by builder in select locations.
11. Suggested sign for listing BH&G-advertised products used in building the home.
12. Ten copies of the September issue of BH&G.
13. Local publicity contacts by BH&G representatives.
14. If home is furnished, BH&G will make a mailing at cost to all subscribers in builder's area, calling attention to the editorial and to the model home in their community.

How the Builder Will Tie in His Efforts
First, of course, the builder must finance and build the home. Detailed drawings will be supplied by BH&G. If the house is to be furnished (furnishing is optional), the builder is asked to work with any department stores in his area which maintain a BH&G Home Planning Center. As for promotion, the builder is expected to do 5 things:

1. Use displays in financial institutions, department stores and in other businesses, wherever possible.
2. Advertise the opening of the Readers' Choice Home with a minimum of a full-page ad in his local paper.
3. Make mailings to his prospect list.
4. Keep the house adequately staffed during the hours when the house is open.
5. Whenever possible, use products advertised in BH&G.

Note: A full-page ad in the September BH&G will list the names of the builders and the cities where each of the homes will be built.

Get Full Details Now
Be Ready to Share in This Promotion in September
If you want to take advantage of all the promotion—and the pretested salability of the Readers' Choice Home—write to us immediately for the details.

This promotion is being offered to only one builder approved by Better Homes & Gardens in an area.
THE MOST IMPORTANT EVER LAUNCHED

PARTIAL LIST OF TOP BUILDERS WHO HAVE ALREADY SIGNED TO BUILD THIS HOME

C. R. Byrd
Birmingham, Ala.
W. S. Daniel Co.
Little Rock, Ark.
Richard Ronne
Sacramento, Calif.
H. M. Sloan
Colorado Springs, Col.
Lester Harris
Cheshire, Conn.
William Trude
Chicago, Illinois

Frederick Falender
Indianapolis, Ind.
William R. Bartlett
Michigan City, Ind.
Andrew Place
South Bend, Ind.
Kenneth Stowell
Wichita, Kansas
George C. Martin
Lexington, Ky.
L. P. Smith
New Orleans, La.

Miller Homes
Detroit, Mich.
Robert Gerholz
Flint, Michigan
W. R. Collinson
Midland, Michigan
Harold R. Rosendahl
Minneapolis, Minn.
Floyd Kimbrough
Jackson, Miss.
Don Drummond
Kansas City, Mo.

Burton W. Duenke
St. Louis, Missouri
John R. Wilson
Greensboro, N.C.
John R. Wilson
Raleigh, N. C.
Eugene Resar
Elyria, Ohio
Edwin Sandberg
Portland, Oregon
Richard Goodwin
Elkins Park, Pa.

Frederick Falender
Indianapolis, Ind.
William R. Bartlett
Michigan City, Ind.
Andrew Place
South Bend, Ind.
Kenneth Stowell
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Raleigh, N. C.
Eugene Resar
Elyria, Ohio
Edwin Sandberg
Portland, Oregon
Richard Goodwin
Elkins Park, Pa.

N. P. Ninneman
Harrisburg, Pa.
Wallace Arters
Lima, Pennsylvania
Frank Sharp
Houston, Texas
Al Balch
Seattle, Washington
M. K. Stoltz
Spokane, Washington
LaVerne Burmester
Janesville, Wisconsin

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simplicity

a few parts...
...a few minutes

WASHINGTON LINE

Three types of bearings available.
Ask your dealer for more information or write to:
WASHINGTON STEEL PRODUCTS, INC.
Dept. AB-3, 1940 East 11th Street, Tacoma 2, Washington
construction know-how cuts cost
in this fast selling Florida project

To deliver this three bedroom, two bath house for less than $10,000, the builder came up with many cost saving construction practices. Its 1,170 square foot area figures at $8.46. Sales for the builder, Brolliar Construction, Inc., of Fort Lauderdale, Florida, far exceed the rate of construction. The low price tag of $9,990 plus its value-packed features have made this house one of the fastest selling in South Florida.

One floor plan is used throughout the project. Exterior variations are achieved through site orientation and color. As most houses are not set square to the lot lines, the builder designed a one piece aluminum channel template. When the perimeter of the house is marked, grade stakes are set and a dozer pushes out for the footings. The footing forms are specially designed 2x10's with a U-shaped, welded clamp supporting the 2x10's. Each board is numbered and has a loose pin hinge for faster placing. Two nail holes in the U-clamp allow for adjustments. These forms are set with an instrument. No batter boards are used on this job.

After the footings have been poured, two courses of concrete block are laid to bring the slab to correct height. Clean sand is used for the under slab fill and puddled before the slab is poured. The under slab treatment calls for a two ply moisture barrier, 6-inch square #10 mesh, and a waterproofing compound in the concrete. The slab is given a swept finish and, after a day's curing, a 3/4-inch terrazzo topping is poured. When the terrazzo
has cured, it is finish ground before any further construction begins. The polishing is done after plastering is completed. To hold terrazzo costs down, the builder uses only a small amount of imported Italian marble chips. Bulk of chips used are from Georgia.

The concrete block side walls are laid up after the terrazzo operation. First, before the roof is erected, the interior partitions are tipped into place. The roof is standard framed with every other rafter tied into the poured lintel. The roof is a 15-year, built-up covering with crushed gravel topping. Buyers can obtain a cement tile roof, either barrel or flat tiles, for $280 additional. The exterior walls of the house are stucco.

A screen of matchstick bamboo separates the partitionless living area into kitchen-dinette and living room. The screen operates on a circular track attached to the ceiling. Closed, it blanks out the kitchen from living room view. The track is purchased locally by the builder for $54.

Two baths, one with a tub and the other with a shower, are within five feet of the same stack. The baths have ceramic tile wainscoting around the tub and fixture wall. The upper portions of the walls are plastered. Baths completely tiled are an extra.

Floors throughout the house are terrazzo; walls and ceilings are plastered. A wall furnace supplies the heat.

<table>
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<th>Breakdown of Costs per House:</th>
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<tr>
<td>Lot</td>
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<td>Slab and terrazzo</td>
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<td>Material</td>
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<td>Overhead &amp; sales</td>
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<tr>
<td>Total</td>
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Extras available are:

| Carport                              | $600   |
| Colored plumbing fixtures            | 60     |
| Cement tile roof                    | 280    |
| Additional tile in bathrooms        | 150    |

Machine troweling is used for the sidewalk operation. Backfill and grading is done with this Bucyrus Erie dozer. Materials are hauled in light trailer pulled by Jeep. In background can be seen a Jeep truck with hoist.
Unique feature is the matchstick bamboo curtain to separate kitchen-dining area from the living room. Guest closet is to the right of the curtain.

**BRAND NAME PRODUCTS USED**

- American Standard plumbing fixtures
- Floridale folding screen
- Gate City interior doors and kitchen cabinets
- Lawson bath cabinet
- National Tile clay tile
- Rheem hot water heater
- Schlage hardware
- Sherwin Williams paint
- Thompson wall heater
- Ualco jalousie windows and exterior doors
- United States Gypsum lath

Workman is applying brown coat of stucco to block. A second coat followed by two coats of paint finish the exterior.

Two types of carport can be added to the basic one-plan house. Driveways are graveled. Cost of the carport is $600. The barrel tiled roof adds $348 to the cost of the house. The living room has cross ventilation which builder claims takes the place of an open screened porch. Jalousie windows are used throughout the house.
Don't be a Door-Keeper!

...SPECIFY DOORS YOUR CUSTOMERS WANT

...DOORS WITH THESE 2 FAMOUS NAMES

Don't get stuck with doors you can't use to build your reputation...and to help sell your houses quickly at a profit.

Feature the doors with the famous Weldwood® and Mengel names...doors that represent highest quality at rockbottom prices.

Both come in a broad range of sizes...in a wide variety of fine decorative hardwood faces, including birch, oak, Korina® and Mahogany.

The Weldwood Staved Lumber Core Door is beautiful in appearance...and is extremely durable.

Its convenient, easy-working features make it a cinch to hang from either side...and it is especially adaptable to custom-made lights and louvres. All hardware goes on it quickly, easily, permanently.

All bonding is done with 100% waterproof phenolic glue, so that it is always safe to install Weldwood Staved Lumber Core Doors for either exterior or interior use.

The Mengel Hollow Core Door is another well-known favorite...using a construction tested by years of service. It has proven itself on hundreds of thousands of installations...meeting every demand for a beautiful, durable interior flush door that meets budget prices. Remember, too, you can buy genuine African Mahogany Mengel Doors at less than the price of birch!

Recommend either door for satisfied customers.
PRODUCT NEWS from AMERICAN-Standard

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

MAYFAIR SUMMER AIR CONDITIONER. This self-contained residential cooling unit mechanically cools and dehumidifies the air... quietly, uniformly, economically. It is designed for easy connection to forced warm air heating system (using same ductwork) to form a year 'round home air conditioning installation.

NEW DRESSLYN LAVATORY-DRESSING TABLE. This handsome unit is compact, yet spacious. The cabinet is made of moisture-resistant wood finished with enamel; the lavatory is genuine vitreous china... both are available in white and 20 harmonizing color combinations. Counter top and splash back are enameled steel.

MAGNE-FILTER AIR CLEANER. Designed for easy installation in the return duct of any winter or summer air conditioning system, the Magne-filter is a dry type electronic air filter that traps even the smallest dirt particles, removes pollen, air-borne bacteria, dust and smoke from the air.

AMERICAN-STANDARD DISPOSER. A work-saving partner for famous American-Standard sinks, this quiet-operating disposer is also ideal for modernization as it can be easily fitted in any sink with standard drain opening. Has reversible, double-edged shredders of rustproof chrome steel, and unique safety top control.

American-Standard
Dept. AB-33, Pittsburgh 30, Pa.

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

☐ Mayfair Summer Air Conditioner ☐ Magne-filter Air Cleaner
☐ New Dresslyn unit ☐ American-Standard Disposer

Name...
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Serving home and industry

MARCH 1953
How to use INSULATION

*Fiberglas is the trade-mark (Reg. U. S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with fibers of glass.
to help sell houses

All insulations keep heat in or out. But this one gives you an important sales plus as well!

Don't misunderstand us—An insulation must be an efficient heat barrier. That's its job.
Insulation should also be sanitary, fire safe, permanent, non-settling and easy to install.
On all these counts, of course, we can prove to your satisfaction that Fiberglas Insulations give you more for your money. That's why they are so widely used in today's refrigerators, ranges, aircraft and other products.

The big reason it pays you to standardize upon Fiberglas Insulations, however, is something else again. Particularly this year of all years.
Fiberglas is the insulation that helps sell the house!
Fiberglas Insulation gives you selling advantages unmatched by any other insulation!

First of all, Fiberglas is widely known, widely accepted.
Continuing national advertising—in home magazines and other media—has carried the Fiberglas story to millions of home-hungry families.
Take "Arthur Godfrey Time", for example. Over one of the most extensive networks ever to carry any program (32 TV stations, 186 radio stations) CBS's super-salesman explains the superior characteristics of Fiberglas to over 12,000,000 viewers and listeners...week in and week out.
In other words, to nearly all your prospective buyers, Fiberglas has become a sure sign of comfort, economy and quality construction.

So far, so good. But Fiberglas goes still further, provides you with the materials to "cash in" on this acceptance. Signs to identify your "Fiberglas-insulated" homes, pamphlets to explain the comfort-making and fuel-saving benefits of insulation to your prospects, insulation warranties for your buyers, suggestions for demonstrating Fiberglas in your model homes, suggestions for featuring Fiberglas in your project advertising.

Reliable sources of supply. The five national distributors of Fiberglas Insulations are leaders in the building materials industry. Their jobbers and dealers are experienced and dependable, able to help you with sales and construction problems.

May we suggest that because every material going into your homes in 1953 must help you sell, it is now Time To Take Another Look At Your Insulation Specifications. For 10 specific suggestions on how Fiberglas Insulations can help you sell more houses, send for this free brochure—today. Write any of the five distributors listed above—or Owens-Corning Fiberglas Corporation, Dept. 62-C, Toledo 1, Ohio.

is in your life...for good!
Alert builders are increasingly aware that lighting can be treated as an important element in the design of a house, adding beauty and hence salability. Lighting as a design factor should be considered as a basic part of the electrical system for any house.

Electrical power companies often have on their staffs home lighting experts who work closely with builders in recommending proper lighting and wiring layouts. Such a service is the Home Lighting Department of the Columbus and Southern Ohio Electric Co., headed by Blanche Waggener. Miss Waggener and her staff worked out the lighting plan shown here, for a house built speculatively by J. Mack Stewart in Columbus, Ohio.

Special emphasis was given to individual circuits and outlets for electric range, disposer, dishwasher, automatic dryer, bathroom heater, heating system and allowance for at least one future circuit. Other features recommended were kitchen exhaust fan, special hanger outlet for clock, weatherproof convenience outlets, wiring for outside flood lights at front and rear of house, and wiring for valance lighting over windows.

**Valances Make for Good Lighting**

The full-length lighted window valance in the living room of the Stewart house more than proved its worth.

---

Let wiring and lighting help sell the house by adding beauty to function.
in buyer-appeal. So did the valance lighting over dining room window. A concealed fluorescent strip behind the valance shield throws a soft and pleasing wash of light over drapery folds, accenting fabric texture and color freshness. Valance lighting also gives additional general illumination by spreading light upward across the ceiling. Valances come completely wired, are easy to install and often have their own traverse track for draperies.

The dining area is dramatized by a Starlight adjustable beam pin-point spot over the dining table. This highlights polished wood and the gleam of table-set-
tings as light falls from the recessed ceiling location.

**Kitchen is All-Electric**

Illumination for the cheerful yellow and white kitchen is provided by a Lightolier Sightron center fixture in the ceiling, with auxiliary lighting from recessed light over the sink, shielded fluorescent light over the range, and fluorescent lighting built under the cupboard for better see-ability at work counter. The kitchen is made complete with a Nutone ceiling exhaust fan and hanger outlet for electric clock.

**Lighting Pattern**

**Kitchen**
1. For good general lighting: a shielded close-to-ceiling fixture using two 25-watt fluorescent tubes.
2. Sink lights: a rectangular recessed box using one 150-watt lamp bulb.
4. Range light: a 40-watt fluorescent tube, with plastic shield.
5. For breakfast and laundry section: large shallow square fixture of frosted glass using four 40-watt lamp bulbs.

**Living-Dining Area**
1. Virden valances in two 40-watt lengths and one 20-watt length were used at the large front window. Window at dining end has valances in two 25-watt lengths.
2. A Starlight adjustable beam pin-point spot is recessed in dining area ceiling over table location. This uses lamp G-16-1/2, 75/100 watt-bayonet base.
Now...RUSCO HORIZONTAL SLIDE Tubular Steel Windows!

New Addition to Prime Window Line Makes Ideal Treatment for Added Wall Space, Bedroom and Bathroom Privacy, Above Sinks, Etc.

The F. C. Russell Company has now applied the proven engineering principles of its widely-accepted vertical-slide Prime Window to a new line of Horizontal Slide Windows. These Horizontal Slide Windows offer the same exclusive features and advantages. Frame and window members are of streamlined, rigid, tubular galvanized steel, bonderized and finished with baked-on outdoor enamel. They are supplied as completely finished assemblies and provide the same ease and speed of installation and convenience during construction.

Rusco Horizontal Slide Prime Windows ideally meet design and construction requirements for high window placement, such as in ranch type houses, where added usable wall space is desired, and in hard-to-reach places such as over sinks, bathtubs, etc. They assure greater ease of operation at shoulder-high or head levels.

Rusco Prime Windows Are Fully Pre-Assembled Factory-Painted, Hardware Attached—All Ready to Install in Window Opening!

- GLASS + SCREEN
- BUILT-IN WEATHERSTRIPPING
- INSULATING SASH (Optional)
- WOOD OR METAL CASING
- OR STEEL FINISH

all in one unit!

RUSCO Galvanized Steel

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Greatest Home-Selling Feature Since Central Heating...

AND TYPHOON HAS IT

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The boom in home air conditioning is on — and you can get in on the ground floor with Typhoon. One compact unit that gives complete indoor control of temperature, humidity, circulation. It means year-round comfort and other important advantages for your customers. It means easier, smoother selling for you. Give the next homes you build the sales magic of year-round air conditioning.

44 YEARS OF COMFORT ENGINEERING IN THESE EXCLUSIVE TYPHOON FEATURES!

- **ONLY TYPHOON** has one-button control — summer or winter, a touch of a button brings cool air or warm... automatically!
- **ONLY TYPHOON** has an all-copper condenser—it defies rust and corrosion, gives trouble-free service.
- **ONLY TYPHOON** is a miracle of compactness—takes up less space than any other unit, can even fit into a standard closet!
- **ONLY TYPHOON** has completely automatic changeover design—for switching from heating to cooling; no dampers to manipulate!
- **SIMPLE TO INSTALL** — Just a few quick connections and within hours your Typhoon unit is ready to function.
- **INEXPENSIVE TO OPERATE** — Engineered to the point of greatest economy consistent with dependable performance.
- **QUIET** — Completely insulated heavy-gauge steel cabinet and floating spring base assure whisper-quiet operation.
- **A.G.A. APPROVED**. Perfected, Tested and Factory-Guaranteed by Typhoon.
"Our customers like Mosaic Clay Tile. That's why we use tile in every house we build," says Irving Rose, Detroit builder.

"Years ago, my father championed the 'standardized construction' theory. He reduced costs and passed the savings on to his buyers.

"We still follow this practice and give our customers a house built of quality materials, at a price they can pay. We don't believe in substitute materials.

"For walls and floors, there's no substitute for the real thing—Mosaic Clay Tile. It's permanent, good looking, stain and moisture resistant. That's why we use it in all our bathrooms and for kitchen sinks and back splashes—and we put up close to 1,000 houses each year.

"The good word's gotten 'round. Now our customers expect Clay Tile in every house we build."

"I have three little girls," says Mrs. Owen Cameron of 20201 Stout Street, another satisfied owner of a Rose home. "My bathroom's the scene of dolly washing, splashing and spilling during the day and at bedtime. But cleaning is easy with Mosaic Tile walls and floors."

"Nothing harms my tile kitchen," reports Mrs. Edwin Persin of 20200 Patton Street, owner of a Rose-built home. "Acidy fruit juices won't stain it. Spilled grease and water wipe away quickly. It's a joy to work in. My husband's a plumbing contractor who knows good materials, and he's really sold on clay tile."

"Just look at my kitchen," Mrs. Cameron said, "the walls and work counter are as smooth and clean as my best chinaware, and as easy to keep that way. With children to watch, I don't have too much time for housekeeping—but with Mosaic Tile my work is much, much easier."

Give your customers Mosaic Clay Tile. Tile helps you sell your houses faster, makes your buyers happier. See Mosaic Tile at your nearest Mosaic showroom, or at the showroom of your Tile Contractor. For tile-fact literature, write Department 35-8, The Mosaic Tile Company, Zanesville, Ohio.
DON'T GET SOR-E-GET DURALLS

Take the work out of windows with Duralls. These convenient screens save expensive on-the-job time, cost less to buy. Customers love 'em. Here's why . . .

Imagine! A screen that snaps into place from inside ... seals tight as a clam . . . never rusts, never needs paint . . . light, compact . . . rolls up like a shade for storage! That's Durall, America's most convenient screen!

INSIDE JOB
No ladders ... simply unroll Duralls, snap into place from inside. Easy as a shade.

STORE IN A DRAWER
Duralls roll up, slip into handy dust-proof cartons . . . spend the Winter in a drawer or closet corner.

TROUBLE-FREE
Duralls get out of your way fast for window washing, tending flower boxes, etc. Just release two clamps, push Duralls free of windows. Reach even top panes without inconvenience.

NO UPKEEP
Get 'em and forget 'em. Duralls never need paint or weatherproofing, hold their shape in any climate. Pure aluminum, can't rust or stain your house . . . outlast ordinary screens by years!

SAVE MONEY, TOO
Duralls actually cost less than ordinary screens . . . no upkeep. Get yours now!

DURALLS have famous Aldura 'Multi-Strand' Reinforced, Flat-Edge Screening to Insure Grip-Seal . . Patented by New York Wire Cloth Company.
As fundamental as woodwork finish...

You want the houses you build to be complete in every detail—right down to the finish on the woodwork. For details can contribute a great deal to final appearance and salability.

One detail sure to impress prospects is concealed telephone wiring. Raceways contribute to appearance by keeping telephone wires out of sight. They contribute to convenience by making it possible to locate telephone outlets where they are most needed. They contribute to owner satisfaction by adding a lot of extra value for a little extra cost.

It is profitable practice to include built-in telephone raceways in development as well as contract homes. Your Bell Telephone Company will be glad to help. Just call your nearest Business Office.

BELL TELEPHONE SYSTEM

AMERICAN BUILDER
National Homes lead with new trend in **Spacious Living**

Another reason why they are the Nation's largest selling line of quality homes!

The modern idea of rooms that flow together . . . "open planning" . . . is best reflected in all of the new 1953 National homes. Outstanding in design, as in quality and low cost, Nationals offer still greater profit opportunities to forward-looking builders. Investigate *today*. See what it can mean to you to buy all structural and component parts in one complete "package" from ONE responsible source! Eliminate your inventory, warehousing and purchasing problems. Write or wire for details now.

**NATIONAL HOMES BUILDERS ENJOY INCREASING SUCCESS!**

Here's an example: H. B. LAYNE CONTRACTOR, INC., Springfield, Ohio.

<table>
<thead>
<tr>
<th>Year</th>
<th>1947</th>
<th>1948</th>
<th>1949</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homes</td>
<td>35</td>
<td>39</td>
<td>140</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>1950</th>
<th>1951</th>
<th>1952</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homes</td>
<td>270</td>
<td>209</td>
<td>280</td>
</tr>
</tbody>
</table>

Mr. Layne says National Homes' modern production methods and ultra-smart designs have been the chief factors in his profitable operation.

**NATION'S LARGEST PRODUCERS OF QUALITY HOMES**
Here is outdoor life with inside comfort and privacy. This transformation of a typical breezeway into an outdoor living-dining room is a popular design feature adopted by the Strausman Construction Co. in its Fairview development at Westbury, L.I., N.Y.

The breezeway is enclosed by extending the brickwork under the adjoining living room window across the front to the attached garage and enclosing the open space above with a louvre of nine 2x6’s and a 1x4 centered. Sidewalls are striated plywood and gypsum board is used in the ceiling. Cement floor is raised a short step above ground.
level. The rear opening is set off by two 4x4 posts on each side. Access is gained through a pair of five-light French doors which serve as a divider between living and dining rooms. A door to the garage adjoins the louver-wall.

The 2x6's are installed "in the rough," while nails and joints in the ceiling are left exposed to obtain a "ranchy" atmosphere. This extra room in the house is easily adaptable to all-year use through addition of screens and storm sash.

Matern & York, Jamaica, N.Y., architects, designed the three-bedroom and two-bath house for the Strausmans, who found it a quick seller at $18,490 with minimum plot of 8,000 square feet in a wooded former estate.

---

**5 YEAR written GUARANTEE furnished with each unit**

**PRECISION folding stairway**

No other stairway offers so much

**EASY TO OPERATE** — The cleverly engineered counterweights operate on LIFE-TIME ROLLER BEARINGS and silently raise or lower the stairway with practically no effort.

**RUGGED & STRONG** — Construction of No. 1 kiln dried lumber throughout. Brackets, rocker arms and hinges cast of special aluminum alloy. Trim furnished on door panel only. All parts are numbered and interchangeable. Frame is made to fit 26" x 54" opening in ceiling.

**INSULATED PANEL** — Panel is insulated with Cellicose and protected with tough chip board.

**SAFETY TREAD** — Each step is covered with full-width composition safety treads. Adds to appearance as well as safety.

**FITS ALL CEILINGS** — The stairway fits any ceiling from 7 feet to 9 feet, 9 inches figured from finished floor to finished ceiling. Runners are graduated to facilitate cutting off at different heights. Two standard sizes: 8'9" fits from 7' to 8'9" ceiling, 9'9" fits from 8'9" to 9'9" ceiling.

**EASY TO HANDLE** — Shipped in 1 package assembled. Precision Stairways are packed completely in one heavy carton, assembled complete with jamb and ready for installation, which offers a considerable savings over other attic stairways. Shipping weight 130 pounds.

**EASY TO INSTALL** — No adjustments — No springs — Requires no attic space. Full height above attic floor is only 36". Folds completely into 26" x 54" opening in ceiling.

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Manufactured by

**PRECISION PARTS CORPORATION**

400 NORTH FIRST STREET — NASHVILLE 7, TENNESSEE
Ask for Getty, and you will have casement window operators that are designed to exceed your toughest requirements. They assure long years of trouble-free service—your customers will remember you for it.

Your installation costs are cut—2 measurements, 7 screws, and the job is done in a few minutes. This saves time and money in your building program. These are just a few of the reasons why Getty operators are used on more casements than all other operators combined! When you say Getty in ordering casement operators and accessory hardware, you’re sure of lasting satisfaction.

NOTE THESE FEATURES!
1. Channel. 15” long, 4 point attachment to window.
2. Arm. 5/16” steel, teeth fully engaged with worm.
3. Housing. Zamak alloy (tensile strength 41,000 psi).
4. Worm. 5/16” case-hardened steel, lifetime lubricated.
Sliding doors that **WORK**
with the greatest of ease!
...and **SELL** so easily, too!

Pre-packaged, Ready-to-Install
**NOVOPLY** *SLIDING DOOR UNITS"
  can't warp, swell, rattle or stick!

Home-owners don't need to be *muscle men* to open
and shut Novoply Sliding Door Units! They work
so easily that even a child can operate them.
These units are made of Novoply, the **flattest** panel-
ing ever produced. And they are **precision-built** to
assure simple installation, easy adjustment and **per-
manently** smooth, trouble-free service.
They come to you pre-packaged, ready to be in-
stalled with all necessary hardware, as well as pre-cut
jams and header. Top rollers are equipped with
ball bearings and run smoothly on an overhead track.
The Novoply doors are 3/8" thick and are **guaranteed**
not to warp more than 3/8", if properly installed.
The beautiful wood-mosaic beauty of the paneling
can be preserved with a simple wax finish. Or it can
be readily stained or painted.

**From Houses to Trailers**! What a ready-made market
awaits you for these Novoply Sliding Door Units.
They're wanted for new and remodeled homes . . .
for apartments . . . for office buildings . . . schools . . .
hospitals . . . motels. Yes, **trailers** make a profitable
market, too!

Our warehouses carry them in stock now. See them
today or send the coupon for complete information.

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**UNITED STATES PLYWOOD CORPORATION**
World's Largest Plywood Organization
Manufacturers and Distributors of **Weldwood®** Plywood,
**Weldwood®** Doors, and other specialties

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MARCH 1953
To Lift Up Materials At Lower Cost... Get Mulkey All-Steel Portable Elevator

Keeps profits up...labor costs down. Fast! Moves 32 blocks per minute! One man can handle and operate. Basic unit 24 ft.—17½ ft. lift. Extensions available for up to 28 ft. lift. Easily trailed up to 35 m.p.h. Foolproof patent clutch and brake assembly. Write today for FREE literature & prices.

Sam Mulkey Co.
1671 AB-3 Locust St. Kansas City, Mo.

The carport is conceived as an organic part of the garage structure for this house built at San Mateo, Calif. by the David D. Bohannon Organization. The garage unit is placed at the front of the lot and is oriented to the house in such a way that the carport not only provides shelter for a guest's car, but also functions as an attractive sheltered approach to the house from the street. Note opening in the cement floor to catch grease drippings.

...place for a GUEST'S car...
Show a home prospect a built-in breakfast bar, china cabinet or vanity and watch his interest rise. If it's constructed of Micarta®, you have a sales talk about lifetime beauty that withstands scuffing, burning, denting, scarring or chipping. Such features can change a “For Sale” sign into a “Sold” sign. Why? Because you have provided the answer that gives small home economy plus the quality and comfort of a much larger home.

You'll find Micarta pre-bonded to plywood panels easy to work with and available in practical economical sizes. When planning your next home or your next development, investigate the advantages of using Micarta laminated plastic surfaces throughout the interiors. There are patterns and decorator colors to match any application.
Tilt-up construction is a tested and proven method of building with reinforced concrete. It saves time, money and materials in erecting standard or individually designed buildings of one story or more. Tilt-up construction is easy and simple and eliminates most form-building and form-handling problems. Tilt-up structures are firesafe, decayproof, good looking, long lasting, easy to maintain. Here's how to build by the economical tilt-up method:

1. After concrete floor is constructed, position edge forms and frames or forms for openings. Apply bond-preventative to floor.
2. Place the required amount of reinforcing in the panel and be sure to provide suitable means to hold it in the proper position.
3. Place concrete, using quality mix yielding durable walls. Use care to prevent honeycombing, especially along bottom edge.
4. When concrete has partially hardened, trowel, float or brush the surface to obtain the kind of smooth or textured finish desired.
5. Incorporate decorative designs before the concrete hardens. The illustration above shows workman adding a low-relief design.
6. Cure the panels until concrete has attained the desired strength. Then carefully remove all the edge and opening forms.
7. With crane or hoist tilt the panels into position in wall. Grout joint between the wall and the floor to make it weathertight.
8. Temporarily brace wall panels as shown before adding reinforcing and forms for the columns that will tie the wall together.
9. Place the concrete in the column forms and allow it to cure properly. Then remove the forms and braces. Wall is now completed.

Build this New Way to Save More Space!

SLIDING SIDE DOOR FOR HOME GARAGES

with Sterling HARDWARE in a Complete Packaged Set!

HINGED SIDE DOORS IN HOME GARAGES ARE ALWAYS IN THE WAY

Now, Sterling offers an easy solution to this problem. The new Sterling No. 890 Sliding Door Set is designed especially for sliding side doors in home garages. Here is a side door that is never in the way as it slides along the wall. The door can be made as wide as desired so lawn mowers and large equipment can be taken in and out of the garage easily.

Here Is The Package!
Sterling No. 890 Sliding Door Set

1. Adjustable Hangers with Track for doors up to 3' wide.
2. Edge Guide aligns door in closed position and makes it secure.
3. Floor Guide eliminates track on the floor. No grooving of door.
4. Back Stop permits full door opening, yet protects fingers and key.
5. Flush Pulls. Large for easy operation. Two furnished.
6. No. 1025 Rim Type Lock with Cylinder. This new lock is designed for sliding side doors. Not included in Set but available as an extra.

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Other STERLING PRODUCTS
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- CASEMENT WINDOW HARDWARE
- PULL-TITE CLOSERS
- STORM SASH HARDWARE
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2345 W. Nelson St., Chicago 18, Illinois

Please rush complete information on new Sliding Door Set and Lock

Name
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City
Zone
State

MARCH 1953
With the unprecedented growth in the use of television, this popular medium of entertainment is now an accepted piece of equipment in both homes and offices. The built-in set shown in detail on the opposite page is designed for an office lounge.

This unit is set up with the screen and speaker mounted in the center of the end wall of the room for easy viewing, with the controls located in a separate panel on the side wall of room adjoining the fireplace. This makes for easy and convenient operation.

Recess in wall is provided for both set and controls. Face of panels is held in place with friction catches which permit panels to be quickly and easily removed. Plywood panel which is covered with fabric encloses the set except for screen and speaker. Fabric extends across the face of the speaker.

The construction of the area surrounding the speaker, screen and controls is relatively simple. Normal studs such as 2x4's frame the openings with furring strips used, where necessary, for backing.

Finished architrave moulds outline the openings on all four sides, with random width vertical board facing housed into mould on one side, and fabric covered plywood which surrounds speaker and screen housed into mould on the other side.

The control panel located on an adjoining wall is constructed in a similar manner, except that panel is made removable for access to controls. This panel is held in place with friction catches.
AMERICAN BUILDER'S BETTER DETAIL PLATE

NO. D-100  BUILT-IN TELEVISION

Floor Plan...

Section 1

Section 2

Elevation...

Detail BASE OF CONTROL CAB.

Plan CONTROL CABINET

RANDOM VERT. BOARDING
WOOD FRAME
FABRIC-COVERED PLYW

VERTICAL BOARDING
2"x4"
FRICION CATCH
REMOVABLE SHELF
REMOVABLE PANEL

FRICTION CATCH
2"x4" STUD
REMOVABLE PANEL
2"x4" PLATE
VERTICAL BOARDING

SPEAKER
tv screen

TV RECESS
WITH REMOVABLE PANEL

PLANTING

LIVING ROOM

SLIDING DOORS
TV CONTROL CABINET

TV RECESS
WITH REMOVABLE PANEL
panels transform any wall into a WORKING WALL

decorative, functional, versatile!

"PEG-BOARD" presents a brand new concept in wall paneling—a combination of perforated hardboard matched with over 60 hanging fixtures (magazine racks, towel bars, shelf brackets, hooks, etc.) all instantly interchangeable without screws, nails or tools of any kind. Take a new look at those plans you're working on now—you'll find dozens of places to save space and add beauty and efficiency with "PEG-BOARD" panels and metal hangers.

Ideal for tools—in garage or workshop

A perfect room divider

Gives new utility to closet space

No. 6-41
how to MODERNIZE store interiors

The arrangement of the furnishings and showcases in this store, some of which are illustrated and detailed on the opposite page, constitutes the bulk of the remodeling work that changed this ordinary store to a smart dress shop. This type of remodeling applies particularly to stores selling wearing apparel.

The actual sales space of this store is confined to an area of about 30x21 feet, with fitting rooms, stock rooms, etc., occupying the rear portion of the store. Design and spacing of display units follow the modern mode, the feature unit being a large semi-circular built-in seat which backs up to a planting area that forms the background for the window display. The seat is built up of wood framing with a heavy fabric of simple design stretched over foam rubber cushions or base. Continuous mirrors extend from floor to ceiling on the side wall of sales room and over the top of a portion of the built-in seat. This gives an illusion of additional width to the room.

A portion of the blouse showcase is built into the end of a wall that forms one side of a fitting room, with balance of the case extending out into sales space. This case is equipped with indirect fluorescent lighting and sliding plate glass doors.

The jewelry showcase is also a built-in unit forming the terminus for the semi-circular plaster wall that occurs at far end of sales room. This case is equipped with indirect fluorescents. Frames are made in natural walnut to match furniture. All wood surfaces are lacquered.
AMERICAN BUILDER'S STORE FRONT DETAILS

Detailed by K. Roderick O'Neal, A.I.A. for American Builder

Designed by Sidney C. Finck, A.I.A., Chicago, Ill.

NO. G-41 INTERIOR FURNISHINGS...

Built-in Seat...

Bouse Showcase...

Jewelry Showcase...

Detail 'A'...
Increase the MARKET VALUE of your homes with

For samples and information, write to:

GEORGIA — PACIFIC

PLYWOOD COMPANY

617-B3 North Capitol Way, Olympia, Washington

The richly textured, exciting plywood that gives you all the charm and elegance of genuine wood paneling at low cost.

WedgeWood offers
Sales Advantages
New homes pack the punch of extra sales appeal when you put in WedgeWood paneled rooms. The rich texture, the dramatic color effects, the natural beauty of genuine wood... all put "buy in the eye" of prospective home-owners.

WedgeWood offers
Cost Advantages
Compare the low cost of WedgeWood with other decorative wood wall paneling. You can cut costs while you're adding selling advantages and distinctive styling to your homes. WedgeWood helps you sell homes faster.

WedgeWood offers
Building Advantages
WedgeWood gives you matchless wall beauty yet saves labor... saves time... saves money. Easy as ABC to install.
A—Just nail up the handy 4 x 8 ft. panels.
B—Apply first coat with brush or spray... WedgeWood comes factory primed.
C—Apply second coat and partially wipe.

Installations like these demonstrate the "buy appeal" that WedgeWood puts into modern or traditional styling.

Watch prospects' eyes light up when they see WedgeWood paneling. It's so easy for them to picture WedgeWood as the background of beauty for their favorite furnishings.

Offer your customers all the advantages of low cost WedgeWood in your homes. They'll appreciate your choice of this distinctive genuine wood paneling and they'll enjoy its beauty for years to come.
because they offer MORE for the money...

Gulfspray
Shower Enclosures

- BE READY TO MEET THE DEMAND! Have Gulfspray shower doors and tub enclosures readily available to your customers. Gulfspray is the "extra" they're looking for.

- FEATURING: smooth, overhead operation or piano-type hinges, scientifically designed drips (drain water back into tub or enclosure), heavy-gauge aluminum or stainless steel ... and wide selection of clear or patterned glass.

Write for details and literature

Binswanger & Co.
Dept. AB-3
207 N. Main
Houston, Texas

A simple, compact floor plan and a large breezeway make this house a quick seller for Builder Fred W. Pinkley, of Lakeland, Florida. The three bedroom, two bath house of 1,470 square feet has a contract price of $12,700 on the owner's lot. Square foot costs are $8.69.

Color is given the house by painting the concrete block exterior and veneering the block piers with colored concrete brick. An additional color touch is obtained with the planting area to the left of the door.

One of the highlights of the plan is the large 10x21 foot screened breezeway. The area is accessible for family living. A door from the dining room leads to breezeway. The house, built on a slab, is of concrete block construction. Vertical joints are flush and the horizontal joints are struck. The exterior color treatment combines a coat of cement based sealer and two coats of paint. Furring strips are pressure treated 1x2's fastened to the block walls with case hardened nails. Door and window casings are steel cove plaster ground units.

The concrete slab has a vapor barrier of mopped 15-pound felt and aluminum foil. The under slab was prepared by watering for 48 hours and then hand tamped.

Roof framing is conventional 2x6 pine, 16 inch on center.

Metal casing and Miami base board act as plaster grounds. Miami base is 1/2 material shimmed out 1/8 inch. Groove keys plaster for stability

Dining room area at one end of living room is adjacent to the kitchen and the screened breezeway.

Large breezeway area makes most of Florida living. The area is 10x21 feet. Breezeway is known in that section as the Florida room.
Exterior of house is produced by concrete bricks of red tones veneered to the block columns.

Large bedrooms, one with a master bath, are important features to the plan. Kitchen is small and compact. Meals are served in the dining area or the breezeway.

Between-the-stud medicine cabinet finds considerable storage use for many bath supplies. The unit fits between the studs, shelves are installed, and a facing and door is applied.

Diamond applique door is distinctive feature. Door is job built. Frame is 1x8's. Interior face is 1/4-inch plywood, and exterior face is "V" groove cypress panel.

--- Florida ---

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Superb, exacting craftsmanship is built into every Artcraft Unit; from simple stock items to detailed, intricate custom work. Prices are low, too!

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FREE DEMONSTRATION
PROVES YOU SAVE MONEY USING RESINIZED®
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He can do this because SPEED-GRITS Papers are DURABONDED® and RESINIZED. That means every keen-cutting silicon carbide grain is locked-in and remains immune to high-speed sanding heat. Result: less loading, shedding, and limping, less cover changes. And, better, more profitable jobs. See for yourself. You name the time and place and we'll be glad to prove it. Write us today. Behr-Manning Corp., Troy, N. Y., Dept. AB-3.

For Export: Norton Behr-Manning Overseas Inc., New Rochelle, N. Y., U. S. A.
In Canada: Behr-Manning (Canada) Ltd., Brantford.
Economical One-Piece Wall Cabinet Combinations—Combine three standard wall cabinets in one economical, easy-to-hang assembly. Solid steel back. Shelf between end cabinets. 34 and 60-inches wide.

New Counter End Unit—Ideal for snack bars or any counter-top extension. Two shelves trimmed in stainless steel.

NOW! 2-Height Kitchens—Tall utility cabinet determines top line of cabinets. This one adjusts to either 84 or 81-inch height. A Republic Steel Kitchens exclusive.

New Corner Spinner Cabinet—Two steel shelves spin on ball-bearing shaft. Turns both right and left-hand corners. Wider 10½" door.

Peninsula Cabinet—New! Doors on both sides. Styles a kitchen, separates working and dining areas.

Thrifty Cabinet Sinks—Equipped with new Republic pressed-steel porcelain-enamled sink and good quality fittings. Right for volume builders.

Steel Kitchens

Designed and built by one of the world's largest steel companies

THEY'RE POPULAR—Steel kitchens are gaining in popularity each year. Buyers like the convenience, the ease of maintenance, and ease of cleaning that only steel kitchens can offer. Now, Republic brings you an entire new line complete in every detail styled right up to the minute.

HOLD COSTS DOWN—To the builder, all-steel construction means standardized units all ready for fast installation. No costly hand-fitting, no time-consuming on-the-job construction. You just uncrate and install. They're dimensionally uniform and accurate. Makes it easy to figure your costs and to hold your costs. No painting.

LARGEST SELECTION OF STYLES AND SIZES—In new Republic Steel Kitchens, you choose from the world's largest selection of matching styles and sizes. Modular designed in 3-inch multiples. That means you can build standard kitchens with a "custom" look. Easily-installed fillers and spacers take care of every last kitchen inch.

NO SERVICE PROBLEMS FOR YOU—Republic Steel Kitchens are bright, attractive, modern. Their high-quality baked enamel finish stays white, resists chipping and staining. Since steel can't warp, swell, or shrink, doors always fit and drawers always slide. Colorful Formica counter tops are practically immune to damage. That means fewer complaints and call-backs.

Get all the facts on this all-new line now. Write:

BERGER MANUFACTURING DIVISION
REPUBLIC STEEL CORPORATION
1022 BELDEN AVENUE  CANTON 5, OHIO

MARCH 1953
GLASS FIBER INSULATIONS HAVE WIDE APPLICATION

AB35316

Used for insulating around the edges of concrete filler slabs in one-story, basementless homes, Fiberglass perimeter insulation helps to cut heat loss from edges of the slab and is said to provide an effective barrier against moisture. Consisting of a rigid fibrous glass board enclosed in asphalt sheathing, Fiberglas perimeter insulation is available in a variety of thicknesses and sizes. It is light in weight and easy to install, according to its manufacturer.

Another useful form of glass fiber insulation is called the Fiberglas "roll blanket," which consists of paper-enclosed lightweight fibrous glass in flexible rolls. Designed for large "open" areas, these roll blankets are available in widths for fitting between standard stud spacings and in thicknesses ranging from one to three inches. Each roll is provided with nailing flanges to simplify its installation.

Use of glass fiber perimeter insulation reduces fuel costs, helps keep floors warm and serves as an expansion joint

The Series 100 (illustrated) is the 3½ foot model, corresponding to the maker's recently discontinued 3 foot model, but made with a larger drum for light weight materials, and with several improved features, including a power throw-out, hinged engine housing, self-lubrication, self-aligning bearings, ball thrust on the paddle shaft and a safety grid.

The Series 120, or 6-foot model has the same heavy duty drum characteristic of these mixers. This size is now equipped with a double V-belt drive from engine to countershaft, which incorporates a simple power throw-out (on gas models), avoiding necessity for clutch adjustments. The Series 160 or 6 to 8 foot heavy duty model is intended for large jobs where extra capacity is desirable. Muller Machinery Co., Dept. AB, 248 Whitman Ave., Metuchen, N. J.

CEILING JACK

AB35318

An efficient and useful ceiling jack, the Gyp C Jack, consists of two sections of telescoping steel tubing, vertically adjustable to any convenient ceiling height by means of an elevating wheel. At the top of the upper section, two crossed arms of curved, flexible steel are fastened, enabling the operator, working alone, to place ceiling panels in position with safety and ease.

The entire jack rests on a heavy steel base with four steel casters angled inward, assuring levelness and portability. Gypsum Ceiling Jack Co., Dept. AB, 222nd St., N. E., Cedar Rapids, Iowa.

New Products continued on page 158
Wouldn't you RATHER have a packaged unit?

The time and labor saving convenience of buying packaged units instead of making is proven in the universal acceptance of every kind of product whether it's cigarettes, canned goods, ironing board cabinets or window units.

The READY HUNG DOOR, a door and frame packaged unit, saves you the trouble of selecting the proper size, grade and quantity of the six materials required to case and hang a door — saves you the labor of sawing, fitting, and assembling 13 wood parts, 11 hardware parts, and the driving of 60 or more nails and screws in each opening. A much less skilled man can INSTALL A READY HUNG DOOR IN JUST 20 MINUTES — and the finished door will have that sleek, mill-made look. READY HUNG DOORS, like other packaged units, SAVE TIME, LABOR, MONEY, WASTE, WORRY, SKILL and DO A BETTER JOB.

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

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DENVER, COLORADO
Ready Hung Door Mfg. Corp.
3113 Dragon

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Appleton Manufacturing Corp.
1321 Park Ave.
HOUSTON, TEXAS
Ready Hung Door Mfg. Co.
P.O. Box 124

MEMPHIS, TENN.
Ready Hung Door Mfg. Corp.
911 Ronner

NEW YORK, N. Y.
Bailey-Whalen Company
17 Park Ave., W. Orange, N. J.

SAN ANTONIO, TEXAS
Ready Hung Door Mfg. Corp.
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SIOUX FALLS, S. DAK.
Jordan Millwork Co.

TORONTO, CANADA
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Fort Worth 2, Texas

MARCH 1953
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Solves All Framing Problems Instantly!

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A sturdy, all-metal tool that folds up into one compact unit...1 foot long, 2 inches wide. Fits in pocket easily. Full money-back guarantee.

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WITH TRUSSED DESIGN

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Syracuse 1, New York

Dur-O-wal Div., Dept. 658
Cedar Rapids Block Co.
Cedar Rapids, Iowa

new products
(Continued from Page 156)

RANGE HOOD
AB35312

The fan ventilating range hood is made of sheet steel with a finish of white baked enamel which is grease resistant and easily cleaned. It is provided with a rust-proof chrome-trimmed indirect light over the stove area. An exclusive "grease-stop" permanent type filter which can be cleaned in a few seconds in the dishpan is standard equipment.

The hoods are available in 42, 40, 36, 30 and 24-inch widths, with special sizes available on order. The "Vent-Rite" range hoods are approved by FHA for home construction or Title I improvement loans. The units are guaranteed by the manufacturer for one year from date of purchase, Cole Manufacturing Co., Dept. AB, 705 Raymond St., Austin, Texas.

SLIDING SCREEN DOOR LATCH
AB35310

This brass hardware for sliding screen doors is stated to provide an inside up-action latch similar in principle to that used on the manufacturer's sliding glass doors. The latch is installed on the inside of the door; pulls are provided for both inside and outside, Heretofore, only conventional pulls were used on the door. The up-action latch is said to provide maximum convenience as well as protection against tampering.

Over-all dimensions of the latch are 3½ inches long and 2½ inches wide. The sliding screen doors are available in a choice of aluminum, plastic or galvanized; other mesh is available on special order. Arcade Metal Products, Dept. AB, P.O. Box 657-A, Arcadia, Calif.

New Products continued on page 160
Introducing

an exciting, new interior wall finish

- new metallic base finish
- 4 modern, deep-tone colors
- 3 smart patterns

The glittering beauty of sun on rippling water

We call it “Tyriple”, our newest miracle wall with a finish more durable than ever, smooth as glass, but with a light and shadow depth that is superbly beautiful. A metallic base enamel does the trick, hi-baked to shimmering beauty. Available in new deep modern tones: Bronze, Silver, Emerald Green, Amethyst Blue — in three versatile patterns. Here is lifetime beauty that will not crack, craze, peel or chip. Here is the newness, the freshness that sells. Write today for complete information on the full Tylac Miracle Walls line.

TYLAC COMPANY Monticello, Illinois
PIONEERS IN THE PREFINISHED WALL PANEL INDUSTRY
Power Tools ° ° For The ° °

SYNTRON
Construction Industry
A COMPLETE LINE
OF DEPENDABLE POWER TOOLS

ELECTRIC HAMMERS
Powerful, electromagnetic Syntron Hammers work continuously on the toughest jobs without breakdown. They deliver 3600 blows per minute for cutting, channeling, scaling, etc. Versatile—economical to operate—cut job time.

PORTABLE ELECTRIC SAW
The Dual V-Belt Drive feature of the new Syntron Portable Electric Saw eliminates gears—provides a constant flow of power without bucking or jerking—for fast, easy cutting of wood, concrete block, plaster board, etc. Tough, rugged, built for long service.

ELECTRIC HAMMER DRILLS
For faster, easier hole drilling in concrete and masonry. Drill chuck turns automatically. Self-feeding designs reduce fatigue—speeds up drilling—ideal for installation crews, seating contractors, and exterminator companies.

CONCRETE VIBRATORS
Wall Form Vibrators which assure uniform compacting and settling on countless construction jobs. Models available for light, medium or heavy form work. Motor driven, flexible shaft types for large mass vibration also available.

GASOLINE HAMMERS
Self-contained Gasoline Hammer Paving Breakers and Rock Drills that deliver over 2000 fracturing blows per minute. No air compressor or accessories. One man operation. Cutting asphalt—digging clay, shale, and frozen ground—tamping backfill.

WRITE TODAY FOR FREE Catalogue Data
SYNTRON COMPANY
618 Lexington Ave. Homer City, Penna.

new products

(Continued from Page 158)

WINDOW FAN  AB35311
A completely redesigned window fan is provided with two new utility features: an automatic timer, which adjusts operation from one to twelve hours, as optional equipment; and a high-low two-speed control that permits either rapid or slow cooling action, adjustable to outside conditions and to personal preferences.

The fan has also been completely re-styled, to conform with consumer preferences in styling and color. The motor has been painted to harmonize and located so that it is now nearly invisible.

The unit is 28½ inches wide, 24½ inches high and 11 inches deep. It fits all double-hung windows from 24 to 42 inches. The fan is attached to the window with brackets secured to the frame by thumb screws which fit into rubber grommets, insuring quiet operation. Power is supplied by a ½ h.p., 110/60/1 standard motor, Viking Air Conditioning Corp., Dept. AB, 5601 Walworth Ave., Cleveland, Ohio.

STEEL TAPE  AB35301
The figures and graduations of the new "Royal" Ni-Clad steel tape will not wear off, as they are an integral part of the metal. The hard nickel-plated surface makes it rust and corrosion resistant.

The black markings are easy to read, as they stand out sharp and clear against the nickel background. The tape is also easy to read because "instantaneous" markings (last preceding foot number repeated each inch) are used on it. Welded metal case liner has tough vinyl cover. Folding flush handle opens with a push pin. The Lufkin Rule Company, Dept. AB, 1730 Hess Ave., Saginaw, Mich.

New products continued on page 162
MADE TO ORDER
for the EASY-TO-SELL HOME
for lower cost, easier installation
and more living space

heat them with TEMCO gas wall heaters!

Slab foundations, upstairs rooms, garden apartments, rambling ranch houses . . . you can build to heat them more economically, more efficiently, and more attractively with TEMCO's highly versatile Automatic Gas Wall Heaters.

HERE'S WHY!
- easy to install — Fits between standard (16" O.C.) studding.
- compact — Occupy no floor space. Extend from wall only 4-5/16".
- versatile — Available in single and dual wall models. Engineered to operate on all gases.
- functional — Permits more flexible furniture arrangements.
- efficient — Gives good, clean, even heat distribution. Backed by a 10 year written warranty.
- economical — Low first cost, low installation cost, low operating cost.
- automatic — Available with completely Automatic controls.

TEMCO
Builders of over 1,250,000 Gas Heating Units

The TEMCO Gas Floor Furnace is compact, fits quickly into the floor without the need of basement or costly excavation. Your cost is low. Installation is inexpensive.

TEMCO, Inc., Division B-502
Nashville 9, Tennessee

Please send catalogue, A.I.A. specification sheets and full information on TEMCO gas wall heaters to:

Name________________________________________
Firm name____________________________________
Address_______________________________________
City, County, State____________________________

For the full story of America's most versatile gas heating system, TEMCO Automatic Gas Wall Heaters, fill out the coupon below.
White Universal Level-Transit... most versatile instrument you can own!

INDISPENSABLE FOR THESE JOBS — AND MANY MORE

- Plumb walls and uprights
- Set stakes for grading
- Set slope for tiling
- Run property lines
- Measure angles
- Make stadia surveys
- Level up foundations

Engineers agree: you can do more jobs better — at lower cost — with the White "Universal" Level-Transit. The improved Model 5000 has internal focusing, coated optics, a guarded vertical arc. Plus all the other quality features needed to give you lifetime durability and accuracy. The price: only $185*, complete with tripod. See your dealer, or write DAVID WHITE COMPANY, 311 W. Court St., Milwaukee 12, Wis.

*Price subject to change without notice.

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

new products

(Continued from Page 160)

BATH TUB HANGERS AB35320

These leakproof bathtub hangers are said to solve the problem of watertight bath installations. Made of galvanized steel formed at right angles, they are used to build tubs securely into wall construction behind the wall finish. The hangers support the tub all along each wall, not just at the studs only, permitting the tub weight to be evenly distributed, giving full support to the front of the tub. A patented filler seals the joints against leaks. Clamps and base strips are supplied if needed.

Hangers are adaptable to all tub makes and dimensions. They are adjustable in length from four to six feet, and in width from 30 to 33 inches. The units can be supplied for all makes of enameled or double shell corner tubs with or without a base strip; they are also available for any square enameled iron apron tub, and can be reversed for left hand installation. Shower receptors can also be installed on these devices. William B. Lucke, Inc., Dept. AB, 514 Railroad Ave., Wilmette, Ill.

BRASS HOUSE NUMBERS AB35308

With the addition of a line of house numbers in yellow brass, the Nu-Art line of house numbers is now available in a double size upright display case. The yellow brass numbers, added to the existing lines of stainless steel and bronze numbers give home owners the opportunity of matching their house numbers to other yellow brass hardware already available for home decoration. Macklanburg-Duncan Co., Dept. AB, P.O. Box 1197, Oklahoma City 1, Okla.

New Products continued on page 164

AMERICAN BUILDER
Let it Blow—Let it Rain

With Chase Copper outside, you can be sure that wind-driven rain will never get inside! Chase Copper Flashing, Gutters, and Downspouts resist corrosion, give dependable service for years.

Chase Copper Roofing Products have been popular with homeowners for generations. And that goes for Chase Copper Water Tube and Fittings, and Chase Bronze Insect Wire Screening, too.

Chase wholesalers, served by Chase mills and 23 convenient warehouses, will be glad to supply your builder or contractor or cooperate with your architect in the use of Chase Brass and Copper building products.

Chase
The Nation's Headquarters for
BRASS & COPPER
Subsidiary of
KENNECOTT COPPER CORPORATION

YOUR CLIENTS KNOW THAT COPPER MEANS QUALITY

Chase Copper Gutters, Downspouts and Flashings give an extra touch of quality to the houses you create. We're telling this quality story to 15,872,000 readers of the Saturday Evening Post and other national magazines in colorful ads like this.
OF COURSE YOU PREFER STEEL FOR FRAMING SMALLER BUILDINGS

Construction by Lothing Contractor Edward Quehl, Fontana, Calif.

NOW YOU CAN AFFORD IT WITH Penmetal Lightsteel STRUCTURAL SECTIONS

PENMETAL has devised a system of Lightsteel Structural Sections that brings the superior qualities of steel to light construction—at an economical figure. Here are the facts:

Penmetal Lightsteel Sections are cold-rolled from structural grade steel on high speed machines. So, cost is low. Lightsteel Sections come in a full range of widths, convenient precut lengths, particularly suited to the requirements of modern design...

... open webbing in studs and joists makes for rapid installation of pipe and conduit...

... high strength to weight ratio means quicker erection, takes fewer man-hours...

... combinations of standard Lightsteel studs and joists with Lightsteel track and bridging make for quick and easy framing of all openings, including doors and windows.

Lightsteel STRUCTURAL SECTIONS provide structural stability...complete protection against warping, shrinkage, rot, termites. Fire safe—with suitable collateral materials, they cut insurance costs with ratings up to a full 4 hours. New Catalog tells the whole story, gives all facts, specifications, building data. Write for your free copy; ask for Catalog SS-30.

PENN METAL COMPANY, INC.
205 EAST 42nd STREET • NEW YORK 17, NEW YORK

new products

(Continued from Page 162)

INDUSTRIAL TRACTOR

AB35315

“The tractor of a thousand uses” is how the manufacturers describe their industrial crawler tractor. This unit, with its line of matched equipment, including bulldozer, trailbuilder, front end loader, lifting fork, sidewalk snow plow, hydraulic drawbar, winch, logging kit and others, can perform a variety of useful tasks the year around.

The tractor is particularly suited for backfilling foundations, winch operations, cleaning ditches, landscaping, moving concrete, industrial material handling. As is seen in the illustration, it is also useful in light bulldozing operations. The unit is rated at 21.85 drawbar horse-power, and 26.36 belt horse-power. The Oliver Corps., Industrial Div., Dept. AB, 19302 Euclid Ave., Cleveland, Ohio.

KEY-IN-KNOB LOCK

AB35306

A new series of pin-tumbler, key-in-the-knob type cylindrical locks contain new features of lock construction. The locks are manufactured in solid wrought brass and bronze trim with cadmium plated heavy gauge steel parts, to insure durability under universal conditions in homes, institutions and commercial buildings.

One aspect of their construction enables the cylinder to be changed “faster than in any other lock of this type,” according to the manufacturer, a feature of considerable value to locksmiths and locksetters.

An electro-filming process gives the locks lifetime lubrication; a special composition bearing surface on which the latchbolt retractor travels will provide longer life and greater ease of operation. The Yale & Towne Mfg. Co., Sager Barrows Lock Works Division, Dept. AB, Berrien Springs, Mich.

New Products continued on page 166

AMERICAN BUILDER
Now... for project builders... a new and unusual opportunity in prefabrication! Now... you can have completely prefabricated homes expertly adapted to your own tried and proven plans. Now... you can have the well-established economy of prefabrication, with new exclusive features, more advanced construction techniques plus an entirely new concept of exterior variations that express the same individuality as custom-built homes. As a manufacturer of pace-setting, quality homes for over seven years, it is with a deep sense of pride that we offer Richmond Homes to qualified builders under this unique plan.

Our program, naturally, has certain requirements relative to the financial status and experience of the builder. If you feel that you can qualify, we would like to hear from you. Write, wire, or phone for complete information.

RICHMOND BUILDERS, INC.
546RB Northwest “K” Street, Richmond, Indiana
for QUICK, LABOR-SAVING, EASY INSTALLATION

Time saved is money saved and these windows save installation time by coming to the job factory-assembled, including all hardware and glazing. Easily mullioned for window wall construction. Proven, long lasting performance and convenience features add sales appeal to any type of building.

Gate City Perma-Treated WOOD AWNING WINDOWS

Pioneered by GATE CITY SASH & DOOR CO.
“Wood Window Craftsmen Since 1910”

Member of The Producers’ Council, Inc. Refer to Sweet’s Builders’ File, 4d-Ga

GATE CITY SASH & DOOR CO.
P. O. Box 901, Fort Lauderdale, Florida
Gentlemen: Please send Builder’s Literature and complete information on Gate City Awning Windows.

Name
Address
City State

(Continued from Page 164)

new products

GARBAGE DISPOSER

AB35304

Designed for use by the restaurant industry, the “Waste King” Commercial Pulverator is furnished in two interchangeable assemblies; one type facilitates the function of pre-rinsing dishes and disposes of garbage simultaneously ahead of the dishwasher. It is equipped with an exclusive guard for saving silversware and an overhead spray assembly. The other assembly is used at various centers where garbage occurs, such as at the cook’s table. It is equipped with a scrap block and a perforated stainless steel sleeve for faster, easier garbage elimination.

Both units have a stainless steel cone and high-velocity jet spray. A stainless steel cover added to the pre-rinse model offers a pre-rinse facility prior to the dish-washing operation. Given Manufacturing Co., Dept. AB, 3855 Santa Fe Ave., Los Angeles 58, Calif.

ATTIC FAN

AB35305

The “Frigid” Model FAV-36 inch attic fan with a built-in automatic shutter is designed to lower installation costs. A complete unit, it is provided with a powerful fan mounted on sealed ball bearings. A 1/2 h.p. G. E. motor is completely wired with a fusible link cut-off switch. A ventura type orifice gives top air delivery.

The fan is finished in ivory-white baked enamel with aluminum ready cut trim. The unit requires a 36 x 36 inch ceiling hole. Circulators & Devices Mfg. Corp., Dept. AB, 128-168 30th-second St., Brooklyn 32, N.Y.

New Products continued on page 168

AMERICAN BUILDER
**LOOK JOE!**

The FASTEST CUT... AT THE LOWEST COST* is YOURS with a...

![Clipper Masonry Saw](image)

...the saving will pay for your Clipper

Can You Equal this Speed?

<table>
<thead>
<tr>
<th>Material</th>
<th>Cut in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porcelain</td>
<td>22 SECONDS</td>
</tr>
<tr>
<td>Kiln Block</td>
<td>21 SECONDS</td>
</tr>
<tr>
<td>Fire Brick</td>
<td>4 SECONDS</td>
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<tr>
<td>Vitrified Pipe</td>
<td>18 SECONDS</td>
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<tr>
<td>Concrete Block</td>
<td>19 SECONDS</td>
</tr>
<tr>
<td>Glass Block</td>
<td>8 SECONDS</td>
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<tr>
<td>Natural Stone</td>
<td>12 SECONDS</td>
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</tbody>
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Our Only Business for Nearly 20 Years — Masonry & Concrete Sawsing

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

**EXCLUSIVE CLIPPER FEATURES**

- Pressure Equalizer
  - Makes your blades last longer — Because Equalizer Spring automatically cushions blade pressure.
  - One person easily adjusts cutting head to desired pressure....Operator’s hands never tired.
- Select-A-Notch
  - "Wet or Dry" Pump
    - No need to remove belt when cutting dry. No maintenance... Factory Sealed. Patented Water Application Unit controls flow.

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Clippers alone can supply all specifications of Abrasive, Diamond and "CBR" (Break-Resistant) Blades to accurately meet your requirements. INVEST IN CLIPPER and YOU'LL GET RESULTS!

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MARCH 1953

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- CLIPPER CONSAWS

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COMPANY:

ADDRESS:

CITY STATE

No. 93
UPRIGHT FREEZER AB35319

An upright home freezer called Quicfrez uses only 24 inches of wall space, yet holds up to 200 pounds of frozen foods. The door opening resembles that of a refrigerator, giving easy access to the contents. Capacity is 4.2 cubic feet. It is 28 inches deep and stands 38½ inches high.

Standard frozen food containers fit neatly permitting a maximum quantity to be stored. Shelves are removable so that the housewife can rearrange them to store bulky packages. The insulated haffle door at the bottom serves as a handy shelf when food is being placed in or removed from the freezer. Sanitary Refrigerator Co., Dept. AB, Fond du Lac, Wis.

PLENUM HUMIDIFIER AB35303

This compact unit is designed to fit into existing warm air heating systems or in new installations on the plenum chamber. It is claimed to cut down the risk of respiratory ailments, since room occupants are more comfortable when the humidity is from 45 to 50 per cent. Its installation will save up to 15 per cent on fuel, according to its maker. The device also controls static electricity, since shocks from this cause, as in touching a metal object, are eliminated if the indoor humidity is at a correct level. The unit has a discharge of 3.9 pints of water per hour, a sufficient amount of moisture for the average installation. It circulates 85 cubic feet of air per minute. Powered by a fractional horsepower, moistureproof motor, the humidifier operates on 110 volt, 60 cycle, a.c. current. Daffin Manufacturing Co., Dept. AB, Lancaster, Pa.

**New Products continued on page 170**
Build PLUS value into any home with NEVAMAR
the pre-finished surfacing material

A NEVAMAR-surfaced kitchen is the most "buy-appealing" extra you can build into a home. To a prospective buyer, it tells a story of lasting beauty and freedom from care. For NEVAMAR is a colorful, pre-finished surfacing material that never needs painting, never needs refinishing.

In a wide range of patterns and colors—including many authentic wood-grains—it is perfect for cabinet surfaces, sink tops, and work tops in the kitchen . . . for panels and built-in fixtures in club basements, bathrooms, and rumpus rooms. NEVAMAR lends itself to innumerable uses that enhance the value of the home you build or remodel.

Write today for facts and samples.

DISTRIBUTOR: THE NEVAMAR COMPANY, BALTIMORE-30, MARYLAND
OIL FURNACES AB35302

Combination horizontal and downflow oil furnaces, designated as the F610 series, utilize a counterflow heat exchange principle, and can be fired either as downflow furnaces in a vertical position for perimeter heating or as horizontal units for installation in attics, crawl spaces or suspended from ceilings.

Better than 80 per cent efficiency is achieved in either position, according to the manufacturer. Heat transfer through a 12-gauge heat exchanger is rapid and complete, resulting in economical operation. This stainless steel combustion chamber permits long wear and protection against overheating. This packaged unit is factory assembled, making it easy to store and to install. The compact 80,000 B.T.U. model measures only 22x24x60 inches. First sizes to be released are the 80,000 and 100,000 B.T.U. models. A conventional high-boy model is also available. Norge Heat Division, Borg-Warner Corp., Dept. AB, 346 E. South St., Kalamazoo, Mich.

CUSHIONED ABRASIVES AB35314

An assortment kit consisting of 44 standard rubber cushioned abrasive wheels, plus a chuck and mandrel, has wide adaptability on light electric and air powered manual and bench type machines. The working advantages of both light abrasive and rubber are combined, resulting in simultaneous burring, finishing, cleaning and polishing operations, providing considerable savings in time and labor. The kit measures 8x3x5 inches, packaged in a clear plastic case. Brightboy Industrial Division, Weldon Roberts Rubber Co., Dept. AB, Sixth Ave. and N. 13th St., Newark 7, N. J.

POST HOLE DIGGER AB35313

A new device which will offset the tedious and expensive task of digging post holes is designated as the Hole-A-Minute Digger. It was devised by Contractor E. J. Freeman of California. The device operates electrically from a ½-inch or larger drill, and literally digs a hole a minute, in hard or soft soil.

The Hole-A-Minute bit fits any ½-inch or larger drill and is machined from a bar of extra tough, case-hardened alloy steel which has been heat-treated. Its operating performance is fully guaranteed by the manufacturer. Hole-A-Minute Div., Eugene John Freeman & Co., Dept. AB, P. O. Box 2143, Van Nuys, Calif.

L. P. SALAMANDER AB35317

Offering longer life and less fire hazard, a new butane fired salamander called the Port-A-Heat has been especially designed for contractors, plasterers, paper hangers, floor covering workers, bricklayers and carpenters. The unit is stated to be smokeless, greaseless and non-toxic, permitting operation without the use of a vent pipe. The Port-A-Heat does not become red hot, consequently it may be moved about without waiting for the metal hood or sides to cool. The unit weighs 14 pounds, is 21 inches high and 13 inches wide. The output is up to 36,000 B.T.U. per hour. It is furnished with a five foot armored hose for tank connection. The L. P. gas tank is not supplied with the unit. Port-A-Products Co., Dept. AB, P. O. Box 515, Far Hills Station, Dayton 9, Ohio.

ROOF FRAMING SQUARE AB35307

Combining the principles of a framing square and a slide rule, this new tool automatically solves roof framing problems and provides a pattern for marking all cuts. The operator needs only to know the width of the building and the pitch of the roof.

The all-metal tool has a jackknife blade with rafter tables on either side which enable the user to determine the rise per foot run and the length of rafter. Raising the blade until the indicator is opposite the rise per foot run selected may be moved about without waiting for the metal hood or sides to cool. The unit weighs 14 pounds.

USE THIS COUPON FOR MORE INFORMATION ON NEW PRODUCTS IN THIS ISSUE

Save Time—Just Insert Key Numbers and Mail To: American Builder, 79 W. Monroe Street, Chicago 3, Illinois

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When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder
PINE-PANELLED?

ADD-A-ROOM NOW!
with Gold Bond

GUESS AGAIN!

SHOW this picture to a remodeling client or
a new home prospect, and you'd get a remark
like this—"Sure, it's beautiful, but can I afford it?"
YES!

Gold Bond Gypsum Grainboard gives the
beauty of fine wood paneling...at wallboard cost.
And it's fireproof, another strong sales point for
you. There's a choice of antique-looking Knotty
Pine...rich, warm Bleached Walnut and expen-
sive looking Dark Walnut.

In the April 18th issue of The Saturday Eve-
ning Post, millions of Americans are going to
see this attractive kitchen in glowing full color
...and they're going to get ideas about their
own kitchens, about unfinished attics and base-
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It can mean plenty of profit for you! See the
new Gold Bond Gypsum Grainboards at your
local Gold Bond lumber and building materials
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Fireproof Wallboards, Decorative Insulation Boards, Lath, Plaster, Lime, Sheathing, Roofing,
Siding, Wall Paint, Textures, Rock Wool Insulation, Metal Lath and Sound Control Products.

MARCH 1953
Baths, kitchens, powder rooms of Vikon Metal Tile sell on sight! They're the center of attraction in any of their 26 fade-resistant decorator colors, gently rounded bevel, and sparkling glossy finish.

These rugged squares of metal with a hard-baked finish possess rigid structural stability. They will not warp, chip, or craze. They resist heat, ordinary household chemicals, and abrasive action of repeated washings.

You start saving the minute you specify Vikon! The initial price is low and installation is relatively simple. Light in weight, no extra supports are required. And Vikon Tiles can be bent, cut, lapped . . . with ease!

Approved for government installations

“The Original Individual Metal Tile”
Established 1926

VIKON TILE CORPORATION
WASHINGTON, N. J.

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

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Address
City...Zone...State

CATALOGS —
and Manufacturers Literature

338 — BASEBOARD HEATERS—Thermo - Base, a unitized system of warm air baseboard perimeter heaters supplied in 8, 5 or 3-foot lengths used in place of perimeter registers, is accurately rated for all static pressures and air temperatures. The units are illustrated and complete functions are given in this attractive eight page catalog, with full installation instructions and practical recommendations. Thermo-Base Div., Gerwin Industries, Dept. AR, Michigan City, Ind.

339 — STEEL WINDOWS AND DOORS—new 48 page catalog of manufacturers' complete line of residence casements, screens, and storm windows; intermediate and architectural projected windows, continuous, utility, security and industrial type windows with necessary hardware; installation details, line drawings, useful descriptive material included. Ceco Steel Products Corp., Dept. AB, 5601 W. 26th St., Chicago 50, Ill.

340 — UP SWINGING DOOR HARDWARE—a comprehensive parts and specifications manual, this catalog includes details for standard and low head jamb types, "roll-in" track and pivot installations. Door truss assembly data and recommendations for door dimensions are also included. Different models are correlated, the purpose each unit serves is defined. Sturdee Steel Products Co., Dept. AB, 6820 Brynhurst Ave., Los Angeles 43, Calif.

341 — RESIDENTIAL BOILER—six page illustrated catalog contains capacities and dimensions of all models of new steel heating boilers, with capacities of from 320 to 1,100 net load, steam; available for stoker firing, for rotary or gun type oil burner, or with conversion assemblies for hand firing; boilers can be installed with standard jacket or extended type jacket as shown on cover of catalog. Lycoming-Spencer Division, AVCO Mfg. Corp., Dept. AB, Williamsport, Pa.

(Continued on page 174)
DeWalt Mass-Production Methods Keep Costs Down!

It doesn’t matter how many houses you’re building—or how many DeWals you own—mass-production methods save you time and money! That’s because the De Walt® is such a flexible machine, it adapts to your cutting purposes easily—in seconds. You can use one DeWalt to make many different cuts in a few minutes. Or you can set up many DeWals—each of which makes one cut continuously. Either way, you get all the famous DeWalt advantages.

SPEED—Because the DeWalt is so flexible, you can position the saw for any desired cut in seconds!

VERSATILITY—You perform many operations—ripping, mitering, beveling, tenoning, dadoing and a variety of others.

ACCURACY—DeWalt cuts to within hundreds-of-an-inch tolerances!

SAFETY—DeWalt Safety Guard gives maximum protection at all times.

Find out today how you economize in dozens of different ways...with DeWalt mass-production building methods. See your DeWalt dealer or mail coupon.

Available in 5 fine models from ½ to 10 H.P.

See AMP’s new, exciting television show, "OMNIBUS", every Sunday. Check local paper for time and channel.
Amazing DISPOSABLE Blade

Super-Hard Teeth

HEINEMANN'S
New HARD-TIP Saw

Throw Away When Dull
Stays Sharp 5 Times Longer
Sensational Low Price
Reduces Costs 50% to 60%
Cuts Smoother and Faster

Ends Your Saw Troubles

Remarkable ... this new DISPOSABLE Heinemann "Hard-Tip" Blade. Short teeth, specially hardened, stay sharp many times longer — cut faster, smoother, quieter. Short teeth can't grab — safer to operate — requires less power. Always round and efficient — never develops cracks. Saws fine on any type machine, all kinds of work. The low price will astonish you — $1.77 for Standard Type "C" 8 inch. Equally low prices on all sizes up to 16 inch.

GET THE FACTS TODAY! WRITE FOR FREE BULLETIN AND NEW LOW PRICES

THE F. HEINEMANN SAW AND MFG. COMPANY
CANTON 6, OHIO

Now Available Direct from Mill!

National Log Structures
OFFERS
DURABLE DOUGLAS FIR
BUILDING LOGS

Splined logs — Precision cut — Bark peeled — Chemically treated
READY TO "LAY-UP"

Each sound Douglas Fir peeled log leaves the mill approximately 8' 3" long and about 5 3/8" thick. The splined bearing surface is approximately 3 3/4". The widths vary according to size of tree of 7"—8"—9". The sides of all logs are squared—no taper—and chemically treated for long life. Each log precision grooved and splines are furnished with each order. They go up fast, no studding necessary. Write direct to mill for quotations—immediate delivery.

NATIONAL LOG STRUCTURES INC.
STAYTON, OREGON

Catalogs

342 — TOWEL BARS — and other standard bathroom accessories finished in polished chrome are offered in this 12 page catalog; open end bars, towel rings and hooks, tumbler and toothbrush holders, soap dishes, bathroom shelves of polished plate glass, all with chrome finish clamping devices are described. Five types of convenient dealer display boards are also illustrated. General Chrome, Dept. AB, Bridge-
man, Mich.

343 — PLASTIC WALL TILE — this attractive catalog supplies all required information and advantages of Coronet wall tile, including the waterproof protection which these installations offer. The wide color range offers decorative and permanent wall covering for many different applications; 19 of these colors are illustrated in their natural shades. This tile stresses easy installation while requiring practically no maintenance. Hatchmeister Inc., Dept. AB, 2338 Forbes St., Pittsburgh 30, Pa.

344 — CURB AND GUTTER PAVER — eight page bulletin gives complete technical information with illustrations and line drawings of this gas driven unit which lays five linear feet per minute minimum. Four screwed types are available for all standard curbs. Practical data included shows how paving costs can be reduced while saving labor and time. Dotmar Industries, Inc., Dept. AB, Hanselman Bldg., Kalamazoo 1, Mich.

345 — ALUMINUM ENTRANCES — a 16 page catalog describes in pictorial-text form, including installation photographs, cutaway drawings, details and complete specifications, the manufacturers' line of commercial entrances and installations of modern store fronts. These units feature full vision entrances and wide stile construction, offering considerable variety and adaptability of usage. The Kawneer Co., Dept. AB, 714 N. Front St., Niles, Mich.

(Continued on page 176)

(Continued from page 172)
Here is the doorway opposite but with a panel of regular single glaze glass. With a random clear glass block panel, prying eyes cannot see inside.

By night, the entranceway glows with a light that radiates welcome to friends. By day, inside rooms are flooded with natural daylight. This random clear panel retains all of the doorway's colonial charm. The subtle variation in the block face is reminiscent of old handmade glass.

GLASS BLOCK “GOES” WITH ANY ARCHITECTURE

Whether a home is traditional or modern, it can have the advantages of Insulux Glass Block®. Block patterns are available in a wide variety of face designs that “go” with any architectural design.

What other material offers you the opportunities to create such interesting, new architectural effects that are so decorative... so useful... yet so practical?

For information, write to Insulux Glass Block Division, Kimble Glass Company, Dept. AB3, Box 1035, Toledo 1, Ohio.

KIMBLE GLASS COMPANY
Toledo 1, Ohio

Subsidiary of Owens-Illinois Glass Company
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ALUMINUM COMBINATION
STORM-SCREEN DOORS

Why put old-fashioned storm and screen doors on the new homes you build? Make them more attractive, more practical, more "sell-able" with Alumatic ROYALS!

ROYALS add charm and extra value to every style of home and your buyers will go for their practicality! ROYALS take all kinds of abuse; never need painting; assure savings on upkeep and repairs for years to come.

Your local building supply dealer has the new Alumatic ROYAL see for yourself how much more beauty and value the ROYAL can add to your homes. Special low contractor prices —delivered complete with all hardware, closer, and aluminum jamb — ready to install!

Alumatic CORPORATION OF AMERICA

(Continued from page 174)

Catalogs

346—TRENCH DIGGER
—an eight page folder gives in detail the reasons behind the superiority of the "Blackhawk" Trench Hog. Product design, materials and workmanship are discussed, together with complete specifications of the various models. Accessories for different digging operations also included. Large illustrations, clear descriptive text help to make the folder useful. Arps Corp., Dept. AB, New Holstein, Wis.

347—ALUMINUM WINDOWS—this 28 page catalog lists the complete Alwintite line of double hung, horizontal sliding, picture, "Viewall" and combination storm windows, screens and storm sash and window accessories. Line drawings of full size details facilitate installation data. Complete specifications and photographs, clear descriptive text, make this a useful builder's and contractor's aid. Alwintite Division, General Bronze Corp., Dept. AB, Stewart Ave., Garden City, N.Y.

348—GARAGE DOORS—these upswinging units, available in several styles and models to fit individual installations are completely presented in an eight page catalog illustrated both with photographs and line drawings of typical examples, showing the doors' ease in opening, attractive design and installation simplicity. Sturdy construction and resistance to weather are among its features. Carr, Adams & Collier Co., Dept. AB, Dubuque, Iowa.

SERVICE COUPON—CLIP and MAIL to CHICAGO

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American Builder
79 W. Monroe St., Chicago 3, Ill.

March, 1953

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Now famous Asbestone siding, roofing, corrugated and wallboard asbestos-cement products join the Gold Bond family of high-quality building materials. The Asbestone Corporation plants in New Orleans and St. Louis increase the number of Gold Bond plants to 35. Now you can specify a Gold Bond product for the outside as well as the inside of homes and industrial buildings—new construction or remodeling.

Now the Gold Bond idea of "Undivided Responsibility" is stronger than ever before. Specify Gold Bond all the way, and place the responsibility for product performance on one reputable manufacturer, National Gypsum Company!
From October 26 to November 2, 1952, more than 15,000 came to see

G-E “Young America” Home

The G-E Kitchen and Laundry you see here is being featured not only in J. M. Snyder & Sons “Young America” Home, but in scores of other developments from coast to coast.

When prospects see these matched General Electric appliances in your houses, they will be delighted, and they will associate the quality of the appliances with the entire construction of your houses. Furthermore, a G-E Kitchen-Laundry can be built right into a $10,000 or $12,000 house—and the monthly cost to the homeowner may be no more than that for a regular telephone bill.
J. M. Snyder & Sons, builders in Long Hill, Conn., won First Prize in the "Small Builder" Group of the recent Annual Merchandising Contest. Read how you, too, can capitalize on this success story in the months to come.

J. M. Snyder & Sons is a "small" builder who constructs no more than 25 houses each year. Not only alert to the latest in modern design and sales features... he is also interested in ways of merchandising his homes to the public.

Nor is the Snyder experience an isolated case!

All over America builders—"large" and "small"—have erected General Electric "Young America" homes... and all over America prospects come in droves to see and buy.

We shall be glad to work with you—as we have with Mr. Snyder.

Here are some of the ways we believe we can help you sell houses faster and more profitably:

1. Available to you (and shown below) is a folio of 5 new "Young America" House design suggestions by Victor Civkin, AIA. Get full details from your G-E Kitchen-Laundry distributor.

2. Also available are complete promotion plans for the opening of your model house. These provide tested and successful publicity, advertising suggestions for newspapers, radio, television and billboards, and cooperative advertising!

3. Finally, take advantage of the services of your G-E Distributor Builder Specialist who will work with you, and place before you all the builder sales experience of the General Electric Co.

Never before has any manufacturer presented any builder with such a wonderful opportunity. Better get the facts today—and we mean today. Address: Home Bureau, General Electric Company, Louisville 2, Ky.
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When offered a choice...
customers invariably choose

Shakertown Sidewalls

1200 Houston homes built with Shakertowns!

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You can see it... in the natural wood texture... in the soft, suede-like finish and deep shadow-lines with wide, sweeping exposures. It's there... in the savings these double-coursed shakes offer in extra protection, insulation and less cost per year of service.

Brace & Carruth have used Shakertown Sidewalls on more than 1200 distinctive homes. They utilize the styling flexibility, the wide color range, and the many practical combinations with other quality materials. Like Brace & Carruth, you can meet the demands of changing style requirements and customer preference, most profitably with America's most imitated material... Shakertown Sidewalls.

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... Add Eye-Appeal and Buy-Appeal with Structural Corrugated Glass

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WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

Venko helps you break down buyer resistance.
Its three sensitive controls assure low-cost heat and hot water. And more — Venko comes completely wired and equipped for quick installation with burner, circulator and controls in place, ready to operate. This means convenience for your customers—hours of time and labor saved for you. In addition, Venko is so compactly crated that one man can handle the entire unit which fits through a 30 inch door.

Built to fit the modern home

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Contemporary-styled office structure combines many cost saving construction techniques. Simple brick wainscoting enhances appearance, reduces maintenance. Wood and glass area above wainscoting simplifies construction.

Offices that require greater amounts of traffic are placed nearer the lobby. The President's office is in close proximity to the production department. The angular placement of the building to the plant provided an area for the cafeteria.
In their quest for style and low cost Air Control Products, Inc., of Coopersville, Michigan, turned to a local home builder to produce their new 11,500 square foot office building. Grand Rapids Builder James Bronkema, known in his area for specialization in contemporary design, used many cost saving techniques adaptable to contemporary styling. These techniques were instrumental in holding costs to $855 per square foot.

Bronkema designed and built the structure which adjoins the firm's new factory. Construction is wood post and beam with brick and concrete walls and large glass areas. Dramatic use of color was used to spark the materials.

Highlight of the design is the patio or interior courtyard which affords an exterior view from every office. Smartest architectural trick was the angular placement of the structure in relation to the factory building. The angle produced space for the plant's cafeteria yet held square footage to a minimum.

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Dignified entry facade has floor to ceiling plate glass windows and mahogany slab doors. Second floor area to the right of entryway is a contrast to the low building. Second floor houses sales and general offices, board room.

Interior patio provides all offices with an outside view. Pool uses waste water from the manufacturing process.
B&D UTILITY 7" HEAVY-DUTY SAW . . . $88.50
Weighs only 10½ lbs. Cuts to 2½" at 0°, cuts 2" dressed lumber at 45° with built-in depth and bevel adjustment. Custom powered by B&D.

B&D UTILITY 8" HEAVY-DUTY SAW . . . $92.50
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B&D UTILITY 9" HEAVY-DUTY SAW . . . $117.00
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Blades for general and special purposes, including Carbide-Tipped, Planer and Flooring blades and Abrasive Discs.
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CUSTOM-POWER in a complete line of B&D UTILITY SAWS!

There's a Black & Decker UTILITY SAW for every job to speed schedules, save time, slash costs!

Whatever your sawing job, you'll find the Saw exactly suited to your needs in the complete Black & Decker Utility Heavy-Duty Saw Line! You have five models to choose from...in blade diameters from 6" to 9", cutting capacities up to 3½" depth...plus the versatile, new Portable Jig Saw...for everything from roughing out to final trim. They'll save you time, money and man-hours whether you're sawing studs, roof trusses, rafters, joists or stair stringers; building cabinets or trimming stock size millwork to fit; cutting slate, tile, galvanized sheet or composition materials!

What's more, every B&D Utility Saw features Custom-Power that beats hand sawing 10-to-1! Special universal motors are designed and built right in our own plant specifically for tough power sawing. Each one is Custom-Made for the Saw it drives...with a reserve capacity to take the rough spots without overheating or slowing down!

And that's not all!

Other features include light weight, perfect balance, telescoping blade guard, instant-release trigger-switch, grease-sealed ball bearings and top-quality helical gearing.

For a free demonstration see your favorite B&D Utility hardware or building supply dealer. Or write today for free catalog to: THE BLACK & DECKER MFG. CO., Dept. H-663 Towson 4, Maryland.

Blacks
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PORTABLE UTILITY TOOLS

IT'S NEW! The B&D Utility Portable Jig Saw!

Use it for cutting openings in wallboard—no entering hole is needed. Cuts around intricate shapes for precise fitting of wood, metal, composition materials, linoleum, rubber, felt, etc. Driven by a powerful B&D-built universal motor. Comes complete with five different blades. Fan on motor blows sawdust away to keep guide lines free and visible. Can be easily converted for bench operation with Table Attachment.
FRAMING the structure

Detail of the lobby wall. Posts are fastened to the 2x6 sill on the bottom and at the top they are nailed through the roof. Beams are on 10-foot centers.

Lobby brick wall runs into the 3½-inch beam pocket. Dropped ceiling to the left serves as return air duct and raceway for electrical wiring. Asphalt tile floor covering is used throughout.

Post and beam framing erected on 10-foot centers was designed and engineered by the builder. The extra long module was believed best for office construction. One module is large enough for a single office, or two can be used for larger units. Beams are built up of 2x12's with a 4x8 spacer between. The 3½-inch pocket between the 2x12's allows 4-inch brick or block to be run in the pocket with a minimum amount of finishing. This construction method produces interior partition walls.

Where partition walls fall other than beneath the beam, a full two-inch wood planking random width "V" jointed material is used. Windows and glassed areas have ¼-inch plate glass fitted between the framing members. The glass is held in place by ½x2-inch stops nailed to the framing member.

Roof and ceiling material is a full 2-inch t&g planking nailed to the beams.

Hip roof framing in the open beam construction has an open hip rafter of two 2x12's and jack rafter of two 2x12's with a 4x8 between. The ceiling material is full 2-inch t&g planking.
Window detail shows quarter-inch plate glass fitting between framing members. Stops, $\frac{3}{8}$x2 inches, hold glass in place.

Built up beams have two 2x12's with a 4x8 between. Pocket between 2x12's accommodates 4-inch brick or block. Beam color is the same on both the exterior and interior. Result, feeling of openness.

**BEAM DETAIL**

Two-thirds of the planking material are 20 feet long and cantilevered into the next module. Insulation and wiring are placed over the ceiling planking. Trim around doors was eliminated.

Office Space for 88.55 sq. ft. (continues on page 190)

Wood office partition is used when it does not correspond to the beam module. Material is full 2-inch random width "V" jointed planking. Splines were used to eliminate shear action of the wood members. Builder claimed splines set in dado are easier to erect than using 2-inch log material.

**MARCH 1953**

187
Here's where GPX plastic-faced plywood can cut costs for you... and increase your profit on every home

GPX is made from top-quality, solid-core Douglas Fir Plywood surfaced with phenolic resin plastic under heat and pressure. It comes in three grades: GPX General Use with a hard, smooth natural finish that never needs painting; GPX GREEN Painting Grade gives you the finest paint surface obtainable; and GPX Concrete Forms are known for maximum re-use and minimum re-finishing. Within each grade is a complete range of thicknesses and overlay weights. GPX combines the structural strength and workability of plywood with the hard smooth surface-toughness of plastic... a natural combination for the modern builder.

Before you start your next job, find out all about the time-saving, work-saving and money-saving advantages of GPX. Call your lumber dealer or write for full details.
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Please send me FREE Technical Manual on GPX Plastic Faced Plywood.

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MARCH 1953
WALLS of BLOCK and BRICK

Office Space
for $8.55 a square foot

President's office utilizes two 10-foot modules. The rear wall is a painted light-weight aggregate block, four inches thick. The door is 6 feet, 6 inches high which is the same height as 10-block courses. Blocks above the door did not need to be cut as would have been the case with a 6-foot, 8-inch door.

Downspouts are of 3-inch galvanized water pipe, 20 feet long, leading from the roof to the drain. The downspout is both decorative and sturdy.

The roof pitch is 2.4 in 12. This pitch gave same angle of cut to all blocks in the interior partition walls. Only three basic cuts were needed for interior wall construction.

The center section down the corridor has 10 courses of blocks. Door height is 6 foot, 6 inch. Above masonry wall is a strip of double strength glass windows.

AMERICAN BUILDER
FOUR SEPARATE HEATING SYSTEMS

Four furnaces supply heat for the perimeter heating system used in this 11,500 square foot office structure.

Office Space for

$8.55 a square foot

Four separate counter-flow perimeter warm air heating systems were installed. To facilitate the best arrangement of offices, the furnaces were not placed in the center of their heating areas. Two of the units are at one end of the heating area contrary to general practice for perimeter heating. To compensate for the extra long runs, larger than average ducts lead from the plenum chambers. These are reduced in diameter as branch runs lead off the main duct. Reducers were fabricated by the metal manufacturing company.

This multiple perimeter heating system has been in use most of the 1952-53 heating season and has proved satisfactory. Tests by heating research organizations now underway will give further data concerning this non-conventional perimeter system.
"Our Delta radial saw cuts practically anything," says Herman Horstman, Jr., "and saves 25% over portable power tools. Exclusive 360° turret action makes cutting faster, easier, safer."
A wall section goes into place—precision fit. Three men in the shop cut a complete house in a day, with the Delta radial saw; and four men erect a home, ready for rock-lath in two days!

On-the-job sawing center builds profits for Metcalfe-Hamilton, Kansas City builders. Close up shows typical sawing shed at apartment house project. Delta radial saws, because they are more versatile, make more cuts, need less maintenance, are ideal for construction work.

Delta Power Tool Division
Rockwell Manufacturing Company
646C N. Lexington Avenue, Pittsburgh 8, Pa.

Please send me full catalog data on Delta Radial Saws

Name
Company
Address
City
Zone
State

DELTA QUALITY POWER TOOLS
Another Product of Rockwell
Now! Apply asbestos-cement over Insulite Sheathing Shingle-Backer

"I can save $42 on homes like this with Insulite's new double-course system for asbestos-cement siding shingle jobs!"

EZRA OSTERHUS, General Contractor, Robbinsdale, Minnesota

Developed by Insulite, this new Shingle-Backer System for asbestos-cement siding shingles...

- Requires fewer shingles per square
- Eliminates need for building paper
- Goes on quickly and easily
- Provides deep shadow-line beauty
- Increases insulation, reduces sound transmission
- Builds stronger, tighter walls
- Cushions shingles... reduces breakage

1. See how you can "glamorize" asbestos-cement sidewalls! Insulite's new Shingle-Backer System provides that attractive shadow-line that makes asbestos-cement jobs look richer, more expensive. Yet, this better-built, better-looking sidewall costs no more (and in some cases $2.53 per square less) than asbestos shingles applied over wood sheathing.
shingles
with this new System!

2. Here’s how it works. First, apply Insulite Sheathing*. One carpenter can sheath 1,000 sq. ft. in 8 hours or less. Cuts sheathing time as much as 43%. Eliminates need for building paper because it’s waterproofed throughout with asphalt. When 4-foot Bildrite Sheathing is used you get twice the bracing strength of horizontal wood sheathing. No corner-bracing required.

3. Next, apply 11\(\frac{1}{4}\)" Shingle-Backer and asbestos-cement shingles. System is self-aligning. No special nails or fasteners needed. Increases shingle exposure from customary 10\(\frac{1}{2}\)" to 11" gives 5\% greater shingle coverage. Provides cushioned base to reduce impact breakage. Reduces shingle waste as much as one-third. Increases insulation value of wall. Waterproofed throughout with asphalt.

Developed by Insulite, this combination makes a strong, tight exterior with more than twice the insulation value of wood sheathing, felt and double-course wood shingles: (1) Bildrite Sheathing (2) Shingle-Backer (3) Outer-course Shingles (4) Grooved Nail. See how you can build better for less on your next shingle job. Send coupon for complete data.

Save $80 to $120 per home with Insulite’s tested Shingle-Backer System for WOOD SHINGLE jobs.

Cut sheathing and under-coursing time in half with this approved system for double-course sidewalls. 4-ft. Bildrite eliminates need for corner-bracing and building paper. Shingle-Backer applies faster, easier than wood under-course shingles. Provides deep shadow-line. System has tremendous holding power. Test wall was exposed to 250 m.p.h. winds. Not a shingle came loose!

Build and insulate with double-duty

INSULITE

Made of hardy Northern wood

INSULITE DIVISION, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota

Please rush data on your new Insulite Shingle-Backer System for:

Asbestos-Cement Siding Shingle Jobs.

Double-course Wood Shingle Jobs.

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THE NEW Calder OVERHEAD GARAGE DOOR LINE has a style and size for every need.

Here’s a brand new line of doors that has everything. Made by a manufacturer with over half a century of designing and engineering experience, the new Calder doors are available in every conceivable size and style for every conceivable need. Special designs and sizes to order and for extra appeal to the customer and extra profit for you—all Calder doors can be equipped with radio controlled electric operators. Send for complete information and our new, free, illustrated catalog.

Calder MANUFACTURING CO. LANCASTER 12, PENNA.

installing steel windows in the “SCR”

With the start of many “SCR brick” houses planned for this spring, American Builder continues its series on “Building the ‘SCR brick’ Wall” with a second look at the installation of windows in the 6-inch modular masonry wall. In the January issue, the installation of stock wood windows of different types in “SCR brick” walls was discussed and illustrated. This article will illustrate the use of three types of standard steel residential windows as recommended by Structural Clay Products Institute.

In Fig. 1 are shown the head, jamb and sill details for a Truscon Steel Double Hung window (Series 138). This window is modular and, therefore, fits modular openings in “SCR brick” walls. Standard widths vary in 4-inch increments from 1 foot 8 inches to 4 feet. The spring balances in the head require at least a 2-inch offset in the lintel. This is accomplished very easily with a built-up wood lintel as illustrated in Fig. 1. In “SCR brick” walls the two, three, and four feet wide windows will fit with the least amount of difficulty and with fewer cut units at the jambs.

An alternate head detail for the Truscon window is shown in Fig. 2. Here an offset masonry head is used. A standard 3x2 11/16-inch "ZEE" can be used, with a clipped normans or "SCR brick" as facing, or a combination of a 6x4-inch angle to support the load above with a smaller 2½x2½-inch angle to support only the clipped brick below. While a rowlock brick sill is shown in Fig. 1, other types of sills may be used if desired.

The installation of residential steel casement windows in the “SCR brick” wall is not quite so simple, since such windows are not as yet available in modular sizes. However, as shown in Figs. 3 and 4, the use of either wood or standard metal surrounds with these windows will permit them to be installed in some modular masonry openings. These details are based on details furnished by the Detroit Steel Co., manufacturers of “Fenestra” windows.

Residential steel casements are available in five standard widths (window dimensions) as follows: 1 foot 7½ inches, 2 feet 7½ inches, 3 feet 1 inch, 4 feet 5½ inches, and 5 feet 9½ inches. The surrounds shown in Figs. 3 and 4 can be used with the last three sash widths to permit their installation in modular masonry opening widths of 3 feet 4 inches, 4 feet 8 inches, and 6 feet 0 inches respectively with only relatively minor adjustments. By maintaining a standard head reference dimension of 13½ inches and 15½ inches for wood and metal surrounds respectively, only the sill reference dimension will vary for different height window assemblies. The reference dimension is the distance from the edge of the window frame to the nearest grid line above.

FIG. 1 Steel double-hung window installation in the “SCR brick” wall.

FIG. 2 Alternate head detail for the Truscon window.

FIG. 3 Steel casement window installation in the “SCR brick” wall.

FIG. 4 Alternate head detail for the steel casement window.
**BRICK** house

**FIG. 2** Alternate masonry head detail for steel double-hung window in the "SCR brick" wall

or below, depending upon whether the head or sill detail is being considered. The sum of the two reference dimensions horizontally or vertically, added to the standard window dimension, equals the grid opening. In Table 1 are listed the head and sill reference dimensions and the vertical grid opening dimensions for each of the different (Continued on page 198)

**FIG. 3** Steel residential casement window with wood surround in "SCR brick" wall. This detail is applicable to standard steel casement widths of 3' 1", 4' 5¼", and 5' 9½"

**"TROUBLE SAVERS" save time, too!**

**LADDER JACKS**
- ONE-MAN Ladder Jacks (left) adjust to any pitch on either side of the ladder.
- Weight distributed on three rungs.
- New, rail-type jack (right) uses side rails of ladder for extra safety.

Write for Catalog M: complete information on all "Trouble Saver" Scaffolding Accessories.

**SCAFFOLD BRACKETS**
- Erected and dismantled faster than you can build a makeshift wooden scaffold.
- 3 and 3½ ft. lengths—rail carbon steel.
- Nail, studding and bolt-attached types.
- Attachments to convert any one type to any other type.

The Steel Scaffolding Company, Inc.
846 Humboldt Street, Dept. AB, Brooklyn 22, New York
Telephone: EVergreen 3-7550

The good word gets around about **Bostwick** CORNER BEADS

Did you ever see how hard it is to splice corner bead that has an "up-shoot" on the end? Did you ever notice the bad plastering job when the end of corner bead "shoots up"? You won't have this trouble with Bostwick expanded wing corner bead. The straight bead (no bumps) saves time and plenty of it. Ask your dealer for Bostwick. Want a sample and catalog? Write today.

**Bostwick**

THE BOSTWICK STEEL LATH CO.
103 HEATON AVE. - NILES, OHIO
TWO SEATTLE CONTRACTORS
SPEAK ABOUT

KAY-TITE

February 27th, 1952
Gentlemen:

After many years of specializing in masonry
water proofing, using various products we
found Kay-Tite by far the most outstanding.
Results on every job where it has been used
have been very satisfactory.

Our contracts cover all kinds of buildings,
residential, government and commercial. We
do work on all types of masonry, inside, out,
side and above and below grade. All work is
covered by bond and guaranteed.

We always recommend Kay-Tite and are
most happy to attest to the dependable quality
of your product as it has enabled us to give
a long term guarantee on all jobs.

Very sincerely yours,
Alco Waterproofing Co.

SEATTLE WATERPROOFING CO.
ALL TYPES OF WORK

KAY-TITE COMPANY
PROTECTS MASONRY
AGAINST WATER SEEPAE
FOR BRICK
SPUCCO
CINDER BLOCK
ROUGH MASONRY
UNGALZED TILE

FIG. 4 Steel residential casement window
with metal surround in "SCR brick" wall.
This detail is applicable to standard steel
casement widths of 3' 1", 4' 51/4", and
5' 9 3/4".

(Continued from page 197)

As mentioned above, the details
in Figs. 3 and 4 are applicable only
to steel casement widths of 3 feet
1 inch, 4 feet 5 1/4 inches, and
5 feet 9 3/4 inches. The 1 foot 7 1/2 inch
and 2 feet 7 1/2 inch widths in this
type of window fit best in modular
masonry openings without such
surrounds. Fig. 5 shows these sizes
and the use of an interior metal
trim with only a narrow jamb and
head wood blocking. If dry wall
interior finish is used, a narrower
metal trim is available. In Table 2
are listed the head and sill reference
dimensions and the vertical grid
openings for the standard heights
of steel residential casements used
without surrounds in the "SCR
brick" wall.

Steel "utility" sash are commonly
used in detached or attached gar-
JAEGER’S shorter mixing cycle increases daily yardage

Jaeger’s shorter mixing cycle means more batches-per-day with no increase in crew and payroll. Here’s how it’s done — charge and discharge have both been cut to only 5 to 7 seconds. The original Skip Shaker throws its load into the drum in one swift slide. Extra big bucket and flight blades and specially designed “catch-all” spoon discharge it with equal speed.

What’s more, Jaeger’s rugged design stands up to the pace. Heavy drum with high carbon machined tracks, Timken bearing rollers, engine with power to spare, automotive transmission — all require minimum upkeep, give years of service free from breakdowns.

Available in 6, 11, and 16s sizes. Ask for Catalog M-10.

THE JAEGER MACHINE COMPANY
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Columbus 16, Ohio

PUMPS • COMPRESSORS • HOISTS • PAVING EQUIPMENT • TRUCK MIXERS

TACK CORNERITE RIGHT
with HANSEN Heavy-Duty TACKER

TACKS
- Metal Lath
- Ceiling Tile
- Insulation
- Screens
- Cornerite
- Hydron
- Building Paper

MORE SPEED from the zip-zip action of Hansen compound-leverage principle. Fast as you grip, you drive Hansen Tackpoints up to ½” length. Self-contained, ready for instant, continual use.

MORE POWER from Hansen trip-hammer driving action. The power of several hammer blows is contained in a single blow of Hansen. Balanced design insures accurate driving — easy, powerful action.

MORE PORTABILITY is combined with greater power in this readily portable unit. Light in weight. Take it to the job. Save time—steps—materials.

MORE RESULTS: Insulation is tacked better. Ceiling tile is tacked securely, neatly. Cornerite and metal lath held in place with one hand—tacked with the other. Choose Hansen—the Tacker it pays to use!

ASK FOR BOOKLET
A. L. HANSEN MFG. CO.
5059 Ravenswood Ave.
CHICAGO 40, ILL.

MARCH 1953

FIG. 5 Steel residential casement window without surrounds and with interior metal trim. This detail is applicable to standard steel casement widths of 1' 7½", and 2' 7¼". They are supplied in only one standard size, 2 feet 8½ inches by 3 feet 6¾ inches, and fit into a modular masonry grid opening of 2 feet 8 inches by 3 feet 8 inches as shown in Fig. 6. Since this detail is applicable to an “SCR brick” wall used for a residential garage, no interior finish is shown.

The six details used with this article should enable the builder to work with any of the more generally used steel residential windows in “SCR brick” construction with a minimum of difficulty. The use of the many types of aluminum windows will require special discussion, since there appears to be somewhat less standardization among the many types of aluminum sash now on the market. An illustrated article on the use of aluminum sash in “SCR brick” walls is planned for an early issue of American Builder.

(Continued on page 200)
SILL STRIP

These spring bronze or aluminum alloy weatherstrips make a perfect seal for ALL types of HINGED METAL windows . steel and aluminum casements . awning style windows . projected windows . metal ventilators in picture windows.

COUNTLESS THOUSANDS of installations have proved the effectiveness of MASTER Weatherstrips in keeping out those enemies of the home: dirt, dust, rain, and cold. Strips are fastened to the frame and sash is sealed tight under tension when closed. Many territories still available for competent dealers. Write today for full information and catalog of all MASTER products.

MASTER METAL STRIP SERVICE, INC.
1720 N. Kilbourn Ave., Chicago 39, Ill.

TABLE 1
Vertical Reference Dimensions and Grid Openings For Residential Steel Casement Sash With Wood and Metal Surrounds

<table>
<thead>
<tr>
<th>Window Height</th>
<th>Head Sill Opening</th>
<th>Head Sill Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-2&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>3'-2½&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>4'-2½&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>5'-3&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
</tbody>
</table>

With Wood Surround With Metal Surround

TABLE 2
Vertical Reference Dimensions and Grid Openings For Residential Steel Casement Sash Without Surrounds

<table>
<thead>
<tr>
<th>Window Height</th>
<th>Head Sill Opening</th>
<th>Sill Grid Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-2&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>3'-2½&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>4'-2½&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>5'-3&quot;</td>
<td>1/16&quot;</td>
<td>1/16&quot;</td>
</tr>
</tbody>
</table>


duO-Fast Automatic Tackers

Hammer Tackers and Gun Tackers for all your Tacking Jobs

DUO-Fast Automatic TACKERS are widely used in home construction work, for tacking insulation, building papers, ceiling tile, metal lath. They provide the fastest, easiest, and best way to do the work.

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660 Fletcher St., Chicago 14, Ill.
Add the beauties of Nature to the homes that you build

Many a home is made more salable simply by making it more livable. One way to do this, used by many of the country's leading designers and builders, is to retain natural wood grains and employ the rich colors of Nature to add to the charm and grace of modern architecture.

Approved way to capture the natural-grain beauty of wood is now available in a sealer and primer called Rez. Color-toned Rez, for outdoor areas, transfers to wood surfaces the rich colors and tones of the desert, the seashore, the prairie, the Northwest forests. These beautiful tones have lasting values because Rez becomes part of the wood itself—penetrates and seals the pores. It is this double action of Rez that protects wood against sun, rain, snow, ice, discoloration, fading and streaking.

The 5 beautiful color tones are:

CEDAR REZ — warm cedar brown, colored like sherry aged in the cask
DRIFTWOOD REZ — smoky gray, with the color of bleached driftwood
REDWOOD REZ — the rugged, ruddy color of the California redwoods
SAGE REZ — a soft, dry green that captures the color of desert sagebrush
MAHOGANY REZ — a rich wine red, with the deep tone of saddle leather. These color tones are not to be confused with ordinary stains.

Clear Rez likewise has a penetrating and sealing effect—equalizes the porosity of wood surfaces—prevents blotching and streaking which often follows staining—minimizes swelling, twisting and warping since it checks moisture entry. Controls grain raise.

Paint, hardware and lumber dealers can supply actual "on-the-wood" Rez samples. Or, write MONSANTO CHEMICAL COMPANY, Merchandising Division, 1700 South Second Street, St. Louis 4, Missouri. In Canada, Monsanto Canada Limited, Montreal, Toronto, Vancouver.

MARCH 1953
Small Rooms are Roomier — Have more Sales Appeal

with AMWELD® STEEL SLIDING CLOSET DOORS

Today, no home is completely up-to-date unless equipped with sliding-door closets. They save valuable space throughout the house — make small rooms larger — put waste door-swing area to practical use. Builders all over the country report dwellings so equipped move faster — bring better prices.

GAIN 6 TO 9 SQUARE FEET PER CLOSET — AMWELD K-D Sliding Closet Door units save extra floor area and wall space — permit use of entire closet — allow easy access to closet contents.

TWO FINISHES TO CHOOSE FROM — Grey Prime, Baked-on Finish, ready for a color of your choice. Natural Birch Grain Finish; no other finish required.

NO MAINTENANCE COST — Sturdy construction provides lasting beauty — no sag, no warp — cannot swell or stick.
- Easy-to-install instructions included in carton.
- All hardware snaps in place.
- Available for 3, 4, 5 and 6 foot wide openings — standard 6'9½'' height.

AMWELD® BUILDING PRODUCTS DIVISION

THE AMERICAN WELDING & MANUFACTURING COMPANY, 310 DIETZ ROAD • WARREN, OHIO

AMERICAN BUILDER
ROCKET 1000 IS BUILDING NEWS

Grant's Low-Priced Sliding Door Hardware Continues Best-Seller

LOW, LOW HEADROOM IMPROVES APPEARANCE

There's almost no space between top of door and bottom of track with Rocket Hardware. And there's only 1 3/4" from header to top of door!

The Rocket's compact design means no unsightly gaps to cover up. The clean, smooth lines work well with today's building design. Builders are naturally pleased by its buyer-appeal.

FINE FEATURES WITH LOW COST

The Rocket's low cost has been achieved with no sacrifice of the high quality standards traditional with Grant. Simplified design and efficient production make this possible.

Solid, self-lubricating nylon rollers, spun-riveted to carrier housing give quiet, lifetime service. And carriers can't jump track, yet are easily installed and removed.

Track Serves as Architectural Trim
No Special Facia Plate Required

The Rocket track is a big cost- and time-saver for builders! Mounted flush with the opening, it need only be painted to match room trim colors. Its slender lines disappear. Saves time, eliminates facia plate!

See Your Building Materials Dealer—Send for Catalog and Information

Ask your dealer for Rocket Sliding Door Hardware. If he doesn't yet have the Rocket line, write for complete data to

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31-63 Whitestone Parkway, Flushing, New York

Important: IMMEDIATE DELIVERY!
All of the frame homes in the nationally-known Park Forest, Illinois Community Development are equipped with Dura-seal Combination Metal Weatherstrip and Sash Balance. And this important visual feature helps these homes sell themselves!

With Dura-seal, windows open and close easily and smoothly with finger-tip control. Four spring balances (enclosed in metal housings) are used in each window to assure true balance. Dura-seal's complete weatherstripping saves 20% to 40% in fuel and prevents drafts and dirt from entering. It is cut to the pitch of the sill—providing an attractive and efficient window. It is self-adjusting and assures trouble-free operation for the life of the building!

These are a few of the reasons why Dura-seal is a favorite with thousands of builders and architects. Be sure to look into Dura-seal now . . . see our folder in Sweet's File!

ZEGERS Incorporated
8090 South Chicago Avenue, Chicago 17, Illinois

Detroit builder seeks new sites by air

The scarcity of suitable land for new home locations has become a major concern to many Detroit builders. Considerable time is being spent in driving around the 1,600 square miles of the Detroit metropolitan area seeking acceptable construction sites.

A. W. King

One Detroit Builder, A. W. King, has, however, discovered a partial solution to this problem by flying over potential development sites in his private plane. A former Seabee during World War II and a licensed pilot, King has found that he can accomplish quite a bit of landviewing from a 3,000 foot vantage point, while at the same time eliminating much unnecessary automobile travel.

A builder of homes in the higher price brackets, King's primary quest is for spaciousness rather than the necessity of seeking proximity to municipal services.

aluminum sheet mill described in booklet

“Welcome to the McCook Plant” is the title of a 24-page booklet recently published by Reynolds Metal Company. Over 70 illustrations and explanatory captions describe the equipment and operations at the firm's aluminum sheet mill occupying 287 acres at McCook, Illinois, a Chicago suburb.

The booklet presents a series of sketches depicting the various steps which comprise the operations involved in producing sheet from aluminum ingot. The booklet will be sent without charge upon request to Desk 4552, Reynolds Metals Co., Dept. AB, 2500 S. Third St., Louisville 1, Ky.
Another New Product For You...

NOW!
YOU CAN INSTALL
TRUSCON
ALUMINUM
RESIDENTIAL
CASEMENTS

In a new range of modular widths . . . featuring modern horizontal lines, increased light and ventilation area, stronger, more rigid construction.

Here's a fitting addition to the big Truscon Steel Window line. Famous Truscon quality through and through gives this newest aluminum casement a big plus value for you.

It is manufactured in a new range of modular sizes which match standard concrete block dimensions. This means no off-size openings . . . no trimming of blocks. You save on both labor and materials . . . in masonry as well as wood framing.

Casement heights are identical with those of standard steel casements. You can install the three-inch wider Truscon Aluminum Casements in homes you've originally planned with windows of other widths.

In the modern manner, these new wider casements emphasize horizontal lines. Ventilators are wider for freer entry of fresh air. And, larger glass sizes allow approximately 8% more light and ventilation per window opening.

For extra strength, heavy aluminum extruded sections are used throughout. Ventilator section is 1½" deep with web member increased 50% beyond normal thickness for adequate stiffness and air-tight closing. Truss-type aluminum hinges add strength while retaining slender architectural lines. Hardware and accessories are in aluminum and stainless steel. Screens and storm sash in aluminum also available.

Truscon Aluminum Residential Casements are available from key warehouse and dealer stocks. Get more information from your nearest Truscon District Office, your local Truscon dealer, or write us.

TRUSCON STEEL DIVISION
REPUBLIC STEEL CORPORATION
1052 ALBERT STREET • YOUNGSTOWN 1, OHIO

MARCH 1953
Ever talk to a carpenter who uses a Porter-Cable Saw? Do it sometime—he’ll gladly explain the practical benefits of quality tool design.

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

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

* Every Porter-Cable Tool is inspected 100%. That means thorough examination of every bearing, motor, switch, casting, etc. Each tool is guaranteed against defects in workmanship and materials.
NOW! ZONOLITE® OFFERS THE BUILT-IN BENEFITS OF INSULATION, FIRE-SAFETY, LIGHT WEIGHT AND PERMANENCE...

IN 2 GREAT CONCRETE PRODUCTS

ZONOLITE Vermiculite Concrete!  ZONOLITE Sand Concrete!

Under radiant heat pipes for more efficient operation and control.

Lightweight, insulated and permanent, ZONOLITE Vermiculite Concrete is ideal for roof decks, roof insulation, cavity-wall fill and insulating floors on the ground. Perfectly suited as a base for radiant heat systems...or where an exposed concrete floor is desired, ZONOLITE with a sand-concrete topping provides high insulating efficiency, cuts heat loss.

Ideal for one-pour floors on grade, lightweight upper story floors.

Resilience approaching wood floors! Use as fill over structural floors, for floor slabs over closely spaced joints, or for floor slabs on the ground. Has 4½ times the insulating value of ordinary concrete —½ the weight. Fireproof, permanent. ZONOLITE Vermiculite Sand Concrete is ideal as a base for tile, linoleum, terrazzo or carpeting—needs no topping.

ZONOLITE COMPANY
135 S. LaSalle St., Chicago 3, Ill.
Member of Vermiculite Institute

ZONOLITE Company, Dept. AB-33
135 S. LaSalle St., Chicago 3, Ill.
Please send me NEW Booklet CA-4, “Floor Slabs and Floor Fill,” with complete information and specifications on ZONOLITE Vermiculite Concrete and new ZONOLITE Sand Concrete.

Name:
Firm:
Address:  Zone State:
City:  0 Architect  0 Contractor  0 Other
Proper use of rope with blocks as an accessory was treated in last month's article in this series. But, on many occasions rope does the job practically by itself and its correct usage for such chores depends on at least a limited knowledge of knots, splices, bends and hitches—each of which is intended for a definite purpose.

This article will deal with splices and bends—the two methods of joining two ends of rope together.

JOINING ROPE PERMANENTLY

Knots have many uses, but one of them is not the permanent joining together of two pieces of rope; that's a job for a splice. The reason is simple: actual laboratory tests have shown that at the point at which a knot is tied, the rope may be weakened as much as 50 per cent, due mainly to the sheering action set in motion when the knot is tied and which damages or even cuts some of the fibers. On the other hand, a good splice, which is actually the process of relaying the strands of two rope ends into one unit, will retain as much as 95 per cent of the rope's strength.

What splice do you want?

You have two basic splices from which to select: the short splice, which is the strongest, and the long splice, which although not as strong is less bulky and will pass through a pulley. Obviously then, you will select the short splice whenever possible due to its advantage of strength and use the long splice only where added bulk will be a disadvantage.

How to make a short splice

Splicing may seem complicated. It isn't, if you follow these step-by-step instructions. After you've made a few splices you'll have the routine down pat and will be amazed at the neatness of your splices.

1. Unlay the strands of the ropes for a short distance, whip ends of the strands to prevent un-twisting and put together as in diagram above, alternating the strands from each end.

2. Now tie down one set of strands temporarily. Taking any strand of the opposite set, tuck it over and under one strand of the rope.

3. Tuck against the twist or "lay" of the rope. What happens is that the tuck goes over one strand, under the second, and out between the second and third.

4. Repeat the same operation with the other two strands from the same end of the rope.

5. Remove tie from other strands. Repeat operation on their side of rope. Continue two more tucks for each of the six strands.
out of ROPE

part 2—how to splice
—how to whip rope ends
—how to use bends

6. To finish, roll and pound rope on hard surface. Don't cut ends of strands off too close! (See top sketch)

Tapered splice—
To make your splice even neater in appearance, you can make a tapered splice, such as that shown in the bottom sketch above. Merely follow all the steps above until you have made the first two tucks with all strands. Then remove one-third of the yarn from each strand before making the third tuck. Remove one-half of this remaining yarn before making the fourth and final tuck.

How to make the long splice—
As pointed out before, the long splice is weaker than the short splice, but it must be used whenever the rope has to run through a pulley. One word of caution: the long splice should be made only with two ropes of the same size. Here's the step-by-step procedure:

1. Unlay the end of each rope about 15 turns and place the ropes together, alternating the strands from each end, as shown above.

2. Starting with any opposite pair, unlay one strand and replace it

(Continued on page 210)

MARCH 1953

Put the Finest Finish on all types of floors!

Save Time and Labor with AMERICAN

WOOD FLOORS ... how to give them long-life beauty has been the object of American Research for 50 years! Today—American know-how helps the architect, builder and floorman put the finest finish on oak, maple, pine and all other types of hard and soft woods. You can save time and reduce costs—with performance-tested, high-speed American sanders, edgers and polishers. You can be sure of enduring floor beauty—protected with American quality seals, finishes and waxes.

Typical of the advanced engineering and performance of American Machines is the American Super 8 at right. Sands floors nearly twice as fast as standard machines ... powerful 2 H.P. motor ... variable drum speeds, 1600 to 2800 r.p.m. ... variable drum pressures, 52 lb. to 103 lb., to meet all conditions in floors.

OTHER FLOORS ... You can also save time, labor and money in maintenance work by using American Machines and American cleaners, seals, finishes and waxes—for all types of jobs on all floors! Scrubbing, polishing, steel-wooling, disc sanding, buffing ... on wood, concrete, asphalt tile, rubber tile, linoleum, cork, any floor.

NATION WIDE SERVICE ... by American distributors in principal cities is very fast ... avoids costly delays. Shown here is modern headquarters of R. E. Shuler, Memphis area distributor.

Disc Sanding with American DeLuxe ... balanced plate with sanding disc gives floors a smooth, satin-like, easier to clean finish.

Grinding with American DeLuxe ... a precision attachment, speedy and efficient for smoothing out rough, uneven concrete or repolishing terrazzo.
BUILDERS TOLD US

"Don't change it!
You have the BEST and SAFEST catch on the Market!"

Growing demand for Keystone Aluminum Tension Screens has resulted in thousands of installations throughout the nation—and builders tell us this means thousands of satisfied users! Recently—in trying to make our Tension Screens even better—we demonstrated some new experimental models to builders in a number of cities. They told us emphatically—"Don't change the design of Keystone Tension Screens! You are now using the best and safest catch on the market!"

Now—add Plus Values with KEYSTONE—increase sales appeal of homes, apartments, motels, cottages, etc. It's the smart new way to cut screening costs, reduce maintenance and add convenience—for all double-hung windows. Saves 25 minutes per window in installation time. Easily installed—no reliance in place. Just turn knob to adjust for proper permanent setting. Heavy frames to cut or fit. No painting—no rust. A neat and attractive full-length, low-cost screen of outstanding long life. Send today for details.

ROPE

(Continued from page 209)

with a strand from the other part. Repeat this operation with another pair of strands in the opposite direction as above.

3. Now tie each pair of opposing strands, as B and E above, with an overhand knot, tuck each strand twice, as in the short splice, and then twice more as for the tapered splice. Or, halve each strand (see A and D), and tie with an overhand knot before tucking. This latter method results in a smaller splice—but at a great loss of strength.

4. Roll and pound well before cutting strands off close to rope.

How to make the eye splice—
The eye splice is the strongest, most permanent way to make a loop at the end of a rope. It is made exactly the same as the short splice, except that it is done with one rope by bending the end to form the eye and then splicing into the strands of the standing part of the rope.

WHIPPING A ROPE

A good rope deserves good care and one item in such care is "whipping," or binding the end to prevent unravelling. You may also want to whip the ends of strands before splicing, as this prevents unravelling while you are taking the tucks. This is a simple task, well worth the little
ideal control of light air temperature privacy

with all- Flexalum® venetian blinds

Make your homes completely functional—with a completely functional window treatment. FLEXALUM blinds give light without glare, fresh air without drafts, comfortable room temperatures, and privacy without that shut-in feeling. And this most efficient of all window-coverings is also the most attractive, the most durable, and the easiest to clean.

The all-FLEXALUM blind gives you durability and lasting beauty:

* Wipe-Clean Plastic Tapes and Cords
  A damp cloth wipes away the stickiest stains. Tape won't shrink, stretch, fray or fade.

* Snap-Back Aluminum Slats
  Spring-tempered to snap back ruler-straight even when bent to 90° angle. Won't rust, chip, crack, peel or change color.

* Insist on this Mark
  Look for the Flexalum "visible-invisible" trademark. It's your assurance of the top quality venetian blind.

Write for local sources and free file of venetian blind information—AIA File #35-P-3

MARCH 1953
WEATHERSTRIPPED WINDOWS show infiltration ratio

| Type of Fit | Weatherstripped | Non-Weatherstripped | Par Infiltration on Crack | Reduction in Air Infiltration
|-------------|-----------------|---------------------|--------------------------|--------------------------|
| Well        | 14.2            | 61                  | 4.30                     | Reduction in Air Infiltration
| Average     | 16.7            | 104                 | 6.24                     |
| Poorly      | 23.8            | 163                 | 6.85                     |

*At a pressure of 0.20 inch of water (20.4 mph wind velocity)
Effectiveness is greater than 6:1 for average or poorly fitted windows.

**Reduction in Air Infiltration Through Windows Due to Weatherstripping (Unlocked—no storm sash)**

**JOINDING ROPES TEMPORARILY**

While splicing is recommended as the only satisfactory method of permanently joining together two pieces of rope, there are times when you will want only a temporary arrangement. That comes about particularly when you need a longer piece of rope than any you have on hand and need to get the extra length by joining two pieces together.

For such situations, you'll want to use a "bend," which is a particular form of a knot. Generally speaking, bends should be tied only in two ropes of the same size. Stiffness and smoothness — otherwise the bend may not be dependable.

**How to tie the sheet bend**

The sheet bend is one of the most popular bends; it ties and unites easily without injuring rope fibers. It is preferable for joining light and medium ropes, and is easy to tie.

To tie: make an overhand loop with the end of one rope. Pass the end of the other rope through the loop thus formed, then up behind its standing part, then down through the loop again. Draw up tight.

(Continued from page 210)

(Continued on page 214)
NOW WESTINGHOUSE brings dishwasher design into a new stand-out styling that sparks the desire to own.

Install *Glamour* with these new 1953

WESTINGHOUSE DISHWASHERS

Add Buying Incentive in Your Home's Selling Center... Spotlight the Kitchen by Featuring the Appliance Most Prospects Want, Yet Do Not Own.

Builders, mortgage lenders and home buyers are all finding high interest in automatic dishwashers for new homes. As a sales feature, this appliance packs a powerful punch in a minimum of floor space. Being plumbed-in, it becomes an integral part of the home loan package. And the promise of real time and work savings is a potent appeal to prospects for new homes.

*Installation Costs Cut.* Every Westinghouse Dishwasher is supplied with a special Y-tail pipe for simple, inexpensive connection to sink drain line. Kitchen planning is made easier by the standard 24" or 48" widths of the models.

Right now learn full details about the completely new 1953 line of Westinghouse Appliances—with the right model and size for every builder need—by calling our nearest distributor or writing direct.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division, Mansfield, Ohio

**YOU CAN BE SURE...IF IT'S Westinghouse**
Fastened 15 to 1 faster
Saved $15,000 on one job
Cut cost from $2.53 to 9¢
per fastener

FIGURE FOR YOURSELF
HOW YOU CAN PROFIT FROM
Ramset JOBMASTER

Ask your nearby dealer to show you how much time, effort and money you can save by fastening into steel or concrete with powder-actuated Ramset JOBMASTER, on large jobs or small ones.

Let him show you the lightweight, compact JOBMASTER that fastens instantly. See the quick, easy loading of the one-piece tool, the trigger action, the one-hand operation.

Try the JOBMASTER yourself and observe the accurate positioning of the Tru-Set Fasteners with their exclusive Red-Tip Pilots. Watch how the Roto-Set shield and angle-fire control combine for straight, firm penetration and high operating efficiency.

*Ask for "MODERN FASTENING METHODS"
Profit from the many practical suggestions and diagrams, proved by long, successful experience of thousands of Ramset users, who finished their jobs faster, easier and at lower cost. Call your dealer or mail the coupon, today.

Ramset Fasteners, Inc.
Ramset Division, Olin Industries, Inc.
12117 BREA ROAD • CLEVELAND 11, OHIO

Please arrange on-the-job demonstration and send me "MODERN FASTENING METHODS."

Name
Company
Address
City

ROPE (Continued from page 212)

How to tie the Garrick bend—
The Garrick bend is one of the strongest of all forms of knots. It cannot jam and it unties easily. It is used for joining together heavy ropes and hawsers.

To tie: with one rope-end, form an underhand loop, so that both the free end and standing part point away from you. Start the second rope-end beneath both sides of the loop. Cross it over the standing part of the first rope, then under the free end of this first rope, and then over the left side of the loop. Cross it under itself and let the second free end lie over the right side of the loop. Finish by seizing each end to the standing part.

How to tie the Fisherman's knot—
A very strong knot, the fisherman's knot is extremely useful for joining together small rope or twine. It is called a knot rather than a bend, because it consists simply of two overhand knots. However, it performs the function of a bend.

To tie: lay the two ends together—each pointing in the opposite direction. Then tie an overhand knot in the end of each—around the standing part of the other. When drawn tight, the two knots slide together and will not slip.

APPEARING IN MAY
Part 3 of this series on rope usage will cover such subjects as how to make rope slings and lashings, plus more hints on short cuts to rope efficiency.

Approximate percentage of efficiency of knots and connections as compared to safe load on manila rope

<table>
<thead>
<tr>
<th>Knot Type</th>
<th>% Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square or Reef Knot</td>
<td>43%</td>
</tr>
<tr>
<td>Timber Hitch &amp; Half Hitch</td>
<td>72%</td>
</tr>
<tr>
<td>Sheepshank</td>
<td>35%</td>
</tr>
<tr>
<td>Clove Hitch</td>
<td>75%</td>
</tr>
<tr>
<td>Bowline (outside)</td>
<td>50%</td>
</tr>
<tr>
<td>Bowline (inside)</td>
<td>53%</td>
</tr>
<tr>
<td>Short Splice</td>
<td>68%</td>
</tr>
<tr>
<td>Long Splice</td>
<td>68%</td>
</tr>
<tr>
<td>Eye Splice</td>
<td>85%</td>
</tr>
<tr>
<td>Total Strength</td>
<td>85%</td>
</tr>
</tbody>
</table>

Biggest Man and Time Saver in the 10-in. Saw Field!

Quickly converts to Ripping Rig.

Cuts Flue Liners

Cuts Heavy-Gauge Metal

Scores Concrete

Contractors report big, increased output on mass production using two MAXAW 1000's instead of a radial saw. Two men working on saw horses with MAXAWS quickly make top cut and heel and tail cuts on each piece.

Extra heavy duty
- All ball bearing

For heavy construction industry

Look at this Superiority!

<table>
<thead>
<tr>
<th>MAKE</th>
<th>BLADE DIA.</th>
<th>WEIGHT</th>
<th>CUT AT 45°</th>
<th>*PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXAW 1000</td>
<td>0-5/8&quot;</td>
<td>22 lbs.</td>
<td>2-13/16&quot;</td>
<td>$175.00</td>
</tr>
<tr>
<td>Saw A 10&quot;</td>
<td>21-1/4 lbs.</td>
<td>2-5/8&quot;</td>
<td>185.00</td>
<td></td>
</tr>
<tr>
<td>Saw B 10-1/4&quot;</td>
<td>24 lbs.</td>
<td>2-1/8&quot;</td>
<td>185.00</td>
<td></td>
</tr>
<tr>
<td>Saw C 10&quot;</td>
<td>35 lbs.</td>
<td>2-5/8&quot;</td>
<td>190.00</td>
<td></td>
</tr>
</tbody>
</table>

*Competitive prices quoted as of Jan. 1, 1953. Saws listed as A, B, C are those made by leading manufacturers of industrial saws.

MAXAW 700

Teamed up with MAXAW 1000's, the MAXAW 700 quickly breezes through on-the-spot cutting with only 10 lbs. of weight to carry and handle. Heavy Duty—All Ball-and-Roller Bearing—Industrial Quality, makes every cut in all lumber up to 2 x 12's both on 45° bevel and straight cut. Only $69.50

FREE — We will be glad to send you a Lumber and Plywood Footage Gauge. Just write Dept. AB-33 on your company letterhead.

Cummins-Chicago Corp., Chicago 40, Illinois
334 Lauder Ave., Toronto 10, Canada

Since 1887

The miracle of magic pivot puts MAXAW 1000 so far ahead of all competition in every kind of performance that you can decide it is the one to buy without ever seeing it!

Look at the table at left — with magic pivot, MAXAW 1000 cuts far deeper at 45° with a 9¾-in. blade than any competitive saw with a 10-inch blade! Then, besides, it gives you a great big 3¾-in. straight cut — weighs only 22 lbs., against as much as 35 lbs. for others — has dual-center-balance handle so it always hangs parallel to floors, saw tables, when you pick it up — front does not nose down! You get this only with the miracle of magic pivot—exclusive in all MAXAWS!

Remember — the MAXAW 1000 with magic pivot engineering, 100% all ball bearing, extra heavy-duty industrial construction, hardened worm-and-wheel gearing will slough through even wet, soggy, slug-laden wood. Cut costs—speed up biggest production jobs with it!
BLUEPRINT FOR MORE BUSINESS!

Install...

NEW IMPROVED Hidalift
THE 100% CONCEALED SASH BALANCE

Makes Double-Hung Windows

- Quieter Operating
- Less Costly To Maintain
- Easier to Raise and Lower
- More Attractive in Appearance

Hidalift offers more "SELL" features because it is:

100% CONCEALED—There's nothing exposed to mar the beauty of modern windows. No part protrudes or is otherwise exposed to view.

DESIGNED for EASY, FAST INSTALLATION — smooth-as-silk lifetime operation.

EASIER TO TENSION — Tensioning can be applied before or after installation without special tools.

FITS WINDOW with or without weatherstripping.

POSITIVE LIFTING POWER provided by highest quality coil spring.

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The Turner & Seymour Mfg. Co.
Torrington, Conn.

Gentlemen:
Send complete literature and prices on Hidalift
Please check  [ ] Dealer  [ ] Builder

Name:
Address:
City  Zone  State

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one of 10 woods
from the WESTERN PINE REGION

A distinctive straight-grained wood with a strength, toughness of fiber and rigidity which make it ideal for structural and framing members of farm, home and industrial buildings. Excellent workability, fine texture and ability to take and hold all types of paints and stains recommend it for interior woodwork too.

This is but one of ten fine softwoods from member mills of the Western Pine Association. All are manufactured, seasoned and graded to exacting Association standards. Lumber dealers, builders, architects and wood users have found them dependable and best for many construction uses.

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IDAHO WHITE PINE
PONDEROSA PINE • SUGAR PINE

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LARCH • DOUGLAS FIR
WHITE FIR • ENGELMANN SPRUCE
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Write for free illustrated book about Larch.
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to get business!

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Timely, accurate, comprehensive construction news service
THE FIRST STEP IN EVERY SALE
What does Mrs. America look for first inside your house? She tries to see just exactly where her furniture will go. And that takes free wall space.

With Dunham Baseboard Heating she'll have enough "wall" to arrange things as she wants them—even when picture windows and fireplaces "knock out" valuable wall space.

That's because Dunham Baseboard runs only along outside walls, and only at floor level. No above-the-floor warm and cold air grilles to keep furniture "clear of."

Let Mrs. America place her furniture where she feels "at home"... and she's more apt to buy your home.

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 unusually neat, finished appearance. See your local heating contractor for full information, or write direct to C. A. Dunham Company, Dept. 25, 400 W. Madison Street, Chicago 6, Ill.
Built-in quiet can help sell your houses

Add Cushiontone ceilings to your "extras" package

Today's buyer expects more "extras" for the price of a new home. That's why you can sell homes faster when you include the unexpected extra of Armstrong's Cushiontone ceilings.

People have seen this fiberboard acoustical material in exclusive restaurants, theaters, and smart shops. When they see it in the houses you build, they'll recognize it as a luxury as modern as air conditioning. Yet it costs you very little extra to offer Cushiontone as part of your house package. It's especially economical for use in the houses you build with dry-wall construction.

Cushiontone is almost essential for the "open-planned" house. Where full partitions are not used to separate kitchens, stairways, and "family rooms," Cushiontone will help divide these areas into quiet zones.

You save valuable time on a Cushiontone job. The handy 12" x 12" tiles are simply nailed to 1" x 3" furring strips. Cushiontone also supplies extra insulation—particularly important in one-story "ranch-style" houses.

Ask your lumber or building materials dealer for full details on Armstrong's Cushiontone or write Armstrong Cork Company, 1603 Stevens Street, Lancaster, Pennsylvania.
New homes in 1953 will have “Plug-In” Strip installed as a leading Sales “PLUS” for greater builder profits.

Eliminate home owners’ “PET PEEVE” by providing convenient, safe, electric outlets all around the room. Home owners’ survey reveals electric outlets all around the room are as important as an all-electric kitchen.

“Plug-In” Strip is a continuous baseboard trim of electric outlet convenience. Its installation cuts rough-in wiring cost while increasing electric outlet adequacy 400 per cent.

LET’S GO NOW! Complete details are near you—call your local National Electric sales office or write direct today for full information.

National Electric Products
PITTSBURGH 30, PA.
**Delco-Heat helps sell Oklahoma homes**

Delco Conditionairs specified exclusively by Lawton builders

Here's what Andy Crosby, Vice-President and Sales Promotion Director of The Lewis Construction Co., Inc., Lawton, Oklahoma, has to say about Delco-Heat. "Our sales experience indicates Delco-Heat automatic home-heating equipment offers real sales advantages in the homes we build. We are so favorably impressed that we are installing Delco-Heat in all our new homes." Hewett Refrigeration Co. is the Delco-Heat Distributor in Lawton, Okla.

Tom Lewis, Jr. (left), Andy Crosby (right)

The home pictured here is typical of the ranch-type, two- and three-bedroom homes we built in 1951," writes Tom Lewis, Jr., President of The Lewis Construction Co., Inc. "In this particular development of 75 homes we used Delco-Heat Gas-Fired Conditionairs exclusively."

Eye-appealing cabinet styling...competitive prices...General Motors dependability...consumer acceptance...a complete range of burners, warm air furnaces and boilers to meet every builder's needs—are just a few of the reasons why so many prominent builders are turning to General Motors Delco-Heat.

Home owner satisfaction proved in thousands of Delco-Heat installations shows that you can't beat Delco for gas- or oil-fired automatic home-heating equipment. Find out, now, how Delco-Heat can fit into your new home-building plans. See or phone your nearest Delco-Heat Distributor listed in the Yellow Pages of your phone book. Or, for complete information, write Dept. ABH, Delco Appliance Division, General Motors Corp., Rochester 1, N. Y.
Here's all
You Pay!

$1.75
6" diameter
RIP-CUT-OFF
NO. 60 COMB. (8" dia. $2.15)
with round or special shape centerhole

FOR

SI-CLONE
SAWS
of Guaranteed
SIMONDS Quality

No other saws give you guaranteed
high quality... at such popular prices! In all, there are 13 types of saws up
to 12" diameter in the Si-Clone Line
(including Dado Heads and Carbide
Tipped Saws). These are furnished
with round or special shape center-
holes for table and electric hand-saws
as catalogued. Stop in or call your
local hardware store, department store,
or woodworking machinery dealer to-
day for the SIMONDS
SI-CLONE SAWS
you need.

IDEAL LAYOUT for a

Walls inside are of 5/16-inch plywood (redwood novoply, driftwood and summer-
wood). Trim is redwood. ceiling is 16/32 Nuwood tile. Fixtures are birch and maple

保证
材制SIMONDS
STEELE充分保
证条件指
不合，材
工品指

FITCHBURG, MASS.
Factory Branches in Boston, Chicago, San Francisco, and
Portland, Ore. Canadian Factory in Montreal, Que.
The face of the old building (left) was remodeled to tie in with the new sales room. Redwood is the chief material.

lumber yard

The Deal Lumber Co. of McPherson, Kansas, was established ten years ago in a modest building and yard located next-door to an important intersection on U.S. Highway 50N. As the business grew, physical expansion was inevitable. Fortunately the company was able to buy the property between it and the corner, and has recently completed an expansion program which involved the building of a new sales-room and office and the remodeling of the old facilities. The result is a single unit well planned to function efficiently in all departments.

The company is now located on a corner with a frontage of 225 feet on the highway, with plenty of space for properly routed drive-ins and for customer parking.

The new building has a 2x6 wood frame exterior faced with 3-inch and 10-inch V-joint redwood. Green Corrulux, extruded aluminum and plate glass show windows dress up the facade, and the night lighting of the building is excellent.

Remodeling of the existing buildings included facing all with 1/4-inch asbestos board and corrugated iron. A new double deck lumber shed 22x48 feet was added, as well as a carpenter shop which is 20x40 feet. All lumber is under roof except for out timbers.

"The best part of this expansion program," says manager Carl M. Edwards, "is that we still have space for another 40x30-foot building—sometime."

JAEGER MACHINES PUT PROFITS IN YOUR CONTRACTS

Yes, you'll add profits to your masonry contracts with this Jaeger "Power Hoe." Its bigger drum capacity and multiblade pugmill mixing action keeps ahead of your crew...supplies a better mixed, easier spreading mortar at full strength. More reliable too...Timken bearing drum shaft with Jaeger tested leakproof seals, automotive transmission, drum of heavy gauge steel give years of trouble-free service.

Jaeger Self-Raising "Holster" Tower

Here too you'll save labor and material, plus hours of placing time. Heights to 67', 1 ton capacity. Assembles on ground in 10' sections. Self-Raising. Easy to move on skid base. Available with material cage or 1/2 yard bucket. Automatic safety device positively prevents falling even if cable breaks.

See your Jaeger distributor or send for Catalogs.

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CONCRETE MIXERS * COMpressors * PUMPS * PAVING MACHINERY

Scots Lawn BEAUTy

a Plus Value that sells homes

Many "extra features" are incorporated into today's homes to attract prospects, make sales. A Scott lawn is the standard of perfection known to everyone because it adds so much to the final appearance of any home...it's a natural plus value that's in step with the outdoor living atmosphere wanted today. You can furnish homes with a beautiful carpet of Scotts velvety turf for very little, if any, more than ordinary lawns.

Start now to benefit from the extra sales appeal of saying "my homes include a Scotts lawn." Spring is a very favorable seeding time, so don't delay seeing your local Scott dealer or writing our turf specialists for recommendations and prices.

O. M. Scott & Sons Co., 120 Spring Street, Marysville, Ohio
also Palo Alto, Cal

Start now to distinguish your homes with Scotts Lawn PERFECTION
No guesswork in Minnesota

In Minnesota . . . where normal annual temperatures often range from nearly 100 degrees to a rugged 20 below . . . construction men have discovered how air entrainment helps to produce concrete that resists the deteriorating effects of extreme and highly variable temperatures.

But they also know that guesswork doesn't go when you're mixing air-entrained concrete! That's why the State of Minnesota specifies that on Minnesota highways . . . as on so many other construction jobs . . . it's wiser to follow the "prescription" technique.

Now, Minnesota makes sure—by requiring: "... for air-entrained concrete, normal Portland cement will be required with the air entraining agent to be added at the mixer."

... it's sure, simple—and performance proves it's well worth while!

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.

Photos courtesy Minnesota Department of Highways.

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MANUFACTURING COMPANY

SALES OFFICES: Chicago • St. Louis • Memphis • Jackson, Miss. • PLANTS: Oglesby, Ill.
Des Moines, Ia. • Cape Girardeau, Mo. • Nashville, Tenn. • Cowan, Tenn. • Brandon, Miss.

PORTLAND • HIGH EARLY STRENGTH • AIR ENTRAINING • MASONRY
This twin bungalow is called a "retirement" home by its builder, Harry C. Long of Akron, Ohio. People who are planning to retire buy it—to live in one of its two five-room suites and rent the other. It's a retirement-income idea with quite a market.

Mr. Long has made this value-packed house a solid investment. Each suite has five large rooms, electric kitchen, including dishwasher, deluxe bathroom, fireplace—and Thermopane* insulating glass in every window. Thermopane adds appeal—lots of it—whether you build houses to sell or to rent.

Thermopane costs more—sure—but builders like Mr. Long make up the difference by using the panel window system. The frames come to the site already fabricated. They consist of 2 x 6's pre-rabbeted and put together in a grid pattern, as a single light, or in any combination of lights up to three wide and three high. Ventilators go into as many spaces as desired. Both fixed lights and ventilators take standard Thermopane made with low-cost DSA glass.

You can also use standard Thermopane made of DSA glass in double hung, casement and awning sash. Of course, for larger windows where utmost clarity and strength are desired, you'll want to use Thermopane made of L'O-F Polished Plate Glass.

Your Libbey-Owens-Ford Glass Distributor or Dealer can give you full information. Or mail the coupon.

Libbey-Owens-Ford Glass Company
333 Nicholas Building, Toledo 3, Ohio

Please send me complete information on installation methods for low-cost windows of Thermopane.

Name ___________________________ (Please Print)

Address ___________________________

City ______ Zone ______ State ______
of all home builders prefer Oak Flooring, no matter what the price category. This was revealed in a recent nation-wide study.

This tremendous preference knew no price or size difference because all homeowners want certain basics in their new homes. These benefits are all found in Oak Flooring: beauty, durability, economy, adaptability and "healthfulness."

These builders reported that a majority of the home buyers looked for Oak Flooring when inspecting a new home. They know that Oak Flooring is unique in its combination of lifetime beauty and unmatched durability.

For this reason, many builders say, "Nothing helps sell a house faster than a good Oak Floor."

Now that Oak Flooring can be laid over concrete by using screeds set in mastic, it is easy and economical to include the advantages of Oak in homes having minimum budgets.

See the NOFMA catalog in Sweets and send for free, FHA-approved instructions for laying Oak over concrete. Write to National Oak Flooring Manufacturers' Association, Sterick Bldg., Memphis 3, Tenn.
Until recently, the back of cove tile pieces was rounded; now, a new 90 degree “stay-flat” back on large radius cove tile results in important time saving in clay tile installation.

The new cove design, which is adaptable for both mastic and mortar installations, enables the tile setter to install the large radius cove course before setting the wall surfaces. With the 90 degree back, he can stack wall tiles on top of the cove. This method eliminates the need for wood shimming, while avoiding the problem of slipping. The new “stay-flat” back stays in place. It is stated to be easy to cut and align.

The flat surface on the back of the cove is sufficient for strong adhesion with mastic whether it is buttered or floated on.

The large radius cove tile can be used at any wall joint that benefits in appearance or use with an exterior curved surface instead of square corners. It is being used especially for drain and counter locations in the kitchen, with tile bath floors and for both vertical and horizontal wall joints of shower stalls. Since they do away with the problem of cleaning corners, the coved installations provide greater sanitation both in homes and institutions.

The new large radius cove tile is a recent development of Pomona Tile Mfg. Co., Los Angeles, Calif.

**Typical length of large radius cove tile, showing 90 degree “stay flat” back and cross section.**

From all angles—performance, price, upkeep and operating costs—the new Muller Plaster and Mortar Mixers hold first place. The Muller Patented Paddle Shaft Seal is guaranteed for the life of the mixer. Larger drums, power throw-out and other new features give top efficiency.

Made in sizes from 3 1/2 to 9 cubic feet. Prices from $312.00 F.O.B. Factory up.

Write or Phone today for complete information.

MULLER MACHINERY COMPANY, INC.
Matuchen, N. J. Cable Address MULMIX
Look! 3 sash operations from just one window!

HOPPER-VENT—Sash swing inward when Flexivent is in this position. Note ample ventilation, yet no interference with drapes.

Want a really versatile ventilating

AWNINE-VENT—Plenty of ventilation in this position, excellent protection during rains.

CASEMENT—Flexivent becomes a low cost casement window when installed in this position.
window? Use the new Andersen FLEXIVENT

FLEXIVENT for stacks, ribbons, groups.
It's the most flexible window yet!

Have you seen the new Andersen Flexivent Window Unit? It's proving a sensation in building circles ... the most versatile, most useful ventilating window you've ever seen!

Choice of awning, hopper or casement operation. Choice of 9 sizes, including large openings. Use Flexivent singly. Or combine it in ribbons, groups, stacks, or with other windows.

LOW IN COST! Simplicity of design and operation have kept the Andersen Flexivent low in cost, but you'll see famed Andersen quality and skill in every detail!

HIGHLY WEATHERTIGHT—Sash are hung on friction hinge-adjusters, close tightly against frame and weatherstrip. Optional screen and double glazing.

WANT MORE INFORMATION? Then contact your Andersen dealer, or write Andersen Corporation for detail and specification data.

Manufactured by
Andersen Corporation
Bayport, Minnesota
Window Specialists for 50 Years

IN PANEL WALLS, built up sections of Flexivents give a choice of ventilating or fixed sash. Here's a popular 9-light wall.
A dry foundation for Swifton Village

1200 UNITS AT THE NEW SWIFTON VILLAGE, CINCINNATI, OHIO.

The above illustration is an architect's conception of a section of the new housing project that will house, when completed, 4,500 people, covering 36 acres.

THOROSEAL

Developed and built by The Jonathan Woodner Company, of Washington, D.C., the project, when completed, will total $25,000,000. The Thoro System materials, used on this project, furnished by the Oakley Coal & Supply Company, through The Nurre Company, Cincinnati.

Al Loreti applies 2 coats of Thoroseal to concrete block foundation, as sure protection against rain and dampness.

WATERPLUG
Stops leaks

THOROSEAL
Seals surface

QUICKSEAL
Beautiful finish

For 39 years, The Thoro System materials have been protecting above and below-grade masonry, where constant dampness, caused by rain, destroys unprotected masonry.

Get our 20-page brochure, pictorially described in detail; also, architect's chart for your wall.

STANDARD DRY WALL PRODUCTS
NEW EAGLE, PENNSYLVANIA • U.S.A.

American Builder
3 ways to lick problems of

CONDENSATION and VENTILATION

MARCH 1953

Milcor® LOUVER VENTILATORS

Three types...and sizes for every need...with designs for application to masonry or stone, sheathing or siding

Trapped summer heat and winter moisture condensation are serious problems in today's air-tight, insulated homes. Interior moisture vapors pass through ceilings and walls, condensing to cause paint blisters and serious structural rotting.

To lick this, use vapor barriers to confine moisture — and install Milcor Louver Ventilators to draw off moist, dead air and supply fresh dry air.

These ventilators are built for easy installation — built to give the home owner the advantages of permanence, long-life economy, modern appearance:

* Heavy galvanized steel.
* Aluminum-paint finish.
* Reinforced louver blades.
* Framed, removable insect screen.
* Generously fitted corners and overlaps.

Whether you build or remodel on contract, or build to sell, protect the home owner — and your reputation — by installing Milcor Louver Ventilators. See your building supply dealer.

Portland builder rents

1,200 square feet of space, counting both units. Siding is cedar shakes. Hardwood floors and dry wall construction inside. The building is placed on a lot 50x100 feet.

What this mark means on clothing...

this mark means on redwood

GRADE-MARKED FOR EASY HANDLING TRADE-MARKED FOR EASY SELLING!

When you see the grade-mark of the California Redwood Association on a piece of lumber, you can be sure it will give your customers the fine performance Redwood is capable of giving! For every board foot of CRA Redwood is graded, milled and seasoned to exacting standards. Why take chances? Offer your patrons the best—grade-marked, trade-marked, Certified Dry CRA Redwood — the quality Redwood processed by the reputable member firms of the

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“Enough talking has been done about public housing—it's time to compete with it.” So figured John J. LaPorte, regional vice-president of NAHB and former president of the Portland (Oregon) Home Builders Association. He believed that because of his activity in association work it was up to him to take the lead in developing really low rental housing.

The LaPorte built duplex contains 1,200 square feet of space for both units, but it is so arranged that there is no waste space in either apartment. The two apartments are separated by a wall of 2x3-inch staggered studs with Fiberglas woven in between for sound deadening.

The building is of standard frame construction with cedar shakes on the exterior, dry wall interiors covered with wallpaper in living room and bedrooms and paint in kitchen and bathroom. Kitchen has coved lino-leum. There is lino-leum in the bathroom and hardwood floors in the other rooms.

A double sink with one deep tray for washing, lino-leum drain board, floor-to-ceiling storage cabinet with sliding doors, and space for automatic washer— are features of the kitchen. It also is equipped with a range and refrigerator.

Bathroom has baked enamel wall-
new two-bedroom units for $49.50

FIRST SHOWING
PORTLAND HOME BUILDERS EXPERIMENTAL
LOW COST RENTAL UNIT
$49.50 PER MONTH INCLUDES

OPEN
Sat. 3-5 for PUBLIC ACCEPTANCE
A Truly Attractive Economy Duplex With All Modern Conveniences
BUILT IN THE PUBLIC INTEREST FOR PEOPLE OR LOW INCOME FOR Rent or For Sale
JOHN J. LaPORTE, Builder
MEMBER OF PORTLAND HOME BUILDERS ASSOCIATION

Human nature being what it is, buyers of some of the LaPorte duplexes promptly rented them for $60 and $70 instead of the original $49.50.

board around the tub. Heat is supplied by a 55,000 B.T.U. gas heater, thermostatically controlled. Other features are pull-ladder to storage space in attic, where 20 gallon gas water heater is also located, venetian blinds, concrete slab large enough for two cars adjoining house, lawn and shrubs.

LaPorte built several of these duplexes as an experiment. He figured that when using land costing not over $700 per apartment (such land is available in Portland), he would get about a 3 per cent return with a 3 1/2 per cent vacancy factor. This of course is not large enough if the matter is looked at in a cold-blooded business way. But if considered in the light of builders’ responsibility to provide decent housing for families in the lower income brackets and so prevent the increase in public housing units—it is an adequate return.

There were some interesting repercussions. People who lived in LaPorte apartments renting for $90 monthly called and wanted to know how they could get in the $49.50 units. He found that the only way to rent the apartments to the right people was to investigate the income of all applicants. Otherwise families capable of paying higher rents would come in.
“Most practical approach to year ‘round conditioning ever”

say hundreds of builders who inspected Bryant’s new “COMMAND-AIRE” TWINS at NAHB Show

Builders who saw the “Twins” in Chicago have good reason for enthusiasm. For here at last is year ‘round home conditioning that’s...

20% to 35% lower in cost! We’re mass producing the “Twins” to bring the price way down—to make it possible for you to offer year ‘round conditioning in moderately priced homes... to mass-market buyers! Moreover, you can offer...

Cooling initially—or later! The “Twins” are independent, matched heating and cooling units. You can install and show both units in your model home and offer, in the others, the immediate or later addition of cooling according to the convenience of the buyer. And you needn’t worry about space because the “Twins” offer...

Unusually compact design! Using as little as 73½ sq. ft. of floor space, you can tuck them away in a closet, alcove, utility room or a corner of the basement. And you have a wide range of combinations to choose from—gas or oil furnaces ranging from 50,000 to 175,000 Btu/hr and cooling units in 2, 3 and 5-ton capacities.

Get complete information on the “Twins” today. And ask about Bryant’s supporting program to help you sell your homes. Contact your Bryant Distributor or write: Bryant Heater Division, 17825 St. Clair Avenue, Cleveland, Ohio.

Bryant means business... better business for builders
THERE'S A BIG

When you buy a Homelite pump, generator, blower, or chain saw, you buy a superior product. You get outstanding performance and real dependability, the results of Homelite's 30 years' experience in manufacturing gasoline engine driven units. And with this, you get a plus...a big plus...service of unusual caliber.

Covering the entire country, there are 45 Homelite factory branches...fully staffed by Homelite men and completely stocked with Homelite parts. These factory branches are Homelite branches exclusively...servicing Homelite products exclusively...serving Homelite customers exclusively. They are established, located and equipped to bring factory precision service to you in the field...in the fastest possible way.

Manufacturers of Homelite
Carryable Pumps • Generators
Blowers • Chain Saws

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FACTORY BRANCHES FOR
PROMPT, EFFICIENT SERVICE

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Bloomington, Ill. — Bloomington 2-7877
Boston, Massachusetts — Stadium 2-4455
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Charlotte, N. C. — Charlotte 2-5835
Chicago, Illinois — Auburn 7-0246
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Jacksonville, Fla. — Jacksonville 3-5475
Kansas City, Missouri — Logan 9555
Los Angeles, California — Angelus 0186
Lufkin, Texas — Lufkin 8
Memphis, Tennessee — Memphis 4-1660
Milwaukee, Wisconsin — Hilltop 2-2505
New Orleans, La. — Temple 2707
New York, N. Y. — Cortland 7-2522
North Arlington, N. J. — Kearny 2-3500
North Salt Lake, Utah — Salt Lake 9-4216
Omaha, Nebraska — Atlantic 8085
Philadelphia, Pennsylvania — Lombard 3-0614
Pittsburgh, Pennsylvania — Allegheny 1-7263
Port Chester, N. Y. — Port Chester 5-3400
Portland, Oregon — Portland 3-5295
Syracuse, New York — Syracuse 2-7902
Toledo, Ohio — Jordan 8723

MARCH 1953

MARCH 1953
new TWIST NAIL aids application of insulating siding over fiber board or gypsum sheathing

You might say that a “twist of the wrist” has opened the way to important new economies in sidewall construction.

This latest twist is the one that builders use to put a pretzel-like curl in nails driven between studs in sidewalls constructed of overlap shingle insulating siding applied over either insulating board or exterior gypsum board sheathing.

FHA recently accepted for new construction insulating siding when applied over either of those sheathing materials. Previously, FHA had recognized only wood as suitable sheathing under insulating siding.

Acceptance had been withheld because nails tended to pull out of the comparatively soft gypsum or insulating board when vertical joints fell between studs. Now a simple tool is used to put the twist in the end of an aluminum nail after it is driven. The curl in the nail provides a positive anchor at the back of the sheathing. And all it takes is a twist of the wrist.

FHA Use of Materials Bulletin No. UM-12 covers application of insulating siding in new construction. It describes the methods of testing, design, insulating value and application methods acceptable to FHA.

The Insulating Siding Association has also revised its own manual, “Recommended Procedure for Applying (Continued on page 238)

A DOOR WITH "BUILT-IN" INDIVIDUALITY
RAYNOR CARVED RAISED PANEL DOOR is adaptable to every type of architecture

- Square as well as streamlined panels are available—the design in Raynor Carved Panels is precision routed in 1" thick blanks. Unequaled in beauty and versatility, all Carved Raised Panel doors are equipped with Raynor patented Graduated Seal for smooth dependable operation.

Available in a wide variety of standard designs and patterns, carved panels may be obtained in designs of your own creation. Individual panels can be built into house doors and shutters.

Write for free colored folder.
RAYNOR MFG. CO., Dixon, Ill.
Builders of a complete line of wood sectional overhead doors.
DRIVE-IT was used to help build a tunnel alongside the swimming pool at the Sans Souci Hotel, Miami Beach, Florida. The tunnel was needed to give workmen access to repair leaking pipes without the need of tearing up the sidewalk each time. The curved ½" angle iron was anchored to the concrete wall with DRIVE-IT. Cross (⅛" "l") beams are then fastened to the angle. The drive pins support the entire weight of the new concrete sidewalk which is poured into forms supported by the beams.

Send for descriptive booklet to learn of the many fastening jobs on which DRIVE-IT can save money.

split-second fastening to concrete steel

Drive-It uses a small powder load to drive hardened steel pins into concrete or steel. No power lines! No drilling!

DRIVE-IT, the first powder actuated tool approved by Underwriters' Laboratory.

DRIVE-IT cannot be discharged accidentally due to the push and turn sequence. This, plus the large safety pad makes DRIVE-IT triple safe.

DRIVE-IT is the only powder-actuated tool which requires but one standard power load regardless of penetration desired.

Exclusive Automatic Barrel Extension for fastenings inside junction boxes or other recesses.

Exclusive Swivel Safety Pad easily rotated for getting into close quarter work.

DRIVE-IT "300", lowest cost fastening tool. Low original cost and low operating cost.

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735 Broadway, Vancouver, B. C.

☐ Please send FREE catalogue and literature.
☐ I want a FREE demonstration of DRIVE-IT.

Name______________________________
Street______________________________
City________________________ State__________________
Overlap Joint Insulating Siding to New Construction,” to include sheathing materials recently accepted by FHA. Copies of the manual can be obtained from the Insulating Siding Association, Glenview, Ill.

A year ago the Association surveyed comparative costs of exterior wall construction in the Chicago area. It found that insulating siding, over wood sheathing, was 35 per cent cheaper than beveled siding, 37 per cent cheaper than double course wood shake shingles, and 50 per cent cheaper than brick. Now even greater savings are possible when low cost insulating siding can be combined in one wall with low cost insulating board or exterior gypsum board.

According to studies made by the Association, it takes 44\frac{1}{2} hours to make an exterior wall with 1,000 square feet of insulating siding over 15-pound felt and 25\frac{3}{8}-inch wood sheathing. Of the total, 13 hours are spent installing the sheathing, 14\frac{1}{2} hours on the felt, and 30 hours on the insulating siding.

If insulating board were used for sheathing, the time spent installing it would average 10 hours or less, and since no felt paper would be needed, the 14\frac{1}{2} hours spent installing it would be saved. This leaves a net saving of at least 41\frac{1}{2} hours or 10 per cent, and most builders will realize from their own experience that this is a conservative estimate.

The October issue of American Builder described a test installation of exterior gypsum board in which 1,219 square feet were applied in eight manhours. Assuming that the average installation speed is as much as 20 per cent lower, the use of gypsum board under an insulating siding exterior would cut installation time at least 20 per cent. Again, it would not be necessary to use building paper between sheathing and siding.

**BLACKHAWK**

**A LOW COST, MOBILE VERSATILE, TRENCHER**

A Ford or Ferguson tractor mounted, versatile, small trencher with big trencher performance, digs up to 800' per hour, with wide range of depths and widths — up to 7' deep, 20' wide. One man and a Trench Hog do the work of 40 hand laborers. Ideal for builders, plumbers, electrical contractors, utilities, municipalities and pipeline contractors.

- Depths accurately controlled, hydraulically.
- Cutters furnished in 6' to 20' widths. Easily changed to suit the job. Special cutters for tough soils and frozen ground.
- Optional equipment includes one side dirt delivery attachment to deposit spoil on either right or left side of trench.
- Crumbers available to provide clean, smooth, accurate trench bottom.
- Choice of 7 digging speeds.
- Independent wheel control for straighter line trenching and turning corners.
- Boom raises upward about 90° for transport.
- 4' bulldozer available for backfilling.

**THOUSANDS IN USE—EVERYWHERE**
stop plaster cracks before they start...

KEYMESH GALVANIZED REINFORCING applied on the entire ceiling area of any room assures more crack-resistant plaster surfaces. Because stresses and strains are distributed more evenly throughout, longer plaster life results. There is no limit to the interior design and construction possibilities when ceilings are completely reinforced with Keymesh. Keymesh also provides strong plaster reinforcement, and desirable heat transfer properties, for ceiling radiant heat installations.

KEYMESH-KORNER GALVANIZED REINFORCING applied at corners, joints and ceiling-wall junctures prevents future plaster crack troubles. Its preformed-for-corners, convenient width and easy-to-handle features provide fast, economical reinforcing exactly where it is needed most. It snaps into corner shape by merely flexing the cut piece. And Keymesh-KORNER lies flat, too, for flat joint reinforcing.

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

LOOK FOR US IN SWEET'S FOR '53
Files LC 2d A 11a HC 3d
Ke Ke Ke
WRITE FOR PRICES AND COMPLETE DETAILS
KEYSTONE STEEL & WIRE COMPANY
Peoria 7, Illinois
KEYMESH - TIE WIRE - NAILS - WELDED FABRIC
KEYMESH-KORNER - KEYSTONE NON-CLIMBABLE FENCE - KEYSTONE ORNAMENTAL FENCE
Other widths and gauges available for both
4 big reasons why you can install a General Electric Water Heater and forget it!

In any electric water heater, there are 4 important construction features: the tank; the spuds; the units which heat the water; the thermostats which control the heating. These things determine length of life, and the amount of servicing the heater will require after it has been installed.

No other leading manufacturer has all of these features!

Here's faster, easier installation for you!

G.E.'s new table-top model is top-connecting!... You install it without bending or stooping. Saves you time, saves your back... and you offer customers a lower-than-ever installation price.

IT ALL ADDS UP TO THIS—
When prospects come hunting, offer them an economical, better-built G-E Water Heater. Give them a G-E plus the satisfaction of knowing their hot water problems are over.

For the best in water heaters... call your G-E wholesale distributor!
Seeing's believing...

Wish you could take a trip through the plant...then you'd see why Lupton Architectural Projected Windows rate high with builders throughout America.

From the heavy deep section steel bars, to the final thorough inspection, a Lupton Architectural Projected Window represents quality at mass production prices.

Ventilator corners are riveted, then welded for additional strength and rigidity. Excess weld metal is trimmed off and the exposed surface is finished flush. Carefully balanced ventilators permit finger-tip control, assure snug fit. All operating hardware is solid bronze, in a smooth mat finish. Completed windows are Bonderized for better paint adhesion, and prime painted in one continuous operation.

When you install Lupton Architectural Projected Windows you give your customers abundant daylighting, easily controlled natural ventilation, sturdy strength and modern styling at moderate initial cost. Over-all costs are lowered through efficient long service and minimum maintenance expense.

The complete line of Lupton Steel or Aluminum Windows is available from coast to coast. Get the full story from the local Lupton Representative, or write direct.

MICHAEL FLYNN MANUFACTURING COMPANY
700 East Godfrey Avenue, Philadelphia 24, Penna.

Members of the Metal Window Institute and Aluminum Window Manufacturers' Association

LUPTON
METAL WINDOWS
how would you do it?

ideas for the man on the job

softening putty to remove glass

First Method
Place a string that has been soaked in an inflammable mixture next to the putty. Light the string... It will soften the putty. Do not take too large an area at one time or the putty will harden before you can remove it. The best mixture is gasoline and kerosene. Gasoline alone burns too fast.

Second Method
Put gasoline in a small oil can and ignite directly on the putty. This method is likely to scorch the paint on the sash and crack the glass. — M. J. Hiland, Lansing, Mich.

curved squeegee for cleaning concrete floors
Two 3-inch strips of inner tube, 36 inches long, fastened to a 36-inch strip of angle iron can be curved for cleaning concrete floors. The handle is fastened by small angles.—O. Johnson, Spokane, Wash.

We take on the Toughest jobs in the Easiest way

We're the Weldwood® Hardboard Twins

We're easy to "work"... and you can saw us... trim us... plane us... chisel us... nail us. You'll be rewarded by finished jobs that show smooth, clean lines.

And strong jobs, too. For we're rugged and we're tough. Yes, and good-looking to boot.

For we're light in color, so even pastel paint takes readily on our surfaces. This ready paintability is one of the things about Weldwood Hardboard that keeps users happy.

Happy when they use it. Happy to come back for more. And still more. We're popular with folks who take pride in results that are "way above average.

We're STAN... for Weldwood Standard Hardboard. And TEMP... for Weldwood Tempered Hardboard; which is a permanently weather-resistant, oil-treated, plastic-resin hardboard.

Be sure not to miss the extra profits that Weldwood Hardboard brings. Place an order today with your Weldwood supplier.

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Manufactured by Abitibi Power and Paper Company
Distributed Exclusively By
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World's Largest Plywood Organization
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Branches in Principal Cities * Distributing Units in Chief Trading Areas

To meet all your requirements: both Standard and Tempered 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 Tempered 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.
just won't stay flat...

Barrett Spun Rock Wool has extra “spring-back” action. Longer fibres make batts firm and full bodied for easier handling, cutting and fitting! You save time and labor.

Save on storage space. Barrett Rock Wool can be compressed to 60% of its bulk—yet the greater resiliency snaps it back to full thickness in a jiffy. Never a flat batt!

Easier to sell. Barrett Batts won’t crumble or settle. Customers get greater insulation value because of greater thickness when installed and greater number of permanently retained air spaces.

You and your customers benefit. Barrett Spun Rock Wool costs no more than ordinary rock wool despite all the added advantages. And to help you sell—Barrett offers you promotional material and local advertising that paves the way to greater sales. And remember! Barrett’s new Spun Rock Wool is backed by a company whose reputation for quality has made it a leader in the building field for almost a century—a convincing fact that leads to greater sales!

BARRETT’S SPUN WOOL
that makes it easier to store ... to handle ... to sell!

MARCH 1953

BARRETT DIVISION
Allied Chemical & Dye Corporation
40 Rector Street, New York 6, N. Y.
FACTS about CAPITOL steel kitchen cabinets

COMPLETE LINE FOR COMPLETE KITCHENS
More than 40 sizes and types—ready to install for new construction or modernization.

SELLING FEATURES THAT MEAN PROFITS
This Capitol Roto-Base corner cabinet adds utility, convenience and smartness to any kitchen.

EASY TO INSTALL
Recessed back on wall cabinets fits onto wood strip nailed to studs in wall. Base cabinets slide into place—held secure by continuous counter tops that bring color to kitchen.


For real activity you should see what’s going on in our Bermico plant. We’re trying 24 hours-a-day to make enough Bermico Sewer Pipe for everybody.

Bermico’s popularity makes us happy... that’s why we’re pushing production to the limit, while still maintaining Bermico’s unusually high standard of quality.

Bermico—the cellulose, pitch-impregnated pipe for outdoor, underground, non-pressure use—is root-proof, corrosion-proof, easy to work and handle, light in weight, and can be counted on for a lifetime of trouble-free service.

We appreciate your patience—and are working hard to fill your orders for Bermico as fast as they come in.

BROWN COMPANY, Berlin, New Hampshire
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AMERICAN BUILDER
Here's a lock with **everything** that you and your customers look for.

**INTEGRALOCK!** Appealingly handsome appearance...modern key-in-knob design...precision mechanism...enduring quality...ease of installation...first, last and always, features that give the home extra protection.

The Sargent Integralock is the only modern key-in-knob lock with the double protection of the SENTRY BOLT...especially designed in a horizontal position for greater strength. It is operated by a turn lever from the inside or a key from the outside. And the outside knob is locked with stops.

*Another exclusive feature:* the shear-pin in the knob breaks when subjected to extreme torsion permitting the knob to spin harmlessly but allowing the key to operate the lock.

**EASY TO INSTALL!**

And don't forget these other Integralock features: extreme ease of installation... compact factory-sealed lock cases... unit assembly self-lubricating OILITE Bearings.

For full information about Sargent Integralocks and "4500" Locks ask your supplier or write us, Dept. 5C.

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**THE WALL COVERING THAT CLOSES SALES!**

Yes!... Here's a striking new wall beauty that carries your sales story straight to Milady's heart—where home sales are closed! FAB-RIK-O-NA fabric wall coverings stamp your whole house with the mark of quality and luxury. Beautifully textured fabric...in warm, vibrant tones that fit any scheme of decoration, modern or traditional. Goes on like wallpaper... stays on and wears like armor plate! FAB-RIK-O-NA Burlap—for a rugged, homespun air... or Amerspun, a finer, more subtle weave.

*Lowest cost—top quality*

*Fits 4-12 through 12-12 pitch*

*Exclusive self-framing design*

*Installs quickly behind facia*

*Assures no-sag rigidity*

*Large free area at every pitch*

*Aluminum only—in 3 sizes up to 54" base*

*Adjustable Aluminum Flashing and screen with each louver*

ASK YOUR DEALER for information on the COMPLETE LESLIE LOUVER Line of Roof, Cornice and Foundation Vents, Wall and Adjustable Louvers TODAY.

Write for 1953 Catalog.

**Send for booklet with samples.**

H. B. WIGGIN'S SONS CO.

Makers of Fine Fabric Wall Coverings Since 1894

56 Arch St., Bloomfield, N. J.

MARCH 1953
how would you do it?  ideas for the man on the job

cove for slanted walls

After putting up ceiling tile or other material where I have slanting walls I cut a triangular strip with the same angle as the angle of the walls. Attach this strip to the cove from the back and apply the cove in the usual manner.—J. Weislo, Indian Orchard, Mass.

gauge for storms and screens

Take a piece of screen stock as long as the windows are wide. Place the hanger eyes on this stock and mark. Drill holes at these marks. This is the gauge for marking the storms and screens. When that operation is completed fasten a pair of the hanger eyes to the gauge and mark the position of the hanger hooks which are fastened to the house.—J. Weislo, Indian Orchard, Mass.
...twice as weathertight
with only 1/10th the lifting effort!

Bilt-Well Superior Windows give Homeowners twice the protection against air-leakage as set forth in *AWWI’s specification. Impartial tests bear out this point!

Its superiority is, of course, a patented feature...the exclusive jamb-liner...facilitates snug-fitting at all times... also insures finger tip lift. "Superiors" are counter-balanced with overhead spring balances, guaranteed to last the life of the building. "Superiors" require only one-tenth (1/10) the lifting effort of most other windows.

And that's not all... "Superiors" are made of kiln-dried Ponderosa Pine—and as you know wood is by far the best natural insulation. Add the fact that "Superiors" are water-repellent preservative treated in strict accordance with *NWMA standards, the result... the outstanding weathertight window that will last a lifetime!

ACT NOW... specify Bilt-Well Superior Windows on your next job and every job thereafter!

Manufactured by CARR, ADAMS & COLLIER CO., Dubuque, Iowa

See Our Catalogs 16*-CA and 23*-Ce in Sweet's 1953 File

MARCH 1953
COMPARE the Top Quality Features and Low Cost of the new HAR-VEY ROLLING DOOR HARDWARE

3 models of the New CHALLENGER Series meet all your needs for doors to 70 lbs.

- Aluminum Track
- @ Oilite Bearings
- Adjustable

Compare the Top Quality Features and Low Cost of the new HAR-VEY ROLLING DOOR HARDWARE

Faster Installation

- The top-mounted Challenger track can be speedily installed, requires no mortising.

Smoker Rolling

- V-groove track eliminates chattering
- Oilite bearings are self-lubricating
- RUSTPROOF Aluminum Track
- Durable Nylon Rollers

Less Headroom

- Reduced headroom is only 1°-1½°
- ALUMINUM track serves as trim—no painting necessary

More Convenience

Challenger sets (hardware and track) came completely packaged

- in sizes for standard door widths.
- Saves time in buying and handling.

Typical low delivered price only $2.70 list—for completely packaged set for 2' pocket door, including track, hangers, flush door pull, screws.

Get all the facts from your supplier, or write Dept. O

Metal Products Corporation

807 N. W. 20th St., Miami, Fla.

Western Div. (Calmetco, Inc.) • 609 S. Anderson, Los Angeles

Mid-West Div. (Plymouth Metal Products) • 505 W. Harrison, Plymouth, Indiana

HOMESHIELD PRODUCT

WE SET YOU UP IN BUSINESS

Here's a Real Opportunity

Read what Elmer L. Warn wrote us: "I have operated a Foley Saw Fiber and a Retoother for over two years. I am a carpenter. When it will be hard for me to throw a hammer and pull a saw, I will have a shop that will make me an easy living. I tell these machines my old age insurance, and they are paying for themselves as we go along."

Send for FREE BOOK

"MONEY MAKING FACTS"

Shows how you can start at home, make up to $5 or $6 an hour in your spare time. Send coupon today. No salesman will call.

Foley Mfg. Co., 326-3 Foley Bldg., Minneapolis 36, Minn.

Send FREE BOOK "MONEY MAKING FACTS."

Name

Address

American Builder
home modernizing finance answer to overcrowding

"Today, the social prestige of automobiles, and television have attained an unprecedented high—taking a larger share of the consumer's dollar than ever—while the upswing in overcrowded housing continues, building up one of the biggest home modernizing markets this country has ever known," according to Fulton, Morrissey Company, a Chicago advertising agency.

To benefit its building material clients, this agency recently concluded a six-state survey to find out why home owners are not modernizing their dwellings at a faster rate.

Specifically, the agency wanted to find out:
1. What loans are most frequently made by loaning institutions to those who have mortgaged homes but seek to improve them by modernizing.
2. How familiar loaning institutions are with the "open-end" mortgage.
3. What the advantages and disadvantages are of mortgage systems now being used by loaning institutions for modernization.
4. If building supply dealers are in favor of credit buying.
5. If dealers would like to have a stronger, more competitive edge with other dealers (automobile, furniture, etc.) in their localities, insofar as credit buying is concerned.
6. If dealers are familiar with the "open-end" or extended mortgage plan.

Most loaning institutions in these states use FHA Title I or a personal note to finance modernizing when a home is already carrying a mortgage. The amount of the loan depends on individual cases, but length of time for repayment is usually 36 months maximum—regardless of how much is loaned (one exception being Missouri, which uses a "Deed of Trust," incorporating a clause that makes it in essence an open-end provision instrument).

Most loaning institutions, the agency found, are not thoroughly familiar with the "open-end" mortgage, a mortgage containing a pro-

(Continued on page 250)
vision which permits the home owner to borrow additional sums from his lending institution to repair, remodel, or improve the structure covered by the mortgage—the sum to be paid back over the remaining life of the mortgage.

Bankers talked to in the survey said they're making as many loans as they want to...some have so much business they're "having to turn it away." They are getting all the business they want with Title I and personal notes (which means 3 to 9 per cent interest; 36 months maximum loan extension). They feel longer periods for modernizing loans risk dangers of rise and fall of property values.

Advantages to the homeowner who modernizes using Title I, FHA, are: (1) Quick negotiation, provided he has a satisfactory credit record and income, and (2) short-term obligation, which is usually more appealing to him, bankers, say.

But Fulton, Morrissey points out that a short-term loan, depending on the sum borrowed, means higher monthly payments—which discourages many people, who may be already eyeing a new television set which costs practically nothing down. And many who take a short-term modernizing loan of the types currently available add a high monthly modernizing payment to their already substantially high monthly mortgage payments thus making themselves vulnerable to economic recession.

This, according to many mortgage experts, contributed to many foreclosures during the depression of the 1930's.

One of the major reasons why people are not doing more toward home modernization, the agency feels, is that the average homeowner doesn't know just what is available—and, outside of personal notes and FHA Title I, availability from lending institutions, neither do building supply dealers nor banks, in many cases.

Building supply dealers are in favor of credit buying, according to this agency's survey; they feel more must be done to enable them to compete with other retailers in their localities.
4 powerful reasons why 1953 CHEVROLET Advance-Design Trucks give you more of what you want

MORE POWER—GREATER ECONOMY! Expect a wonderful advance in power, performance and economy in Chevrolet heavy-duty trucks! The great 1953 Loadmaster engine—standard on 5000, 6000 Series, heavy-duty and forward control models, optional on 4000 Series heavy-duty trucks—has a new high compression ratio of 7.1 to 1, develops even more horsepower than before. And the Thriftmaster engine in light- and medium-duty models brings you traditional Chevrolet economy.

TRUCKS ENGINEERED FOR YOUR PAYLOADS! Chevrolet trucks are designed for the job they will do—engineered from tires to axle, springs, clutch and power plant to do that job with the greatest efficiency and lowest cost. You don't waste money on too heavy a truck or too light a truck. You buy the right truck for your job!

MORE STAMINA! More strength where strength counts most! In 1953, all Chevrolet trucks have stronger, brawnier, more rigid frames. They have heavier, sturdier construction that means a longer, lower-cost life for your truck. And they have new larger, safer, longer lasting brakes on many models, too!

GREAT TRUCK FEATURES! In addition to the many NEW things you'll find in these 1953 Chevrolet trucks, you'll also find many great features yet unmatched by other makes of trucks. Features such as Flexi-Mounted Cabs, Unit-Designed Bodies, Ball-Gear Steering and many others help make Chevrolet Advance-Design trucks your greatest buy. Chevrolet Division of General Motors, Detroit 2, Michigan.

MARCH 1953
HERE'S WHY:

When you install Chrysler Airtemp in your homes, you can sell modern living to prospects! You're selling health, comfort and less housework . . . all potent points. But that's not all. The cost to your customers for this new modern living is surprisingly low—just pennies a day—when included in the mortgage.

To make your selling job easier, here are just a few of the unique advantages only Chrysler Airtemp Air Conditioning offers:

- The Chrysler Airtemp name is known! Your selling job is easier because customers have confidence in the Chrysler Airtemp name.
- 15 years of residential installation experience! Chrysler Airtemp offers a time-tested package.
- Chrysler Airtemp stands behind its product! A nationwide network of authorized dealers eliminates service “callbacks” for you.
- An optional five-year warranty creates customers confidence.

Why not get all the facts today. Mail the coupon below.
Three *more* reasons
why NATCCO bathroom
cabinets outsell others!

NATCCO Cabinets are leaders because
they represent quality plus economy. National
offers features that no other company has. And
National Steel Cabinet is the largest exclusive
manufacturers of bathroom cabinets.

**COUNTER & FLOOR DISPLAYS**

Here’s a counter display that will fit anywhere.
Made of sturdy materials, it displays the fast
moving 1102FL GARFIELD model.
It requires no assembling. It
has a pocket for “take one”
literature. You buy only one
model 1102FL to obtain it.

**LIMITED OFFER!**

This well designed, four color
floor display zooms cabinet
sales. It attracts attention to any
part of your store — where it
effectively displays four cabi-
nets — two lighted and two
unlighted models. This beau-
tiful display is furnished you
free-of-charge with each
order of 3 each of models
1102FL, 802, 1902FL and
1902P. Easy to set up—
takes less than 5 minutes.

**LITERATURE**

NATCCO offers a complete line of
handouts, mailing pieces, mats, catalogs,
reprints, sale sheets—everything necessary for
complete promotion of National Cabinets
to your customers. All furnished free of charge.

**NATIONAL ADVERTISING**

Each month National Steel Cabinets are being
promoted to thousands of architects, builders and other
contractors. National advertising through trade and
consumer magazine and direct mail tell the
NATCCO quality story for jobbers and retailers.

SEND FOR THIS PROFIT MAKING STORY!
Read further details of how
the NATCCO line of quality
bathroom cabinets means
more profits for you. Your
letterhead will bring
complete details.

**FOLLANSBEE STEEL CORPORATION**

General Offices, Pittsburgh 30, Pa.

Cold Rolled Strip Seamless Terne Roll Roofing
Polished Blue Sheets and Coils

Sales Offices—New York, Philadelphia, Rochester,
Cleveland, Detroit, Milwaukee, Sales Agents—Chicago,
Indianapolis, Kansas City, Nashville, Los Angeles,
San Francisco, Seattle, Toronto and Montreal, Canada.

Offices—Follansbee, West Virginia

FOLLANSBEE METAL WAREHOUSES

MARCH 1953
- Sales appeal, plus! That's why your sales boom when you feature the in-swinging Etling Window

- Home buyers are enthusiastic over the way the Etling Window simplifies window washing. They like its smart styling, fingertip operation, too.

And, builders know that homes with Etling Windows sell faster at greater profit.

A SIZE AND STYLE FOR EVERY HOME

WRITE FOR DETAILS

ETLING WINDOW
Dept. AB
Barberton, Ohio

FRANTZ BUTT HINGES

There are no "if's" or "and's" when you use FRANTZ Hinges. Their dependability has been built through a generation by FRANTZ craftsmen who have proved that there is no short-cut to true quality. This inherent value of the Frantz line of Butt Hinges is yours to pass on to your customers, with complete satisfaction to you . . . and to the home owner. Thousands of doors are swinging on Frantz Hinges today. Be ready for tomorrow. See your FRANTZ dealer . . . now!

The FRANTZ Line is The QUALITY Line

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

American Builder
Barcol OVERdoors

While Barcol OVERdoors are distinguished by several mechanical features which make them easier to operate, reduce maintenance expense, and give them a life that is longer than average, we feel there is one feature which is not a part of the door itself, but which is of great interest and importance to you — and that is...

BETTER SERVICE

At every office where Barcol OVERdoors are sold there are one or more men constantly on call to provide repair and maintenance service to all owners of Barcol OVERdoors. These men are factory-trained in a course that gives them everything we have learned in the last twenty years about how to fix Barcol OVERdoors that may be damaged or out of adjustment — and how to provide preventive maintenance that can greatly lengthen the life of any door. This important service is a distinctive feature that is available to you as soon as you buy a Barcol OVERdoor, and as long as you own it.

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In effect, what we are doing is not only to make a good door for you in the first place, and then to see that it is properly installed, but also we are providing a reliable arrangement so that you can get the most out of your door.

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MARCH 1953
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makes your houses STAND OUT

Supreme Quality
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door design competition offers $7,600 in awards

An architectural design competition for an interior panel door design is under way, offering $7,600 in awards and possible purchase of designs suitable for mass production. The sponsor, Ponderosa Pine Woodwork, is seeking a fresh approach in applying the principles of panel door construction to progressive design, according to Robert H. Morris, general manager. The first week following published announcement of the contest, 1,900 notices of intent to enter were received.

"The purpose of the competition," Morris said, "is to obtain a design for an interior panel door which is suitable for mass production methods, and is consistent with current standards of architectural design. Designers are making effective use of panels to develop color harmonies to integrate with virtually every type of interior. . . . Decorators are using colored, transparent wood stains, pointing up the natural texture and grain pattern of Ponderosa Pine to get a tonal accent for furnishings."

The contest has been approved by the Committee on Architectural Competitions of the American Institute of Architects.

The competition, entitled "Ponderosa Pine Panel Door Design Competition," closes April 27, 1953. All entry requirements are available upon request to Ponderosa Pine Woodwork Competition Headquarters, 2907 W. Pico Blvd., Los Angeles 6, Calif.

"An Expert Talks Power Tools" by Frank Hegemeyer; General Publishing Co., Inc., Chicago, 1953; 80 pages; $1.00.

This book tells how to get the most out of power tools, how to improve methods and do better work. It explains the best way to use eight different power tools—circular saw, jointer, drill press, band saw, scroll saw, lathe (wood), sander and spindle shaper—and the attachments for each. The book also describes the different operations which can be performed on both conventional as well as the unusual types of machine.

Special jigs and production fixtures developed by the author to speed up woodworking practices are described. Closeup photographs and detailed drawings enhance the book's usefulness. Questions and answers on common woodworking problems are given.

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