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Watch Housing Act Interpretations

The Housing Act of 1954 eases housing credit, and in effect is a green light for a continuing or increasing high volume of housing starts. But the Act also imposes several new and important conditions on builders using FHA and VA. While the new housing act spells out these conditions as clearly as can be expected, some of them are, nevertheless, subject to specific interpretations as questions of application arise.

For instance, Section 301 (a) requires the builder to warrant that a structure designed for not more than four families was "substantial conformity" with plans and specifications as approved by FHA or VA, as the case may be. There are numerous cases on record which have established the legal meaning of "substantial conformity" in connection with plans and specifications, and the indication is that the phrase as used in Section 301 can in no way affect the performance of a legitimate builder, but, on the other hand can be a further deterrent to the jerry builder.

Section 226 requires the builder to deliver to the buyer, prior to sale, a written statement of the amount of the FHA appraisal. This requirement, which applies to only one- and two-family residences, obviously is designed to assure the buyer a comparison of the FHA appraised value with the price he is being asked to pay. Here, the law is clear in both word and intent, and the builder must understand that it gives the buyer the right to abrogate any agreement he has made with the builder prior to the time the appraisal statement is delivered. This is particularly important to the custom builder. Most operative builders finish a demonstration house on which an appraisal has been obtained before they begin to take orders or settle families in finished houses. The custom builder rarely has this advantage. Under the new law, if the mortgage is FHA insured, the custom builder can lose heavily if he begins the execution of a contract before delivering to his customer "a written statement setting forth the amount of the appraised value of the property as determined by the commissioner."

Section 227 applies to new or rehabilitated multi-family housing. It requires the builder, prior to final endorsement of the mortgage, to certify the difference either way or the equality of the proceeds of the mortgage loan and the approved percentage of actual cost. Actual cost is defined to include "a reasonable allowance for builder's profit if the mortgagor is also the builder as defined by the Commissioner," and, in principle, an amount equal to the commissioner's appraisal of the land in fee or the leasehold.

Clearly, this is intended to prevent a recurrence of the alleged irregularities in the financing of some 608 projects. The intent of the section is laudable. But giving the commissioner or anyone else but the builder, guided by competitive forces, the right to determine what is a reasonable profit is government price fixing which, aside from its grave socialist implications, penalizes the legitimate operator, and invites the sharpshooters to find new ways to gyp the public and the government.

Applications and interpretations of all these sections should be watched by builders with special attention to Section 227 and the dangers that are inherent in it.
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AMERICAN BUILDER
new housing bill accelerates home building

Nation-wide starts of new homes began to increase even before the new housing bill was signed. In June a total of 102,000 new non-farm dwelling units were started, 16 per cent above June a year ago. In July a total of 112,000 units were started, another increase of 16 per cent.

Builders have maintained a steady pace during the last four years, producing about 1,100,000 units each year, a very creditable record. With the new housing bill an actuality, the pace has quickened.

 Builders, manufacturers and prospective home owners will benefit from the lower down payments, the open-end mortgage for home modernization and the rechartering of the Federal National Mortgage Association.

"The American dream of good homes for everyone is much closer to becoming a reality," was the comment of President Elliot Spratt of the Producers' Council. Mr. Spratt pointed out that "through hard work and hard selling the construction industry has become not only the largest segment of our economy, but the most effective."

The bill makes the purchase of homes easier for people in the middle and low income brackets. A big selling job will be required, nevertheless, because the market has diminished as compared with the early postwar years.

The new rules

A family buying a new $12,000 house needs only half the down payment under the new rules. The requirement is for a down payment of only $1,200 as compared with $2,400 previously. A family buying a $15,000 house needs $1,950 as compared with $3,000 previously. A new $25,000 house required $9,000 down under the old rules and now needs only $5,000.

Of course, in many localities new houses have been available without down payment, intermittently since 1946. In such places, the market has been very active.

The required down payments for old houses have also been reduced. There is always competition in the market between old houses and new houses. Will the new rules make the competition more active? The new rules on old houses require a down payment of 10 per cent on the first $9,000 of cost, 25 per cent on all above $9,000, 30 years to pay (but payment period must not exceed three-quarters of the estimated remaining life of the house). The maximum loan is $20,000.

The open-end mortgage provisions of the new bill will stimulate modernization. Over 20 million of the nation's 45 million houses are a quarter of a century old. Active selling in this field is one of the best ways of preventing tomorrow's slums.

The rechartering of the FNMA, with the provision for the eventual operation with private rather than government funds, should prove invaluable in providing a stronger secondary mortgage market, with the result that home buyers will find loans for houses easier to obtain.

New market data

New statistical information on the housing market will provide data on where new houses are being built. Up until now the Bureau of Labor Statistics has estimated the number of new dwelling units started in the United States each month, but there has been no information on the geographic distribution of starts. Under a new program the Bureau will publish an estimate of the number of dwelling units started in metropolitan areas and non-metropolitan areas. They will also estimate the number of dwelling units started by geographic regions—the northeastern, north central, southern, and western states.

Of the four broad regions of the country, the South accounted for the largest number (a third) of all the new units begun during the first quarter of 1954. The other three regions shared almost equally in the balance, with the West a little in the lead, followed by the North Central and Northeastern states.
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Multiple accordion aluminum provides this 5-fold protection. It is pre-fabricated to automatically create a “blanket” of multiple alternating layers of air, aluminum and fiber as it is installed.

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The aluminum sheets are completely impervious to water vapor. Infiltration under flat, stapled flanges is slight. The scientific construction of multiple layers of accordion aluminum, fiber and air spaces minimizes condensation on or within this insulation. Its slight mass produces little heat storage.

To obtain Maximum, uniform-depth protection against heat loss and condensation formation, it is necessary to use the new edge-to-edge multiple aluminum*, each sheet of which stretches from joist to joist, and also all through the flanges for further vapor protection as well as permanent attachment of each sheet.

The U.S. National Bureau of Standards has published an informative and authoritative report on “Moisture Condensation in Building Walls.” This booklet explains the conditions under which condensation will take place in insulated as well as uninsulated walls; what part is played by effective vapor barriers such as metal foils; how to use and interpret thermal-resistance and vapor-resistance fractions. You can obtain it at our expense by sending us the coupon.

*Patent applied for
REPAIR, REPLACE AND EDUCATE—at a profit.
That's the three-pronged program being put to work at Richmond, Va., to punch holes in the argument of socialized housing exponents that "private enterprise cannot do it, so the government must."

Action of the Home Builders Association of Richmond to form the Home Builders Rehabilitation Corporation reported by American Builder last month, is designed to bring housing standards up to an economic level rather than a minimum level dictated by city ordinance.

The corporation stands ready to help owners who wish to make indicated improvements, with loans they cannot get through normal channels. It makes individual studies for them, provides them with a member list of repair contractors to "protect him from racketeering estimators and substandard workmanship."

Newest phase of the program to be worked out is replacement. When a house is so dilapidated that rehabilitation is economically unsound, the corporation offers to buy the property at a fair price, demolish the house and let a member (selected alphabetically) build the "home builders' replacement house."

An architect chosen by the corporation's art committee is designing an inexpensive "replacement house" plan. The actual builder will receive the plans and a "spec" sheet with all costs listed, the latter information furnished by subcontractor and supplier members. Declares the association: "Before he starts the builder member knows that cooperation with this plan assures him a profit.

Before the corporation was a month old, complete renovation was started on ten houses and negotiations were under way to buy three lots for erection of replacement houses.

PACKAGE APARTMENT PLAN for resort areas is being tested at St. Petersburg, Fla. It calls for the building of any number of suites from two up for a flat $5,500 per unit, on buyer's land. Each unit is complete with its own heating and air conditioning system, has range, refrigerator, terrazzo floor, ceramic tiled bathroom, wardrobe closets. Horace Hudson, builder of many of the city's waterfront homes, is pushing the idea with a six-suite demonstration model.

LACK OF FHA PERSONNEL, a common complaint from many sectors, is not only holding back commitments but actually causing many loan applications to be abandoned in favor of other means.

Following a check of his membership, Ed Cohen, president of the Tulsa Home Builders Association, said they are "ready to ask for FHA commitments on 2,000 houses, but are holding back because it takes so long for the FHA office to process them."

As a result, he pointed out, "the market is getting topheavy with GI and conventional-loan homes." Unless the situation in the Tulsa area is corrected soon, in his opinion, the middle- or low-income non-veteran will find it difficult to buy any home.

No early remedy is foreseen unless FHA is allowed to hold some of its profit from the general treasury fund in the form of a "floating budget." This would permit it to add workers when the load is heavy, decrease staff during light periods.

BOOM IN HOUSING STARTS has upped all pre-season forecasts and has not, as yet, eased to follow the gradual late seasonal decline.

More new home permits were issued in Louisville during the first seven months than in all of 1953 (3,639 to 3,283).

Tulsa, despite its FHA lag, anticipates the start of 5,000 houses this year, 1,000 more than the annual average since 1950.

FHA State Manager Sterling Roberts, whose office force has been cut back 20 per cent, reports about 1,000 commitments a month, or double the 1953 rate.

Seven-month surveys by F. W. Dodge Corporation reveal increase in residential dollar volume of 39 per cent in Virginia; 13 per cent in western Tennessee and Arkansas; 11 per cent in Kentucky and 6 per cent in the metropolitan Atlanta and Miami areas.
Even 100-mile-an-hour rain cannot penetrate this modern school's walls, coated entirely with water repellent made with Linde silicones.

**HUGE SCHOOL SYSTEM APPROVES**

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"Invisible Raincoat" Protects Many of City's Schools

In one of the nation's largest cities, the above-grade exterior brick and concrete of school buildings is being coated with water repellents made with Linde Silicones.

More than thirty of the school system's close to 300 older buildings have already been treated. New schools are being treated as erected. To date, 500,000 sq. ft. are done.

Board of Education maintenance engineers say that rain leaks and seepage that once caused costly damage to interior plaster, paint, and woodwork, have been eliminated.

Masonry spalling and cracking caused by water absorption and freezing have been completely stopped. Unsightly efflorescence is a thing of the past. And buildings stay cleaner because rain simply washes dirt down the walls.

Leaks were serious in this older school, so brick was repointed, then coated with silicone repellent. Result: No more problems from moisture.

**Why You, Too, Should Specify "Linde" Silicones In Your Plans**

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More and more architects are specifying masonry water repellents made with LINDE silicones. They alone provide all these advantages:

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  For complete water repellency.

- **Penetrating**
  Reach correct depth for maximum effectiveness.

- **No Seepage**
  Even rain driven 100 miles an hour runs right off, yet...

- **Non-Sealing and Pressure Resistant**
  Let moisture out but not in.

- **Fast-Working**
  Dry in 3 hours to complete water repellency.

- **Applicable the Year Round**
  Can be applied even at 15 degrees Fahrenheit.

- **Long Lasting**
  Tests indicate dependable service for 10 years!

- **Easy to Apply**
  Either low-pressure spray or brush.

- **Can Be Painted Over**
  With oil-base paints.

**CALL OR WRITE LINDE**—for the full story on water repellents made with Linde silicones for above-grade masonry, and a list of representative suppliers.

General Offices: 30 East 42nd Street, New York 17, N.Y.

The term "Linde" is a registered trade-mark of Union Carbide and Carbon Corporation.
NAHB to Issue Merit Awards On Regional Level

Recognizing that conditions faced by project builders vary according to geographic location, the National Association of Home Builders will conduct its 1955 design merit award program on a regional basis. Martin L. Bartling Jr., chairman of the construction techniques committee, reports that awards will be made in each of five geographic areas, based upon regional design considerations, costs and marketability.

Objective of the program is to recognize excellence in house design by project builders. A custom design for a specific owner is not eligible. The committee stresses that builder-architect teams may enter the competition regardless of their affiliation with either NAHB or the American Institute of Architects.

Entrants are required to fill out two copies of a "request for judging" form which can be obtained from NAHB or its local chapters. These must be submitted to NAHB in Washington by December 10, together with finished interior and exterior photos, floor plans, elevations and detail drawings mounted on one or more 40x30-inch panels. Entries will be judged and winners announced at the annual convention in Chicago next January. Certificates of merit will be awarded to both builder and architect of each entry selected.

Among states where the American Builder southern edition is distributed, Virginia is included in region one; North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Tennessee are in region two; Kentucky in region three; Arkansas, Louisiana, Texas and Oklahoma in region four.

78 $18,000 Houses Sold in First 5 Days

Washington, D. C., area builders Michnick & DiMaio opened six furnished rambler and split-level model houses Aug. 29 at Lynbrook, near Springfield, Va. Five days later, they reported that 78 homes had been sold for $1,404,000—an average price of $18,000 per house.

Work Session at Southern Builders' Conference

Discussing the new housing bill at Gatlinburg, Tenn., are (clockwise, from left): Sam A. Freyer, Shreveport, La.; C. B. Kelley, Nashville; Ben M. Smith Sr., Atlanta; Floyd R. Kinbrugh, Jackson, Miss.; Swift Lockhardt; B. A. Martin, Atlanta; Richard Hail Brown, Birmingham; Ben Smith Jr., Atlanta, and a local television representative.

Charge Housing Act Appraisal Rule Makes 'Price Setter' Out of FHA

Charges that a clause in the Housing Act of 1954 actually puts the Federal Housing Administration in business as a "price setter" of new housing were made at the recent Southern Builders' Conference in Gatlinburg, Tenn., attended by NAHB members from seven states.

The disputed regulation requires a builder or seller to give the buyer a statement, on an FHA-approved form, setting forth that agency's appraised value. Many builders felt this rule would result in numerous lost sales. Others found that if you do not have the FHA appraisal when your customer appears, you may give the prospective purchaser the opportunity to make a final decision—yes or no—when you do have the FHA appraisal.
it takes only Two Hands to adjust

that's because...

Each hanger is fastened to the door by two screws which pass through a serrated mounting plate, the notches of which are spaced 1/16" apart.

engage similar notches in the hanger plate. When the screws are tightened, the notches mesh and hold the hanger firmly in place. Dependence isn't solely on the clamping action of the screws.

to plumb the door...

First determine the point of adjustment as shown at left. Then, loosen the screws and lower the door one notch; two notches, or even more if necessary. You can easily determine the degree of adjustment in units of 1/16".

At all times you know where you started... how far you've gone. There's no guesswork... no "too little and then too much" and no juggling a heavy door. You save time and a lot of trouble. That's why builders like the simplicity of installation and adjustment featured in Lawrence series "500" Sliding Door Hardware.

LAWRENCE BROTHERS, INC.
STERLING, ILLINOIS

QUALITY BUILDERS HARDWARE SINCE 1876
Hughes, Madigan Slated to Lead Florida Meetings

R. G. "Dick" Hughes, president of the National Association of Home Builders, and J. J. "Jerry" Madigan, NAHB field director, will have leading roles at the Florida Home Builders Association annual convention Oct. 28-31 in the Roney-Plaza Hotel, Miami.

Hughes will be guest of honor at the "Florida Night" banquet climaxing the convention. While Madigan will serve as moderator of an panel discussion, "The Home Building Industry in Our City."

Regional builder members from Georgia, Alabama and Puerto Rico have been invited to attend, according to Walter K. Dean, association president. W. B. "Dutch" Miller, executive director, has arranged for a large number of delegates to attend the Miami-Fordham football game in the Orange Bowl Friday night, Oct. 29.

Col. N. B. Rood of Coral Gables is general chairman of the convention assisted by Paul J. Nasallah and S. A. Dansvver, Miami; Clair Siefferman, Madiera Beach; Joseph A. Shaffer, Jacksonville; Bruce McCullough, Tallahassee; Mrs. Ouida B. Regan, Pensacola; Murray Paschal, Tampa; F. W. Penkert, Lakeland, and C. W. Jamerson.

Roamin' the South—

Quincy Lee, San Antonio HBA leader, opened a group of 48 units ranging from two bedrooms and bath for $9,025 to three bedrooms and two baths for $12,500. The latter had a three-ton waterless air conditioner and 100,000 BTU central heating, was the main reason for 25 sales at end of the first day. Ten days later, Lee had a sellout. Three big names in golfdom are in the building business at Houston. Jimmy Dement, Jackie Burke and Robbie Williams are partners of Truett Peachey, developer of Spring Branch Woods.

Gov. Johnston Murray of Oklahoma and his wife did the honors at Oklahoma City's pre-National Home Week Parade of Homes. They took turns at a hand saw to cut a plank, instead of the traditional ribbon.

G. Kenneth Milliken, former executive assistant of the Northeastern Lumber Dealers Assn., headed west last month to become secretary-manager of the Southern Lumbermen's Assn. . .

"Horatio Alger II"—

Houston builders, accustomed to big ways, are talking about the phenomenal rise of a 5-year-old newcomer to their ranks. Alfred E. Pampell graduated from the farm, instead of high school, at 17, did dry wall contract work for a while with an older brother, soon set up his own business. The Army kept him out of circulation in 1950-51. Starting home building on a small scale in 1952, he quickly branched out to apartment construction and houses up to $40,000. Now building 50 units in the $17,500 to $22,500 range, he expects to start 15 higher-price units this fall. Meanwhile, several major contractors are using his drywall business, which is one of seven corporations he heads. The others cover real estate and lumber as well as construction.

NAHB director Jim Albert of Miami has turned to the low-cost field at Fort Lauderdale, opening 299 two-bedroom units starting at $5,750. Each buyer gets written warranty and service policy, chance to incorporate kitchen appliances in mortgage payments. Vast Coral City turn-out (see pages 20S and 21S) helped increase attendance at other nearby projects and apparently stimulated sales all around. C. & N. Construction Co. (Romeo Vellozzi, Sam Rizzo and Al Porco), who introduced split-levels to South Florida, are now convinced of their popularity. His goal: 100 homes a month, 1,200 in two years. . .

New Look at Raleigh—

G. H. Wright Jr., building homes at Raleigh, N. C., since 1937, has started a group of 54 brick houses to introduce "Lockwood," a 400-acre tract with a potential of 1,000 homes. He has set aside 26 acres for a shopping center, and space for a creekside recreation area, churches and a school. . .

Louis L. Streng Jr., head of the NAHB Board, has returned to building after a lapse of several years. First ten houses range from $9,750 to $10,500; ten more are planned. . .

Long Island builder Herman Glatt decided to quit building two years ago and take it easy in Florida. After a few months of idleness, he built a small home, then another, and now has started a group of seven in the $12,500 class in North Miami.

One of the nation's largest new subdivisions of moderately priced housing has been opened in the Houston metropolitan area by Clark W. Henry, long-time owner of much of the 5,000-acre Jersey Village site. Units are expected to range from $15,000 to $60,000, the first eight being air-conditioned units averaging $20,000. First section of 1,200 acres is laid out for 1,432 home sites. When in full operation, Henry expects to complete ten homes per day. Some inking of the scope of the job comes from Revolvodor Co. which reports Henry awarded it a contract to install 21,000 of its special doors.

Lumbermen's Assn. of Texas has moved its office from Houston to First Federal Savings Building in Austin. . .

Robert L. Fritsche, Melvin Hatley, Buford Ingram and Paul X. Johnston are getting ready to build in the new Casady Hills addition at Oklahoma City. Fritsche has acquired 140 of the lots for three-bedroom air conditioned houses.
Here's a revolutionary new item that's a natural sales clincher!

LUXTROL Light Control gives controlled lighting—smoothly, safely, economically. It eliminates ordinary "on-off" switches, puts at your prospects' fingertips any level of light from complete darkness to full brightness. In living room or TV room, bedroom or nursery, dining room, bar or den, it offers your prospects just the right amount of light for every occasion, every activity, every mood.

LUXTROL Light Control is easy to install and priced far lower than you might expect. It's Underwriters' Laboratories Approved and made by a leading producer of lighting control systems.

Why not arrange a demonstration soon? Simply call Western Union Operator 25 in your own city and ask for the name of your LUXTROL distributor.

For full technical data on LUXTROL Light Control, write your name and address on a corner of this page, tear off and mail to The Superior Electric Company, 11104 Demers Avenue, Bristol, Connecticut.
building weather for October

An exclusive American Builder service
prepared by Irving P. Krick, Ph.D., and Staff

SOUTH: As compared to the long-term average, the South should anticipate considerable variation in operational weather. Least favorable conditions will occur in the Atlantic coast region.

Hot and dry weather is expected to prevail in western Texas and Oklahoma. While several intervals with conditions favorable for the development of rain are anticipated, amounts are likely to be light and interruptions in work schedules should be at a minimum. The number of operational days, therefore, will equal the long-term average. Last year in October, very wet weather was recorded in this area with about four days lost due to rain.

Contraction and builders in Area 2 should look for better than average working weather this month. Rainfall will result in one day being rendered non-operational. Other short but temporary delays may be observed locally due to shower activity during the stormy periods. Temperatures will not prove to be restrictive at any time of the month for, on the average, slightly warmer than usual weather should be recorded. Last October, outdoor working weather was as good as that in prospect.

Invisible Rivers

With thoughts turned to inter-planetary travel nowadays, the thin envelope of air that encircles our planet draws more attention from weathermen each day.

Between the outer spaces and our own world, there is an invisible blanket called the tropopause. This invisible blanket floats from roughly 15,000 feet altitude, over the polar region, to over 40,000 feet, in the equatorial regions. Like any fluctuating surface the tropopause develops a wave-like characteristic. Embedded in these waves are found racing rivers of air moving up to 300 miles per hour in some instances. These racing rivers of air are commonly referred to as the Jet Stream.

Normal to slightly warmer than normal temperatures are expected to prevail in this region during October. Rainfall totals also will average around normal although the eastern section should anticipate, precipitation amounts somewhat in excess of the long time average. Thus, construction activities should carry on at a satisfactory pace. Delays are most likely to occur during the second half of the month. Gusty winds around the twentieth are expected to prove troublesome to siding and roofing work.

The number of days suitable for carrying on outdoor construction will be above average this month. However, working weather will not be as good as last October. Temperatures will be recorded at near seasonal levels during most of October. Warmest conditions will occur around the 14th. Precipitation will be the restricting factor with at least one day of non-operational conditions developing in each of the rain periods. Last year October was very dry.

Below normal temperatures and normal to above normal rainfall totals will characterize the October, 1954 weather in Area 5. Builders engaged in outdoor work should be interrupted frequently with most of the lost time occurring during the last two weeks. Principally, rainfall and generally unsettled weather will reduce the number of operational days. Weather patterns favorable for hurricane development affecting Area 5 will develop in early October.

Timing of weather events is indicative of trends. Don't expect precipitation on every day of the period indicated.

To visualize this high altitude phenomena, let's compare one of these Jet Streams with a fast moving river. The deep middle current runs swiftly, drawing along with it the waters on either side. This middle current of a river is comparable to the swift center core of a high altitude.

With the approach of autumn, this high-speed river of air slowly edges its way southward. This southerly movement partially accounts for the seasonal movement of our wise migratory birds. During some periods, for no apparent reason, these migratory birds stay earth-bound. When this occurs, you may well suspect that there are winds of extremely high velocity being created by waves in the invisible tropopause.

OCTOBER 1954
Cleaning or painting windows used to be a major household job. Now, with R-O-W lift-out windows, these chores can be done easily—inside the home.

See your local lumber dealer or write
R-O-W SALES CO. 1340-66 ACADEMY AVENUE • FERNDALE 20, MICHIGAN

R-O-W is the registered trade-mark of the R.O.W. Sales Co.
Looking for this emblem
on the windows
of quality homes.

Nearly all new homes are attractive.
Prospects' selection of the one is usually based upon analysis of the "plus" features. That's why R-O-W windows lift up sales.

See your local lumber dealer or write
R-O-W SALES CO. 1340-64 ACADEMY AVENUE • FERNDALE 20, MICHIGAN
Largest model, the $8,650 "Garden City" with carport, was the biggest seller.

**how to sell 1000**

Miami builders advertise new houses "at actual cost"—sets sales record

Miami builder: Julius Gaines has set what is probably a new national record by selling 1,021 houses in seven days.

He did it with a unique sales approach—he advertised homes in his new Coral City project for sale "at actual cost." Profits, he said, would be limited to what is possible through development.

Smallest unit, the two-bedroom one-bath "Mineola," was priced at $7,050. Plan is shown at right.
houses in 7 days

of Coral City land and commercial building.

With six well-furnished and decorated models and a fanfare of publicity, the project opened August 22—a rainy Sunday. More than 45,000 persons came out and placed orders for 442 houses. The prospect of buying houses at actual cost apparently appealed to them.

The six models in Coral City were priced from $7,050 to $8,650. Units varied from two-bedroom and bath to four-bedroom two-bath homes. Down payments as low as $150 were accepted, though the houses are conventionally financed—without FHA or VA insurance.

Ralph E. Stolkin, Chicago industrialist who originated and is backing the financial policy, disclosed that sales prices are based on cost estimates. “If there proves to be any profit on the houses,” he said, “all of it will be devoted to public improvements for the benefit of all the home owners of Coral City.”

A community of 10,000 houses on 3,200 acres of dairyland 13 miles from Miami is planned. The houses themselves are of standard concrete block and stucco construction on concrete slabs, with floor area ranging from 961 to 1,343 sq. ft.
"BUILDING GOOD WILL is an essential part of every business. In home construction, good will often depends on the kind of products used by the builder. The better the products, the better the home and the happier the customer. We've found that brands advertised nationally are the best, and that's one big reason we use forty Post-advertised products." (Manufacturers of building materials, equipment and fixtures place more advertising dollars in the Post than in any other consumer magazine.)
Here's Why—HOME BUILDERS supply their buyers' demand for greater closet and storage areas with Glide-All Sliding Doors—in floor-to-ceiling, wall-to-wall wardrobes...larger closets in the smaller rooms...ceiling-height hall storage space...room dividers, too.

In addition to this important feature of extra storage, that helps sell houses easier and faster, builders save time and money. They install Glide-All Doors quickly with simple adjustment, save construction material and labor. They can offer "more house for the money."

HOME BUYERS are "convenience conscious." They demand generous closet space with the easy access they have with Glide-All Sliding Doors. Too, they like their smooth-rolling action, their sturdy construction, and decorative possibilities of painting, papering, waxing or any finish to suit their taste.

Home Buyers are sold on Glide-All Sliding Doors.
Builders profit by using them!

There are Glide-All Sliding Doors for all types of building: 8' floor-to-ceiling or 6' 8" standard heights, overhead or bottom roller models, in modern flush or recessed panels. Versatile Glide-All Doors can be adapted to your special installations too—send us your problem.

Write for complete information and prices. See Sweet's for brief details.

GLIDE-ALL SLIDING DOORS ARE A PRODUCT OF
Woodall Industries Inc.
Detroit 34, Michigan

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

Also Available in Canada
People like the combination of a good traffic plan and year-round air conditioning in a house, because of the ease with which it can be cared for, declares Howard C. Grubb in explaining high public acceptance of his new Lortondale Addition in Tulsa, Okla. In this typical model designed by Donald H. Honn, entry is convenient to living area, bedroom section or kitchen. One may go from one of these sections to any other without passing through the third.

A 4x4 closet space opposite the bathroom houses a three-ton Chrysler AirTemp air-cooled compressor which is joined with a perimeter supply and central return.

Storage area includes 35 feet of closet space and a 9x12 storage room behind the garage. Condenser for the air conditioner is in the storage room and the garage has a 40-gallon water heater closeted in a corner.

Kitchen and hall have no wall separating them from the living room, but free-standing guest closet and dining cabinet form an effective divider, while leaving the ceiling area open to increase the impression of size.

This home has over 1,300 square feet of floor area, is priced at $15,200 including air conditioning. Cabinet tops are Formica; doors, trim, cabinets are mahogany.
Aerial view of Chalmette Vista, well on the way toward its goal of 993 houses.

St. Bernard, La.—

large New Orleans project favors brick veneer homes

Most popular home in the planned 993-unit Chalmette Vista development at St. Bernard parish in Greater New Orleans, is this three-bedroom brick veneer house which has been reproduced over 100 times. Priced in the $14,000-$15,000 range with 55x110 or larger lot, it comprises 1,063 square feet of floor area plus carport.

William C. Osborne, builder, sells the houses from blueprints. He attributes a steady flow of sales to a policy permitting the buyer to watch construction of his home, to select colors for brick, interior paints, roof, ceramic tile and asphalt tile, and giving him a one-year warranty against all defects.

BRAND NAME PRODUCTS USED

- American-Standard colored plumbing fixtures
- Bruce prefinished oak flooring
- Corbin and Westlock hardware
- Johns-Manville asbestos shingles
- Minneapolis-Honeywell thermostats
- Payne-Wilson Jetglas heater
- Sherwin-Williams paints

OCTOBER 1954
ARE YOU WILLING TO BE SHACKLED?

T HE PRINCIPLE of free enterprise for the building industry is under constant attack. What are you doing to fight back?

The National Association of Home Builders, maintained by local associations all over the nation, is fighting back. NAHB's fight for private enterprise is your fight. Failure means unlimited controls over your operations. Success means sound legislation, more and better housing, lower construction costs, greater availability of mortgage financing, greater market potentials, smoother building operations. Impetus provided by NAHB helped lift housing credit controls (Regulation X), remove curbs on materials, limit socialized public housing to about one-fourth of what was planned, transform the Military Housing program from dismal failure into spectacular success. GI home buying aids were extended to Korean War veterans, Congress was persuaded to replenish the mortgage financing authorizations of FHA and FNMA.

These activities—only part of NAHB's work for builders—meant more homes built, more profits for you, more families housed.

Active membership in NAHB is available to qualified home builders and Associates through their local Association. For your protection, for your firm's protection, for your industry's protection, join today. To join, contact your local HBA. If none has been formed in your area, write to the Membership Department for complete details.

NATIONAL ASSOCIATION OF HOME BUILDERS
1028 Connecticut Avenue, N.W., Washington 6, D.C.

WHAT'S NAHB? An aggressive group of more than 29,000 home builders, contractors and subcontractors, material suppliers, mortgage lenders, realtors, architects, building material manufacturers, all dedicated to a strong industry, free from unnecessary controls. Organized on national, state and community levels, it provides an effective means of voicing collective opinions on local and national matters. Through membership in your local Association, you automatically become a member of the National group.

ACTIVITIES OF NAHB. It represents you on Capitol Hill and before federal legislative groups; provides data on up-to-date design and construction techniques, mortgage finance information; engages in housing research; promotes National Home Week and the Parade of Homes; informs the public of industry activities through press, magazine, radio and TV; sponsors slum clearance programs, "trade secrets" meetings, annual conventions and expositions; your local association speaks for you at City Hall, at local FHA and VA offices.

NAHB provides these information services:
- Washington Letter—keeps NAHB members posted on trends that will influence operations; issued about three times monthly in concise, factual form.
- Correlator—monthly publication for members only, packed with Association news and information.
- Housing . . . U. S. A.—NAHB and Simmons-Boardman Publishing Co., publishers of American Builder magazine, combined forces to produce this interesting, informative, profusely illustrated volume on the merchant builder and the housing industry.
- Special Bulletins on new developments issued as circumstances warrant.
- Technical Services Department conducts continuing research to "build a better house with less money and fewer headaches"; examines new materials, construction techniques, land-planning methods. The Trade Secrets House was a product of this service available only to NAHB members.

AMERICAN BUILDER
AFFILIATED LOCAL ASSOCIATIONS
(Southern)

ALABAMA
BIRMINGHAM ASSOCIATION OF HOME BUILDERS
215 Comer Bidg., Birmingham, Alabama
TRI-CITIES HOME BUILDERS ASSOCIATION
200 Court St., Montgomery, Alabama
MONTGOMERY HOME BUILDERS ASSOCIATION
316 Old South Life Bidg., Montgomery, Alabama

ARKANSAS
ARKANSAS HOME BUILDERS

BRITISH COLUMBIA
1114 Sunset Drive, Vancouver, B.C.

FLORIDA
HOME BUILDERS ASSOCIATION OF FLORIDA (State)
1351 S. Dixie Highway, West Palm Beach, Florida

GEORGIA
HOME BUILDERS ASSOCIATION OF ATLANTA
214 E. Pavilion Bidg., Atlanta, Georgia

KENTUCKY
HOME BUILDERS ASSOCIATION OF LEXINGTON
706 Allendale Drive, Lexington, Kentucky

LOUISIANA
HOME BUILDERS ASSOCIATION OF GREAT BATON ROUGE
1404 Government St., Baton Rouge, Louisiana

MISSISSIPPI
HOME BUILDERS ASSOCIATION OF CHATTAHOOCHEE VALLEY
109 E. Main St., Columbus, Georgia

MISSOURI
HOME BUILDERS ASSOCIATION OF THE SOUTHERN MISSOURI AREA
109 E. College St., Springfield, Missouri

OHIO
HOME BUILDERS ASSOCIATION OF COLUMBUS
1317 First Ave., Columbus, Ohio

OKLAHOMA
HOME BUILDERS ASSOCIATION OF OKLAHOMA CITY
425 Troup Road, Oklahoma City, Oklahoma

Oklahoma City Home Builders Association
316 Old South Life Bidg., Oklahoma City, Oklahoma

PENNSYLVANIA
HOME BUILDERS ASSOCIATION OF SCRANTON
425 Troup Road, Scranton, Pennsylvania

RHODE ISLAND
HOME BUILDERS ASSOCIATION OF PROVIDENCE
1001 Lincoln Ave., Providence, Rhode Island

SOUTH CAROLINA
HOME BUILDERS ASSOCIATION OF CHARLESTON
522 Federal St., Charleston, South Carolina

TEXAS
HOME BUILDERS ASSOCIATION OF THE SAN ANGELO AREA
120 W. Travis, San Angelo, Texas

Utah
HOME BUILDERS ASSOCIATION OF SALT LAKE CITY
809 W. 300 South, Salt Lake City, Utah

VIRGINIA
HOME BUILDERS ASSOCIATION OF VIRGINIA
120 W. 300 South, Salt Lake City, Utah

WASHINGTON
HOME BUILDERS ASSOCIATION OF SEATTLE
2012 4th Ave., Seattle, Washington

WEST VIRGINIA
HOME BUILDERS ASSOCIATION OF CHARLESTON
120 W. Travis, Charleston, West Virginia

You'll Feel at Home with a Copy of American Builder

Keeping abreast with today's fast-moving changes in the highly competitive home building industry is no easy task. Your local NAHB chapter is doing a splendid job of making that task an easier one for you—by keeping you informed about current changes, innovations and newly developed techniques. AMERICAN BUILDER takes its hat off to the NAHB for a job well done.

AMERICAN BUILDER ... working hand-in-glove with the NAHB . . . is making every effort to further the interests of home builders everywhere. Our desires, not unlike those of the NAHB, are to help you keep 'on top' of the industry.

We're certain that you'll feel right 'at home' with a copy of AMERICAN BUILDER . . . for here is the easy, relaxing wav to keep informed about what's going on in your industry . . . the logical way to supplement your activities in your local NAHB chapter.

AMERICAN BUILDER's 'balanced editorial fare' gives you just the type of money and time-saving ideas you WANT . . . enough of the broad, yet detailed building information you NEED. Each month, the three regional editions of AMERICAN BUILDER deliver meaty, idea-filled, business-building articles designed to fit the needs of builders everywhere . . . and most important of all, the needs of YOUR specific building problems!

AMERICAN BUILDER
A Simmons-Boardman Publication
79 W. Monroe St., Chicago 3, Ill.
30 Church St., New York 7, N.Y.
OCTOBER 1954
27-5
Houston, Texas

29-day ‘homes in review’ produced 65 sales during ‘off season’

Largest of the 16 models, this four-bedroom house in the $10,500 range was also one of the most popular.

Ten workmen at Inwood Terrace demonstrating strength of truss design used in the 1,500-home addition.

Special display of 16 model homes in Inwood Terrace at Houston, plus a drawing among visitors for a car, clothes dryer and gas range, brought Sterling T. Hogan Sr., developer, 65 sales during a 29-day period regarded as a seasonal slump time. The show was called “Homes in Review.”

Built in Parade of Homes style along one side of a main street, the two- to four-bedroom units were offered at prices of $8,000 to $10,000, with down payments starting at $50 under VA terms; $600 under FHA. Designed by Crochet & Carroll, architects, the houses are built on a slab foundation, having central heating, attic fan, ceramic tile baths and aluminum windows. Planned for 1,500 houses, the addition is now about half completed.

BRAND NAME PRODUCTS USED

Abco Aluminum & Brass
Aluminum Products Co.
American-Standard bath fixtures
Aztec ceramic tile
Philip Carey Manufacturing Co.

Certain-Teed Products Corp.
Del-Mar cabinets
Minneapolis-Honeywell controls
Owens-Corning Fiberglas
Rheem Manufacturing Corp.

AMERICAN BUILDER
Since the July 25 opening of the 596-unit Green Meadow Estates in San Antonio, Texas, sales have averaged two houses a day, William Ochse, president of Green Meadow Builders, said: "We felt our market below $12,000 was pretty well satisfied, so we decided to step up into a little higher price bracket. . . . Our prospects for this bracket are seemingly unlimited." Models on hilly land and curving streets attracted 10,000 persons opening weekend.

Contemporary three-bedroom homes were priced at $13,800 to $15,750. Freeborn & Lord, architects, planned many of the houses with direct entrance to all rooms.

The all-masonry houses have duct, wire, water and sewer connections "stubbed in" for air conditioning; a three-ton unit can be added for $1,000 by removing a prefabricated closet. Another popular extra is a complete pop-up sprinkler system for front, side and rear yards at less than $400. Features include two closets to every bedroom, tiled bathrooms with built-in vanities, colored fixtures and linen cabinets, and a 75,000-BTU furnace.

An 18-acre playground and 11-acre community center are part of the over-all plan.
WHEN a builder puts a new home on the market, prospects pay plenty of attention to construction details.

One of the first things that catches their eye is the type of flooring — and if it’s Goodyear All-Vinyl, they’ll like what they see.

For it immediately tells them you didn’t cut corners. It has quality and beauty that reflects the wisdom of the builder—and this goes a long way towards putting them in a buying frame of mind.

Then when Mrs. Prospective Buyer learns the beautiful Goodyear All-Vinyl Flooring never needs waxing — it isn’t long before she’s got Friend Husband over in a corner, talking hard and fast to him about what a wonderful home it will make!

Mortgage people like it too — for they are well acquainted with the longer life and durability of Goodyear All-Vinyl.

It does a bang-up job in any room of the house, and coves corners and counter tops beautifully.

Why not write for our new catalog, and see for yourself why Goodyear All-Vinyl enhances the value and good looks of any home? Address:

Goodyear, Flooring Department V-8321, Akron 16, Ohio

GOOD YEAR All-Vinyl Flooring

Floors * Walls * Counter Tops — In Tiles and 45"-Wide Rolls

We think you’ll like "THE GREATEST STORY EVER TOLD"—every Sunday—ABC Radio Network—THE GOODYEAR TELEVISION PLAYHOUSE—every other Sunday—NBC TV Network
To get a good bond between concrete blocks, the bricklayer must shift and adjust each block to its final position, before the mortar has stiffened. Brixment makes it easier for the bricklayer to do this. Brixment mortar stays plastic longer in the wall because it has high water-retaining capacity, which provides greater resistance to the suction of the block. This gives the bricklayer more time to adjust and shift the block to its final position, while the mortar is still plastic enough to form a good, tight bond.
You profit faster and serve home buyers better with this Lau "Niteair" Kooling-Kit. It is the big answer to installation of the exhaust cooling unit in the same precise and accurate manner as installation of heating, plumbing and other equipment. You get LAU guaranteed, nationally-known quality fans together with LAU-specified accessories ... complete, matched, ready for perfect and completely satisfying installation.

**Two Fan Sizes:**

- 22" and 30"

... for small and average size dwellings. Model 223-RP is the 22" Fan Package ... Model 303-RP is the 30" Fan Package. The fan is our famous "Niteair" Rancher ... it may be used in either vertical or horizontal position.

Here is the last word in a COMPLETE PACKAGE UNIT! The new "Niteair" Kooling-Kit brings you simplicity and ease of installation in both new dwellings at the construction stage—and existing dwellings. No longer is it necessary to go to many sources for various parts and fittings. You get the whole package, with motor wired and mounted ... and easy-to-follow instructions. You save time and money with a Kooling-Kit!
New bathroom designs to help you sell...

Richmond fixtures for a contemporary theme!

Look at these modern features—the Claremont toilet compartment with its space-saving, sliding-door partition and separate entrance behind the Blake corner tub; the generous sized cabinet with sliding mirrors over the vanity and graceful Bromley lavatory. Warm color tones lend a friendly atmosphere and Whiter-White Richmond fixtures, with their bright sparkle, add lively contrast. Decorator-designed by Richmond to help you sell baths for new homes and the rapidly growing modernization market.

Your customers will soon be seeing this new bathroom, the second of a series, in such leading national consumer magazines as Better Homes & Gardens. Illustrated in full color and described with stirring sales messages, this series will spark wide interest in bathroom design—vividly demonstrate the full beauty of Richmond ware—help build the consumer brand-acceptance you desire.

Whether you specify, sell or install plumbing fixtures, Richmond’s national consumer advertising will help your selling job.

Richmond... the complete line of top quality lavatories, water closets and baths. Sold through selected wholesalers.

Richmond radiator company
16 Pearl Street, Metuchen, N. J.  Affiliate of Reynolds Metals Company
See other side for complete details on the new Richmond WFD Boiler.
ONE boiler for ALL your gas-fired, wet heat needs
The NEW WFD-Series F

Here's great news for the whole building team—plumbing wholesaler, contractor, builder, architect—Richmond's WFD Series F Boiler. Just one thoroughly reliable unit, for either hot water or steam, in eight different capacities—from 80,000 to 290,000 input Btu/hr.

The WFD is easy to install and easy to service—its top cleanout makes flue cleaning a quick, easy operation—particularly in confined spaces. WFD simplifies your specification, ordering and inventory. With a WFD and 2 sets of trim, you have a hot water boiler or a steam boiler.

In short, here is a wet base, cast iron boiler, engineered for dependable, fully automatic operation. Supplied with control groups for all types of gases, the WFD Series F is A.G.A. Approved, meets S.U.R. Standards, A.S.M.E. Standards. It's good-looking—and it will keep its good looks; the steel jacket is “Duridized” which provides a superior bond for the white enamel finish—protects the steel against rust or corrosion.

For further information send off the coupon today—find out about this new gas-fired boiler—the Richmond WFD Series F. Distributed through selected wholesalers.

*Duridine—American Chemical Paint Co.

check these features:

- Cast iron, wet base—A.G.A. Approved for combustible floor installation.
- Available with tankless domestic heater for instantaneous hot water—3 or 5 gallons per minute capacities.
- Fully automatic—all controls and tankless water heater completely enclosed.
- "Duridized" for protection against rust or corrosion. Provides firm bond for white enamel on steel jacket.
- Deluxe appearance complements the finished basement or utility room.

Richmond radiator company
Metuchen, New Jersey
Affiliate of Reynolds Metals Company
"I made a check chart... then I changed to American Kitchens"

says leading builder,
Ben L. Bingham
Los Angeles, Calif.

<table>
<thead>
<tr>
<th>American Kitchens</th>
<th>COMPETITOR #1</th>
<th>COMPETITOR #2</th>
<th>COMPETITOR #3</th>
<th>COMPETITOR #4</th>
<th>AVERAGE WOOD KITCHEN</th>
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"Kitchens are my top home salesmen, and I wanted the best. I compared them all, then I changed to American Kitchens. For me, American Kitchens offer fast, economical installation... a kitchen with more most-wanted features at no more cost... features that turn my prospects into buyers. Better than wood kitchens... especially in the desert... the best in steel... American Kitchens are tops!"

Mr. Bingham builds about 400 $10,000 homes a year in Southern California. Since he's having such success with American Kitchens, why not let us quote you on your next kitchen job and prove how high quality, low cost American Kitchens sell your homes faster.

American Kitchens
AVCO Manufacturing Corp.
Connersville, Ind., Dept. AB-101

—I'd like to have "no obligation" quotation on my next kitchens.
—Please send your new Architects’ and Builders’ File.

Name
Address
City...Zone...State

OCTOBER 1954
Father-son builder team features ELJER in 2,500 bathrooms

Pearce & Pearce, of Buffalo, largest home builder in the Niagara frontier, averages a house a day, every day of the year—and every one equipped with Eljer fixtures.

They consistently feature excellent community planning, including curbed, paved streets; large lots; full landscaping.

Pearce & Pearce uses only the finest skilled labor and building materials. Like so many leading builders concerned with value and quality, they use Eljer fixtures exclusively—over 2,500 complete bathroom sets since the war!

For full information on the advantages to you of Eljer's wide line of quality brass, and fixtures in cast iron, formed steel, and vitreous china, see your plumbing contractor or write us. Eljer Co., Ford City, Pa.

Eljer—the only name you need to know in plumbing fixtures

Howard W. Pearce (right) is past president of the local Home Builders Association. William H. Pearce (left) is current president. Plumbing contractor for Pearce & Pearce is J. F. Weinheimer, Inc., Buffalo.

Eljer's wide line of cast-iron, formed steel, and china fixtures is available in white and five colors. Eljer brass is of highest quality. All are available from a single source, and offer the advantages of a well-known and respected name.
In early spring this year VA applications in Washington, D.C. were being acted upon as late as four or five months after date of filing. The reason assigned was no increase in personnel in the local VA office, despite a big jump in the number of applications.

The reason was not good enough for the members of the Washington Home Builders Association who, with their executive officer, Jim Pearson, demanded and got a speed-up in processing. Currently the lag between filing and processing is down to four or five weeks.

Pearson stated that it certainly is true in Washington and probably true in other local VA offices that there has been no increase in personnel while the number of applications has jumped rapidly. But, he pointed out, if the builders do not demand either faster work or longer hours of their local VA staffs, the personnel will just go on at the accustomed pace. Every business has peaks which have to be met by the employees, and there is no reason why VA or any other government office should be an exception.

Partly Builders' Own Fault

But, warned Pearson, the fault does not lie entirely with the VA people. When he dug into the situation prevailing in Washington he found that one big contributing factor to slow processing was that many builders were not filling out their papers correctly or completely.

The Washington association took prompt steps to rectify this by issuing a kit with detailed instructions covering the filing of both VA and FHA applications. The New Jersey and Detroit home builders associations have put out similar kits, and early indications are that this action will have beneficial results.

Lags Up to Five Months

Reports from other sections of the country show lags of two to five months. Local conditions probably are fairly well reflected in the following figures obtained recently from Washington. The number of units pending assignment at the beginning of the year was 7,600. At the end of July the figure stood at 24,000. In January, the number of applications awaiting an appraiser's report totalled 10,000. At the end of July the total was 42,000. The number of applications waiting for review of an appraisal report was 7,500 in January, and 29,000 at the end of July.

These figures show roughly a fourfold pileup between January and July. There is no possibility of adding to local VA forces at present. Pressure on the local offices by builders, and improved filing practices appear to be effective ways to close the gap between filing and processing.

August Starts Total 111,000

Housing starts in August totaled 111,000, approximately a 20 per cent gain over the number recorded the same month last year. Only 1,200 were credited to public housing.

Total for the year through the first eight months was 796,000, of which 780,500 starts were attributed to private contractors. This is about 25,000 starts ahead of the similar period of 1953, when public starts were running twice as high.

The August figure, according to the Bureau of Labor Statistics, pushed the seasonally adjusted annual rate upward to 1,176,000 starts, highest since the 1950 peak.

August dollar volume of new construction, $3.6 billion, set a new monthly peak and raised the eight-month total to $23.7 billion, up 4 per cent from the total for the comparable period of 1953. Included in the August total was private residential work amounting to $1.278 million, a 15 per cent improvement.
The 11th annual convention and exposition of the National Association of Home Builders will be held in Chicago January 16-20, 1955, with meetings and exhibits about evenly divided between the Conrad Hilton and Sherman Hotels.

More than 18,000 persons are expected to attend the industry-wide meeting, according to Henry Fett, builder of Royal Oak, Mich., who continues to serve as convention chairman. He said that sessions will be carefully planned to permit intensive study of latest technical developments, sales and merchandising methods and mortgage financing.

Though exposition facilities have been increased 15 per cent over the January, 1954, total, Paul S. Van Auker, convention-exposition director, reported that more than 350 manufacturers of building materials and home equipment had purchased all available space by mid-August. Of these, he said about 70 will be participating in an NAHB show for the first time.

Van Auker pointed out that while some 6,500 rooms in 10 downtown hotels had been set aside for the association, reservations must be made by December 15 to insure that accommodations will be available. Builders, contractors, architects, engineers, manufacturers, financial representatives, building supply dealers and others affiliated with the home building industry are eligible to attend.

Advance registration and reservations for NAHB members will be handled through local chapters starting November 1. Persons not affiliated with a local unit should apply, according to Van Auker, to NAHB convention headquarters, 111 West Jackson Boulevard, Chicago 4.

In addition to Fett, the NAHB convention committee includes George S. Goodyear, Charlotte, N. C.; Perry E. Willits, Miami Shores, Fla.; Albert L. LaPierre, Seattle, Wash.; Wilson H. Brown, Dallas, Texas; Irving R. Stich, West Hartford, Conn.; Joseph B. Havenswick, Dayton, Ohio; Francisco Fullana, San Juan, Puerto Rico, and John E. Bauer, Indianapolis.

### College Housing Program Gets $50 Million Boost

The Bureau of the Budget has released an additional $50,000,000 to carry on the Housing and Home Finance Agency's college housing program during the current fiscal year. The Housing Act of 1950, which established the program, authorized $300,000,000 in loans to colleges and universities for construction of student and faculty housing. The latest action raises to $200,000,000 the total released to date.

### FHA to Recognize 'Quality' Work, Products

Revision of FHA minimum property requirement will have as one objective the granting of recognition to "quality construction" and the use of "quality products," which will be reflected in lower maintenance costs. So declared Commissioner Norman P. Mason in announcing appointment of Neil A. Connor, Boston architect, to the new FHA position of director of architectural standards. Connor, he said, will assist in the revision, "with the help of the building industry to raise the standards of housing in America."

"It is not only what a house costs initially which is important to the family occupying it. Equally important is what it will cost to live in. FHA is going to take a look at these other costs, such as monthly upkeep, fuel bills and depreciation."
Court Fight Seen Over University Sale to Builders

Court action against the University of Minnesota has been threatened by the Minneapolis Home Builders Association and other industry groups in an effort to force it to drop plans for a 1,500-home development.

University officials, in a surprise announcement, reported they had contracted to sell several hundred acres of donated land to two builders: Winston Brothers of Minneapolis and Hal H. Hayes of Los Angeles, who would develop the site as a model community and build and sell the houses.

Secret Action Decried

Association members accused the university of entering the field of private enterprise in competition to local building interest. Joined by local material dealers, subcontractors and lenders, they criticized the secrecy behind the project and the selection of a California developer who had no experience in building homes in the area.

Charged Lawrence W. Nelson, executive vice-president of the home builder group: "That is like driving a knife in the back of university graduates who earn their living in the local building industry." He accused the state-supported institution for " stepping far afield when it engages in promoting competitive enterprise in which private interests are engaged.

'Bombproof' City Planned

Meanwhile, Hayes disclosed plans from Hollywood to build a $50,000,000 "atom-bomb-proof" city on 100 acres of the site. He said that homes in the $15,000 to $25,000 range would be equipped with Geiger counters and bombproof bedrooms. They would be served, he added, by a small canal "escape route" and safety-sealed wells for auxiliary water supply.

W. J. Rohan, Winston Brothers, president, said the new proposed project would be "a needed shot in the arm" for the area's economy, but Nelson claimed that shortage of housing was no excuse because local demand "has been completely met."

Meistrell Appointed FHA General Counsel

Frank J. Meistrell has been named as general counsel of the Federal Housing Administration, succeeding Burton C. Bovard who was ousted in July after having served in the position since 1940. He was a member of the New York law firm of Donovan, Leisure, Newton and Irvine.

Appointed as his assistant was Bruce H. Zeiser, former trial attorney in the civil division of the Department of Justice.

Other recent FHA staff additions include Burnham W. Diggle of Washington, director of the examination division, a new position, and Loder L. Patterson of Jacksonville, Fla., director of the division of slum clearance and urban renewal.

Meanwhile, the Housing and Home Finance Agency's division of slum clearance and urban redevelopment, named Tracy B. Augur as new assistant director for urban planning and assistance.

Shift Convention Site

The National Established Roofing & Siding Contractors Association, which has formerly met in New York for its annual convention and exposition, will hold its 1955 meeting March 13-16 in the Hotel Sherman, Chicago.
Cole Reports Plan
To Recover FHA
Section 608 ‘Windfalls’

The first move to follow “a pattern of decisive action by which the government will protect itself and the public interest in FHA windfall cases” has been announced by Housing and Home Finance Administrator Albert M. Cole. He said the plan was designed “to compel recipients of windfalls to pay back the money obtained in violation of corporate charters.”

In his initial move, Cole directed Sidney Sarner, president of 13 Fort Lee, N. J., corporations grouped as Linwood Park, Inc., to call meetings of preferred stockholders to replace incumbent directors.

**FHA to Elect New Directors**

“New directors,” said Cole, “will be elected by the FHA which owns the preferred stock in all corporations created in accordance with section 608.” He pointed out that the program was adopted after study of available legal remedies by William F. McKenna, deputy administrator who directed the HHFA probe of FHA.

“Promoters of section 608 projects who paid windfalls to themselves,” Cole reported, “violated section 608 corporation charters which provide that only earned income may be distributed to stockholders. . . . FHA as owner of the preferred stock will assume control of the corporations until the defaults are corrected. . . . Action similar to that taken in the case of the Fort Lee corporations will be taken in dealing with other section 608 corporations which have violated charter provisions or which have violated other regulations.”

**15,035 RFC Mortgages Taken by FNMA in July**

Funds available to the Federal National Mortgage Association for purchase of mortgages decreased $30,000,000 in July when it acquired 15,035 mortgages formerly held by the defunct Reconstruction Finance Corporation. Unpaid balances of these loans aggregated $64,000,000.

Also in July, FNMA bought 4,365 other mortgages for $56,000,000 and sold 3,497 for $36,000,000.

At the end of the month, the agency’s available funds totaled $540,000,000, with $235,000,000 intended for military and disaster housing loans and the remainder for other eligible mortgages.

**Typical FHA Home of ’53 Had Five Rooms, 924 Sq. Ft., $10,140 Value**

The Federal Housing Administration’s forthcoming 20th annual report will show that the typical new home on which FHA insured a mortgage in 1953 was a single-family, five-room house with 924 square feet of floor space, valued by FHA at $10,140. The size was about the same as 1952 counterpart, but the valuation was up about one per cent.

Last year, FHA insured 151,800 mortgages on new homes and 120,500 mortgages on existing homes. Valuations on three-fifths of the homes financed under the housing act’s section 203 ranged from $8,000 to $12,000. The proportion above $12,000 increased from 21.1 per cent in 1952 to 23.5 per cent in 1953, and the proportion in the $6,000-to-$8,000 group rose from 14.6 per cent to 17.1 per cent.

The typical 1953 buyer of an FHA-financed new home had an effective annual income of $4,880. He obtained a mortgage of $8,555 ($65.6 per cent of the FHA valuation) which he undertook to amortize in monthly payments of $65.95 over a term of a little more than 22 years.

**Dealer’s Viewpoint**

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

Four Seasonal Themes Used This Year

**Will Be Repeated and Expanded in 1955**

Collectively, retail lumber dealers and building products manufacturers spend well over $100,000,000 a year on advertising and promotion. In the belief that even better sales results could be obtained if both groups were to coordinate their efforts, NRLDA’s merchandising committee conferred twice with the producers’ sales and advertising managers last year, and the outcome has been so encouraging that another joint meeting will be held this fall.

NRLDA already has advised the manufacturers that dealers will repeat in 1955 the four seasonal themes used this year and has urged the manufacturers to tie-in closely. Those themes are: “Buy or Plan Your New Home Now” in February, “Get Your Home and Yard Ready for Summer” in May, “Add-a-Room” in August, and “Get Your Home Ready for Winter” in October.

In addition to discussing methods of getting that program adopted still more widely in the future, NRLDA will consult the manufacturers on plans for revising and expanding its merchandising calendar and for developing methods of coordinating dealers’ floor and wall displays with their weekly and monthly advertising themes.

No change is contemplated in the basic structure of the merchandising calendar, the dealers’ advertising and display guide, but manufacturers will be invited to offer suggestions for improving it and making it even more useful.

Building products manufacturers spend several million dollars a year on display materials alone, and dealers contend that a considerable amount of that money is wasted because the materials are not well adapted to the dealers’ needs. On the other side, manufacturers point out that too many dealers are content to leave the same displays in place month after month because they either don’t get around to changing them or don’t appreciate the importance of tying their current advertising and displays together.

NRLDA’s merchandising committee has some ideas for correcting this situation, and doubtless the manufacturers will have some of their own. Out of the discussion is likely to come a set of recommendations that will be helpful to everyone concerned.

Other earlier attempts to reconcile the needs of dealers with the efforts of manufacturers to give them effective merchandising help have been most successful. In addition to using the seasonal advertising themes, many producers now are giving product data to dealers in a more useful form and are offering advertising mats better adapted to their needs.

When comparable progress has been made with display materials, the two groups will have built up a very commendable record of joint accomplishment in a field where individualism always has been the rule.
Don't let your houses have that

VACANT STARE

It's the little things that sell the little woman and nothing can make your houses look so finished . . . so inviting . . . so ready to buy and enjoy as ROLLA-HEAD venetian blinds.

Beautiful custom-made ROLLA-HEAD blinds solve your buyer's problem of how to turn gold fish bowl into cozy nest without having to miss a mortgage payment.

And now, exclusive ROLLA-TEX plastic tapes make ROLLA-HEAD your "extra" with an extra! Put ROLLA-HEAD with ROLLA-TEX on your sales force, today!

ROLLA-HEAD

custom-made

VENETIAN BLINDS

featuring fabulous new

ROLLA-TEX plastic tape


Eastern Machine Products Co.

General Offices & Plant: 1601 Wicomico St., Baltimore 30, Md.
NEW YORK, 771 3rd Ave., Brooklyn
ATLANTA: 1466 Lakewood Ave., S.E.
PITTSBURGH: 208 Corey Ave., Braddock
CANADA: Eastern Machine Products, Ltd. TORONTO • MONTREAL • VANCOUVER
SAVE TIME, LABOR AND MATERIAL WITH

Single-Unit

CLAY MASONRY

ALL THE EXTRA SALES VALUES OF
BRICK AND TILE AT FRAME COSTS

- Minimum Maintenance  - Fire Safety
- Permanence  - All-Weather Protection
- Flexibility of Color, Texture, Design

Furring with 2" x 2" forms air
space for added weather
protection, accommodates
insulation and wiring.

Unfurred hollow units may
be plastered direct, left
exposed or painted.

Thru-the-Wall construction is flexible—
May be furred or unfurred to meet local climatic conditions
and building requirements.

Typical 6" Thru-the-Wall
Burned Clay Units
(These meet FHA and all national building
code requirements for one-story houses)

"SCR brick" a solid, modular unit with coring
not more than 25% of total volume. With furring
strips, continuous base flashing and weep holes,
this unit provides excellent weather protection in
the most severe climates. Jamb slot accommodates
metal or wood windows. Available nationally.
®Pat. Pending

"SCR brick—Type SM" is 8" long and has
one large core in the center. Available in New
York City and vicinity.
*Reg. TM, SCPRT, Pat. Pending

Hollow Unit — A modular clay tile unit, vertically
cored with a void volume of about 40%, designed
for use with or without furring. Furring is advisable
where wind-driven rains occur or where insula-
tion is necessary in cooler climates. Also provides
window jamb slot. Available in Southwestern
states.

Hollow Unit — A vertically cored clay tile unit
with 6" x 4" x 12" nominal dimensions, designed
for use with or without furring. Available in South-
eastern states.

STRUCTURAL CLAY PRODUCTS INSTITUTE
1520 18TH STREET, N.W., WASHINGTON 6, D. C.
...THE COMPLETE COUNTER-TOP PACKAGE
WITH NEW SALES APPEAL

New, decidedly different Unitop has fresh appeal for you—and home buyers. You'll like the way Unitop combines top and backsplash in one unbroken piece—without joints or molding—to simplify and reduce the cost of installation. You'll like its flexibility, too. Three standard lengths, plus an interchangeable left and right-hand corner unit, let you meet the layout requirements of any job—whether straight-line, L-shaped, or U-shaped.

Home buyers will delight in the lasting carefree beauty of Unitop, for its attractive, mirror-smooth MICARTA® surface promises all the freedom from care and cleaning troubles that has always distinguished MICARTA from other surfacing materials.

Let new MICARTA Unitop accent the beauty and appeal of your homes. Your lumber dealer has complete information. Or, if you desire, write for the name of the Unitop fabricator in your area.

Westinghouse

micarta®

distributed by
UNITED STATES PLYWOOD CORPORATION
largest plywood organization in the world
and U.S.-MENGEL PLYWOODS-INC.

United States Plywood Corporation
55 West 44th Street, New York 36, N.Y.

☐ Please send full information on MICARTA Unitop.
☐ Please send names of selected Unitop fabricators.

Name

Address

City Zone State

OCTOBER 1954
LIVER

Most powerful tractor of its type!

Two husky, overhead valve engines to choose from—diesel or gasoline. Pick the fuel that fits your needs the best, cuts your costs the most.

The diesel is a full diesel—starts and runs on diesel fuel alone. An engine rugged and responsive, and one that takes little fuel and upkeep. And this diesel is weatherproof—easy to start no matter what the weather or how long the tractor has been idle.

Choose the gasoline, and you get an engine built to the same rugged standards of the diesel. An engine with a compression ratio of 7.0 to 1—a new high for an industrial tractor! This extra high compression means greater power on less fuel, better performance on every job.

New OLIVER SUPER 55 offers

built-in hydraulics for
The Super 55 is a tractor you can use with all types of equipment. Its 3-point hitch with built-in hydraulic system operates a variety of Oliver and other inexpensive tools. A sturdy, one-piece front frame with convenient mounting pad makes front mounted hydraulic pumps and other equipment easy to attach, easy to remove.

See this new Oliver, check its power, handling qualities and many attachments. Check, too, its many standard features: 6 forward speeds, double-disc brakes, recirculating ball-type steering—features that make the Super 55 the most versatile, profitable tractor you can own. See your Oliver Industrial Distributor, soon!

**THE OLIVER CORPORATION**

400 West Madison Street, Chicago 6, Illinois

* a complete line of industrial wheel and crawler tractors

OCTOBER 1954
Kennecott’s new adequate

and what it means to
the Builder!

As a builder, you know few things are more important today to Mr. and Mrs. Homebuyer than the way your houses are electrically powered. He and she, as never before, depend upon a whole houseful of appliances for their convenience and comfort. These “electrical servants,” in turn, must be fed plenty of power to operate smoothly at their full, built-in strength.

That’s why you build your houses with a sharp eye to the specifications and layouts of their wiring systems. You see to it that the wires, themselves, are large enough . . . that circuits are plentiful . . . that outlets are just where they are needed. Because you know that’s quality wiring. Unfortunately, too many homeowners don’t realize it!

That’s where Kennecott’s national adequate wiring campaign comes into YOUR picture!

You’ve seen the advertisements of this campaign in the Saturday Evening Post and This Week magazines. It’s a hard-hitting drive that’s teaching millions of people how to recognize and appreciate adequate wiring as a prime quality feature in the houses you build. It’s a campaign that pre-sells what you are selling . . . fine homes, fully-powered, for both today’s and tomorrow’s electrical living.

So . . . make “adequate wiring” an important part of your sales talk. You’ll find more and more people listening to you with more intense interest . . . greater understanding—thanks to this Kennecott advertising! Kennecott Copper Corporation, 161 East 42nd Street, New York 17, N.Y.
wiring campaign.....
PROTECTION DOORS. This may be a new term applied to a type of door, without reference to anyone’s particular door, but I’m using it in reference to screen doors, storm doors and combination doors, whether wood, metal or both.

THIS IS CRITICAL of protection doors of all kinds on behalf of the producers of beautiful entrance doors and the producers of equally beautiful entrance door hardware. And particularly on behalf of the home owner who willingly and prudently pays well for handsomely dressed, handsome front entrance door that reflects hospitality and good taste.

THEN, WHAT HAPPENS? He buys a protection door, probably a combination door that hangs twelve months a year.

AND THIS COMBINATION DOOR has wide stiles, wide enough to hide the beautiful bronze brass or chrome latch. Nobody ever sees it, not even the owner. Because the stiles are too wide.

Then, the winter panel is usually cut up into small rectangles hiding fine graining or tasteful paneling carefully selected to enhance the architecture of the front elevation. Chances are that it hides or half hides the ornamental bronze or brass knocker, too.

THE SAME goes for the summer panel of screen cloth. Likely it has horizontal members to ease the strain, if any, on the screen cloth.

SO, even in summer the protection door does its effective best to hide all the carefully chosen beauty behind it.

AND TO COMPLETE the mystery of what lies behind the protection door, this same p.d. has a kick panel at the bottom which rises as high as 18 inches.

AND YES, some of the most effective enemies of the handsomely dressed, handsome entrance door use a scroll or a long legged bird impaled on the screen or storm panel. That does it.

NOW, JUST TRY to see the entrance door. You can’t do it except from the inside when the door is standing open on a hot summer day.

YOU GET THIS far, and it becomes very unsmart to even have an entrance door.

YOU CAN GET the same effect, and for much less money, by nailing four reasonably straight old one-inch boards together on a rough Z-back, hanging the thing on two or three cheap steel butts, and fitting it with a hinge hasp and an inexpensive padlock. Nobody will ever know the difference.

NOW THE PROTECTION door ceases to hide beauty, and instead covers a crime.

I LIKE BEAUTY in an entrance door, in my own entrance door, and I’ll bet I’m not an oddity in this respect.

AND IT SEEMS to me that it’s about time that somebody came up with a protection door that will keep summer insects out, insulate against cold and snow, and at the same time let me, when I come home at night, see through the thing and view with pride my carefully chosen entrance door and its just as carefully chosen hardware.

I’VE BEEN TOLD that you can’t get down to a one-inch stile and a
single pane storm panel and have enough rigidity to support the glass. I don’t believe it.

BUT EVEN if it is true, do we have to use glass? Aren’t there transparent plastics that will do just as well, and not need so much support?

PLASTICS, EH? Have any of the plastics people given a nod to the idea of a transparent all-plastic protection door, combination probably, and tinted to harmonize with the exterior color scheme of the house?

IF THIS IS POISON to the glass manufacturers, what about a glass protection door in combination style. There is structural glass and there are all-glass doors.

AND IF there is any merit to this, can these glass protection doors be tinted lightly, when desired?

MAKE a non-obscuring protection door out of wood, glass, metal, plastic or any combination of these, and I’ll produce a jury of builders whose judgment regarding the salability of the product can be relied on implicitly.

MERCHANDISING TIPS: To promote ‘on your lot’ building, tour a neighborhood noting all vacant lots on which your current house would be appropriate. Then get names of owners from city hall records. Send letter inviting the owner to visit your furnished model house and study its possibilities for his lot. Note also improved lots which could take a second house, in zone permitting this usage. Get names of owners from city records and contact them by mail, suggesting investment possibilities of a second house on the lot.

OFFER BABY-SITTING service. “Yes, we will have a competent baby sitter sit with your young ones while you are transacting your business with us,” states an advertising brochure of the Guthrie Construction Company in Spokane. If a prospect wants to spend some time looking at houses in a Guthrie tract, the company will supply a baby sitter without charge. The wives of several Guthrie employees do this work as it comes along. Since a number of women are available, somebody is always free to take on these assignments.

The popularity of these Christmas figures is growing by leaps and bounds. Standing 30” to 40” in height, they are easily made and very colorful. Dealers, Builders and Contractors can capture a sizable market immediately, with a minimum in investment.

Each of these novel Christmas items is made from a full-size Easi-Bild Pattern—traced onto Homasote Type RD and then cut out. Full decorating instructions are included with each pattern.

The Dealer sells the patterns and the materials—to the Do-It-Yourself market—to his builders and contractors.

The Builder or Contractor keeps his men and equipment busy. The finished pieces sell at a handsome profit and usually in sets.

In October and November, five magazines—with 40 million readers—will carry advertisements on these special Christmas patterns—creating a market for patterns, materials and finished pieces. The magazines are Better Homes & Gardens, American Home, Living for Young Homemakers, Popular Science and Popular Mechanics. Write immediately for the full details of this program. We offer both patterns and full-size samples for display. When people in your territory send us inquiries—as a result of our national advertising—we send them your name; we send theirs to you. Get in on this business now. Write or wire your inquiry today to Department 31A.

*T. M. Reg. Easi-Bild Pattern Company
New Coleman gas wall
sell low-cost

No special construction—

They fit any home, new or old—
flat top, standard roof,
one- or two-story residences;

basement or slab-floor construction

The biggest selling, best advertised, and by far the most popular wall heater available. Because it fits smoothly between standard 2” x 4” centered studs, it is ideal for installation in new homes as well as existing construction that is to be modernized.

Requires no basement, special excavation or duct work. Beautifully styled and a real space-saver in small homes, upstairs rooms, basements, tourist cabins, etc. Also available in Dual Wall Models to heat two separated areas at the same time. Install them singly to heat a few rooms or use multiple installations for zone-heating larger residences. Write us and we’ll have our nearest distributor work out cost to your specifications. The Coleman Company, Inc., Wichita 1, Kansas.
heaters cut your costs—homes faster
fast, easy installation

**NEW** SHORT ECONOMIZER
puts more heat into room

Fits in wall above the heater. Reclaims heat from flue area and returns it to the room. Short enough to fit flat roof, goes in buildings with attic or upper stories.

**NEW** DIRECTIONAIR BLOWER
completely automatic with new Fan and Limit Control

Delivers tempered warmth clear to the floor. Increases circulation, prevents cold-floor discomfort. New Fan and Limit Control automatically regulates operation of burner and blower and economizes on fuel.

NEW LOW PRICES ON COLEMAN FLOOR FURNACES
OIL GAS LP-GAS
Flat Register and Dual Wall Models to fit low-cost specifications

Complete in-floor furnaces that need no basement, no air ducts. Like Coleman Wall Heaters, they can be used singly or in multiple installation for zone heating. The famous Coleman Shalloflow is the industry’s shallowest gas model.

THE COLEMAN COMPANY, INC.
Dept. 500-3-AB, Wichita 1, Kansas
Please have a Coleman distributor give me full information on Coleman Wall Heaters and Floor Furnaces.

Name ____________________________
Firm ____________________________
Street ____________________________
City __________ Zone ______ State ______

OCTOBER 1954
Frederick F. Quinlan, Superintendent of Schools, Lake Forest, Illinois, says, "After careful study, we found lath and plaster the best choice for our new Deerpath School. It provided the fire protection and permanency we feel is especially necessary in a school building. And we were pleased to find it was more economical. For example, lath and plaster ceilings effected an insurance saving which will recover the additional cost in three years—and yield a four figure premium saving each year thereafter."

Circular corridor juncture illustrates decorative accents possible only with plaster. Acoustical plaster in dome provides sound absorption in this high traffic area.

RALPH MILMAN, CHILD & SMITH, Associated Architects
insurance rates for this School

Ray Feldner, Superintendent of McNulty Bros. Plastering Contractors on Deerpath School, presents Certified Craftsmanship Certificates to Mr. Frank A. Childs, Senior Partner, Childs & Smith, Architects; Mr. Ralph Milman, Architect; Mr. Frederick F. Quinlan, Superintendent of Schools, Lake Forest, Illinois; and Mr. William D. Matthews, Construction Superintendent, John Griffiths & Sons, General Contractors.

Certified Craftsmanship IN ACTION!

This Pledge of Performance is your written and signed assurance that the lathing and plastering on specific jobs will be in compliance with the newly adopted Code of Standard Practices for Lathing and Plastering. This Code was developed by the National Bureau for Lathing and Plastering, an organization of contractors and craftsmen. It is subscribed to by scores of local chapters throughout the country.

Certificates issued on specific jobs are written commitments to work schedules, job cooperation, work of craftsmanship caliber and nationally recognized standards of quality. They are yours for the asking from lathing and plastering contractors adhering to the Code.

We suggest a thorough reading of the Code of Standard Practices which appears on the back of every pledge. Ask your lathing and plastering contractor for a copy. Or write National Bureau for Lathing and Plastering, 1401 K Street, N.W., Washington 5, D.C.

Associated Manufacturers of Lathing and Plastering Materials
520 N. Michigan Avenue, Chicago 11, Illinois

This is the emblem of the National Bureau for Lathing and Plastering. It symbolizes high standards of job performance and responsibility.
“I’m lining up with ALIGNALOCK to sell my houses fast!”

Yes, builder after builder says, “It’s ALIGNALOCK for me!”

And you can’t do better than use ALIGNALOCK whether you are planning to build one new home or a thousand!

Here’s why:

... ALIGNALOCK is a high quality, beautifully balanced lock that you buy at a low cost

... ALIGNALOCK’s self-aligning assembly and other features make it possible for even non-skilled help to install it easily, quickly and economically. No other lock can be installed faster!

... ALIGNALOCK is backed by a long respected name . . . SARGENT of NEW HAVEN . . . a recognized brand that indicates to home buyers that quality products are being used throughout

... ALIGNALOCK is available in all functions, and is finished in handsome brass, bronze, aluminum and polished chrome for split finishes

... ALIGNALOCK is made only of quality materials. No brittle, easily-cracked die-cast parts.

... “Automatic unlocking” and “emergency unlocking” give the Sargent ALIGNALOCK an extra safety appeal to home-owners.

See your supplier today. Compare ALIGNALOCK, feature by feature, with any low cost lock. We’ll rush you full particulars if you’d like. Write us, Dept. 9K

SARGENT & COMPANY
New York
NEW HAVEN, CONN.
Chicago

Hardware of Character
AMERICAN BUILDER
Stronghold Nails add strength, hold permanently tight, save maintenance casts. Wood fibre "lock" with the scientifically engineered threads. Nails can't loosen—ever! Available in regular or hardened steel, or in aluminum or other non-ferrous metals. Any length to 9'; any diameter to .310—in any finish, for any purpose.

Stronghold Screws

For Every Phase of Construction

IN USE FROM COAST TO COAST... IN LABORATORY TESTS... TO hold tighter—longer!

Stronghold and Screw-Tite Nails are engineered to hold tighter—permanently tight. They're backed by 20 years of on-the-job use—by our 40 years of experience, our reputation as the largest maker of threaded nails in the United States. Ask for them by name—take no others.

The far, for greater holding power of Stronghold and Screw-Tite Nails has been conclusively established by continuing laboratory tests at Virginia Polytechnic Institute under the direction of Dr. E. George Stern. No other nails can offer such proof of superiority! Ask your dealer for Stronghold and Screw-Tite Nails. If he can't supply you send us his name.

SCREW-TITE Floorin g Nails

For "Squeak-Proof" Floors and Stairs

Floor laid with Screw-Tite Flooring Nails are tighter, smoother, longer lasting—never squeak, buckle or become springy. Screw-Tites are made of high-carbon steel, heat-treated and tempered—won't bend or break. Also in regular steel for softwoods. All sizes.

DRIVE-RITE Aluminum Nails

made stiffer to DRIVE WITHOUT BENDING

Here at last are Aluminum Nails you can drive! In all styles, for all applications where Aluminum nails are advantageous. Available in Stronghold, Screw-Tite or smooth—in count packages under our exclusive trade name, "DRIVE-RITE." Ask for them by name. Write for special "Drive-Rite" brochure.

Made only by

INDEPENDENT NAIL and PACKING CO.

BRIDGEWATER, MASSACHUSETTS, U. S. A.
Scouting for Customers?  

To reach out for more business, advertise in the 'yellow pages' of the Classified Telephone Directory.

That's a sure way to build your construction, alteration and repair business.

You'll get new customers . . . keep old ones when your business—name, address, telephone number and sales message—are prominently displayed in the 'yellow pages'. It's the quick and easy way for prospective customers to find you when they are looking for a builder.

Scouting for business is economical and effective when you use the 'yellow pages'.

Get in touch with the Classified Telephone Directory Representative at your local telephone business office.

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how to install oak flooring over concrete slab

Is it possible to lay oak flooring on 2x4's placed in or on a concrete floor slab?

Yes. say the E. L. Bruce Company of Memphis, Tennessee, producers of hardwood floors.

Lay 2x4 screeds in mastic, anchor them with steel clips or imbed them in the wet concrete itself. Laying the screeds in mastic is preferred by most builders, because the installation is simpler and it permits easier waterproofing.

Adequate waterproofing is of utmost importance with this type of installation. Whereas waterproofing below slabs or between them may act as a barrier to capillary moisture, it has little effect on moisture condensation on the surface of the subfloor.

Put a two-course application of a waterproofing membrane on top of the slab. This will provide an effective barrier against both condensation and capillary moisture.

Mop the concrete, after it has dried, with hot asphalt followed by a layer of 15-pound asphalt felt. Lap the edges one or two inches. Carry the felt up the walls about 4 inches (behind baseboards). Mop again with a second coat of hot asphalt followed by a second layer of 15-pound felt applied as before. Do not apply hot asphalt over the second layer of felt.

If screeds are imbedded in concrete, carry waterproofing membrane over and around them. If, however, the screeds are laid in mastic or fastened with steel clips, run waterproofing membrane beneath them.

Use 2x4's as screeds that are 18 to 30 inches long. Use #1 Common or #2 Common grade lumber. Treat screeds with an approved wood preservative and termite repellent, unless they are cut of heart Yellow Pine.

Lay screeds flat side down at right angles to the proposed direction of the oak strip flooring. Install them in a staggered pattern with the ends lapped at 3 inches for 2½-inch wide flooring and 4 inches for 3¼-inch wide flooring. Place (Continued on page 296)
You asked for it—
...so here it is:

NEW Roltite®
INDUSTRIAL CEMENT

highly resistant to heat and sun
gives a strong bond to aluminum, metals and other difficult surfaces
fast drying
gives good surface coverage

Yes, this is the special contact-type cement you people in the field told us was needed. And Roltite Industrial Cement has been prepared right to the specifications you gave us.

First of all, it dries fast. So it’s ideal for those continuous set-up production runs, and for many other professional and industrial jobs where faster drying means more jobs done at a time. Along with this faster drying time you get better surface coverage, too.

The new Roltite Industrial Cement has exceptional resistance to heat and sun. Where you need a good bond in the face of continuous exposure to high heat this is the cement for the job.

With aluminum, other metals and those difficult bonding surfaces this new cement gives a strong, permanent bond. In fact, Roltite Industrial Cement opens new horizons in bonding aluminum and steel to wood. You can start working with a whole new class of materials and bond them just as safely as you now do plastic laminates or plywood. Now many more jobs can be permanently bonded with contact-type cement—jobs which still use old-fashioned glues (urea, phenol, casein).

If you’d like more detailed information on this new cement, or if you don’t know the name of your Roltite distributor, just drop us a line today.

regular Roltite® is still best for the average job

For that average, run-of-the-mill bonding job we still recommend regular Roltite. While it doesn’t have the special features of Industrial Roltite you’ll find that regular Roltite has important points in its favor you’ll want to keep in mind.

Regular Roltite is easier to clean off a smooth surface—you just rub it with your fingers. No solvent needed.

Regular Roltite has a much longer open time—over 2 hours. And on many jobs you know how important a long open time can be. The shelf life of regular Roltite is also about 3 months longer than that of Industrial Roltite.

If you need one or more of the special features of Roltite Industrial Cement then, of course, that’s the cement to use. But if those special features aren’t going to help you much then we think you’ll still find regular Roltite the best all-purpose contact-type cement available.
here's a panel system that cuts

Wall panels that can be installed with interior finishing materials, including door and window trim, already applied is the big difference between most builder-fabricated panel wall framing systems now in use and that developed by C. A. Huffman, a small volume builder in Elkhart, Indiana. Huffman plans to franchise the system to builders and lumber dealers; has a patent pending with the U. S. Patent Office.

The system is designed around chamfered 2x4s and wedge blocks which provide a built-up post between the panels for fastening. Connecting of the panels is accomplished when one panel, with its extending 2x4 on edge, slips in back of a similar 2x4 on a previously installed panel. As the panels are pushed together the wedge blocks engage, and the two 2x4s align to form the correct stud width. Nails then are driven through this built-up 4x4 post to securely hold the panels together, and in place.

Huffman estimates his system will cut framing labor costs 25 to 40 per cent, compared to conventional methods; has shaved 30 man hours on the house shown on these pages.

Plumbing and heating are put in place conventionally but the electrical installation, though using conventional materials, is somewhat unique. Huffman drops low voltage wiring for his light switches; uses plug-in strips for base outlets.
30 man-hours from framing time

Panels arrive at building site with interior finish already applied and primed.

When panels are joined, a 4x4 post is created between each panel (see detail).

Four-foot module door, window and solid panels can be erected easily by two men.

A three-inch screw is driven through bottom plate of panel into raised floor plate. Workman uses 1/2-inch drill and power screw driver.
panel system that cuts framing time

Carpenter drives a 16d nail through exterior insulation sheathing into built-up post.

Special corner has same wedge system as the larger panels.

One side of house is left open for easier erection of gable end and trusses. Wall is set up and gable raised after all trusses are positioned.

A line is used to straighten the wall as the trusses are installed. Corners were plumbed and braced previously.

A clamp is used to pull two gable end units firmly together before nailing.

Starting at the subfloor, last truss was put in place after 4½ hours, or 18 man-hours.
Corner is slipped into place and nailed with 16d nails (see corner detail)

Top plate is shop fabricated with metal fasteners for quick installation of trusses. Hurricane fasteners are positioned 24" o.c.

Gable ends are fabricated in two sections to minimize weight, speed handling

At the end of the second day, or 16 man-hours, most of the roofing and siding is in place

Both gable end units are raised and joined. Gable end units have same chamfered post system as wall panels

At the end of the third day, exterior of the building is complete, including roof, glazing, doors, windows, trim, gutters and prime coat. Starting at subfloor, four men were on the job for a total of 96 man hours
"SPLINE" PANELS turn time-taking sidewall construction to a fast, profitable operation. With "spline" panels you choose and use whatever backer or undercoursing you prefer. Ideal for both new construction and modernization. No costly fabricating to pay for—just premium quality cedar shakes—pre-painted in modern colors, tied rigidly together in convenient, lightweight 32" panels. Only 6 nails are needed to hold the panel permanently in place. Locked-in "spline" means a perfect butt-line every time. Imagine the convenience, the speed, the profit! Ask your CEDARWALL or COLORSHAKE supplier about "spline" panels today.

More profit, better results for every builder with cedar shake "spline" panels

THE PANEL WITH

LIKE A SINGLE SHAKE 32" LONG, made from genuine red cedar shakes. Low-cost undercourse or backer board allows fast application with wide 14" exposure. Fabricated for your convenience from full 18" shakes.

* CHOOSE YOUR OWN UNDERCOURSE
* CHOOSE YOUR OWN COLORS
* THE ONLY ALL-SHAKE PANEL
"spline" panels on application costs

LIGHTWEIGHT, EASY-TO-HANDLE. Only a pound-and-a-half a panel. "Spline" panels go on as fast as you can swing a hammer. Apply in either new construction or modernization using the undercourse of your choice.

CARTON PACKED. A full square delivered pre-colored and clean in rugged, sealed cartons. As easy to stock and deliver to the job as they are to apply. See about "spline" panels.

exclusive authorized manufacturers

CEDARWALLS

COLORSHAKES

Ask your CEDARWALL supplier, or write:
CAPILANO TIMBER CO. LTD. - Vancouver, British Columbia

Ask your COLORSHAKE supplier, or write:
COLORSHAKE CORPORATION - Marysville, Washington

OCTOBER 1954
Lenox China Company's new 143,000-sq-ft plant, with attached administrative building, in Atlantic County, New Jersey.

Plenty of Natural Daylight in Lenox China's New Plant

... AND THIS BUILDING IS READILY EXPANDABLE, THANKS TO THE RUGGEDNESS OF STEEL WINDOWS

When the Lenox China Company decided to double their production capacity by building a new plant near Atlantic City, N. J., they asked the architects to meet two basic requirements in the design. First, to provide plenty of natural daylight, a “must” for gilding and other intricate hand operations that go into the production of fine china. Second, to provide for plant expansion.

H. F. Everett & Associates, of Allentown, Pa., the architects, filled both requirements by specifying commercial projected steel windows. Glazed with tinted glass, these windows reduce glare, but allow all the natural light necessary. When the time comes to expand, the rear window-wall of the four-bay plant can be removed, other bays added, and the windows re-installed. Tough on the windows? Of course — but sturdy steel windows can take it!

Whatever type of designing or building you do — industrial, commercial or residential — you can do it better with steel windows. Thanks to steel's strength, steel windows give more light and more ventilation than other types of window — and are far more rugged.

A wide selection of steel windows in all standard types and sizes is available locally. Check with your building supply dealer, or contact the local representative of any reliable, nationally-known manufacturer of steel windows.

For many years, manufacturers of fine steel windows have used solid, hot-rolled sections of open hearth steel made by Bethlehem.

BUILD FASTER...SELL FASTER WITH

STEEL WINDOWS

MAXIMUM DAYLIGHT — These highly-skilled craftsmen are gilding fine china, an intricate job that requires excellent natural lighting. Only steel windows have slender but strong framing members that permit maximum daylight and maximum ventilation. See Sweet's File 16b.

BETHELHEM STEEL COMPANY
BETHELHEM, PA.

On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation, Export Distributor: Bethlehem Steel Export Corporation

AMERICAN BUILDER
Include this SELLING feature in your plans

SCHLAGE 5" BACKSET

GREATER Convenience

Sales point No. 1. Use the Schlage 5" backset feature on every flush door in your homes—inside and out. It will add custom-built convenience and has a lot of extra sales appeal. Prospective home buyers will be interested to know this unusual idea has been incorporated in your homes and the old knuckle busting days are gone forever.

DISTINCTIVE Designs

Sales point No. 2. Today's home buyer wants something different—and you can give it to him. Use the Schlage 5" backset and striking ornamental escutcheons to add sales appeal to your entrance doors. Dramatic escutcheons in combination with a wide variety of lock stylings and finishes will help individualize the appearance of your homes' entrance ways.

QUICK AND EASY Installation

The new Schlage 5" backset guide, used with the Schlage boring jig and hole saw makes it possible to bore hollow-core doors easily, quickly and accurately regardless of size or positioning of lock block.
**Connecticut Builders**

**Complete 225 Homes—Report...**

"Unqualified Satisfaction" with **Fasco** Ventilating Fans

*Model 1021—For inside walls and ceilings*

This FASCO Kitchen Ventilating fan is adaptable for a wide range of installations—inside wall above stove—thru cabinets—in ceiling. Housing 3 1/4" thick. Engineered for most difficult type of exhausting—by pressure, thru ducts. New FASCO Turbo-Radial Impeller develops pressures unobtainable by ordinary fan blades. 10" Impeller, 530 C.F.M.

*Typical of the kitchens as displayed in the model home of Hearthstone Park, Inc.*

*These noted builders realize that Fasco Ventilating Fans provide convenience in living... convenience that every prospective home owner wants. Do as these and hundreds of builders throughout the nation do—specify Fasco for every Ventilating Fan installation. For complete information write Fasco today.*

C. W. Goebel, Vice-President, Hearthstone Park, Inc.
Stamford, Connecticut

Leonard W. Leeds, President, Hearthstone Park, Inc.
Stamford, Connecticut

"You will be pleased to know that throughout our operations we have used your Fasco Ventilating Fans with unqualified satisfaction. The true test is not in builders' selection at the outset, but the maintenance-free and ease of operation utility which provides our buyers with a kitchen exhaust fan that does a good job."

Leonard W. Leeds
FORMICA makes News in the Package Kitchen

Formica won its place in hearts of your home buying prospects largely through the work of local or regional kitchen top fabricators. These good customers of ours and suppliers of yours will always play an important part in the sale of new homes.

Recent engineering advances that make possible the application of Formica to metal have now made Formica available as original equipment direct from the largest nationally advertised steel cabinet manufacturers.

Today if your kitchens are customized or standardized from wood or from steel, Formica, the most powerful brand name in the kitchen, can work for you.

Your customers and prospects by the tens of millions are seeing colorful Formica advertising in leading national magazines.

They are being told to—

DEMAND THIS CERTIFICATION

Seeing is believing. If this wash-off identification is not on the surface, it's not FORMICA.
The "TOUCH OF QUALITY" that appeals

8 REASONS WHY YOU SHOULD USE ALUMINUM WINDOWS:

1 PREFERRED BY MOST HOME BUYERS
   Growing demand by the public provides a real sales advantage.

2 ADD VISIBLE SALES APPEAL
   that can be seen from outside as well as inside.

3 FIT ALL STYLES and TYPES of CONSTRUCTION
   Can be used in ranch, colonial, modern or traditional style houses, with frame, brick, brick veneer or block construction.

4 EASY TO HANDLE and INSTALL
   Light in weight, they're easily installed by one man, saving extensive time and labor on the job.

5 NEVER NEED PAINTING
   At time of installation or after. Cannot rust or rot.

6 EASY, TROUBLE-FREE OPERATION
   Will not swell or warp. Always open and close easily.

7 NEUTRAL COLOR
   Harmonizes with any color decor, inside and outside.

8 ACCEPTED BY MORTGAGE OFFICERS
   As a superior, money-saving building product that lowers maintenance costs and enhances resale values.

INSIST ON THIS SEAL FOR YOUR PROTECTION

AMERICAN BUILDER
Quality-Approved aluminum windows add sales appeal to any house you build, regardless of its design or size.

For the woman, it's the appeal of attractive beauty, ease of operation, weather-tightness, and that modern look-of-tomorrow. For the man, it's the practical dollar-and-cents appeal of no painting, no maintenance expense, lower fuel costs.

Why not cash in on this growing demand for aluminum windows on the part of home buyers? As you plan and build new houses, install "Quality-Approved" aluminum windows and see for yourself how they help stimulate sales. Your home buying prospects, as well as your financing agency, will appreciate it, too, if you include screens and storm sash as part of a complete single-mortgage package.

To make sure you get good quality aluminum windows—designed and constructed in accordance with recognized quality standards—insist on windows with the "Quality-Approved" Seal. They are available through many manufacturers (see list below) in all sizes and styles (double-hung, casement, awning and projected). All are tested against rigid performance standards. All are APPROVED for quality of materials, for strength of sections, for sound construction, and for low air infiltration.

For additional information, consult Sweet's, or any of the manufacturers listed below, or write direct to Dept. AB-10.
the new income tax law explained

By John F. McCarthy
Attorney at Law

This is the first of several articles discussing the Federal Internal Revenue Code of 1954. It takes up certain changes applicable to taxpayers generally. Later articles will deal with matters of particular application to builders.

The Federal Internal Revenue Code of 1954 recently passed by the Congress and approved by the President, is the first general revision of the federal income tax law since the inception of that law in 1913. The new Code does not offer any change or reduction in tax rates. However, it does complete a revision which has changed the law otherwise in several material aspects which will confer various tax benefits and effect many tax savings. Most of these changes became effective on January 1, 1954, but where applicable, offer immediate relief. Each taxpayer, therefore, will be well advised to consult with his own tax counsel to determine exactly how the new Code affects his present business organization and future plans and what savings are afforded him.

Under the new Code the time for filing income tax returns by individuals and partnerships has been extended one month. Thus individuals and partnerships on a calendar year basis must file returns and pay taxes by April 15th. Those on a fiscal year basis must file and pay on the 15th day of the fourth month following the close of the fiscal year. Likewise, the time for the first declaration and payment of estimated tax by an individual is postponed to April 15th. Subsequent dates for amended declarations and payments, namely June 15, September 15 and January 15, remain unchanged. Generally, the time for returns and payments by corporations also remains unchanged. However, corporations with tax liabilities of over $100,000 a year are put on a new pay-as-you-go system under which they must file declarations of estimated taxes, pay part of their taxes in advance and make final returns and payments after the close of the year.

The new Code makes two important changes concerning dividends received by individual taxpayers from domestic business corporations. It permits an exclusion from gross income of the first $50 of dividend income received in any taxable year ending after July 31, 1954. Where husband and wife file a joint return and each has dividend income of $50 or more, the exclusion is $100. In addition, the Code permits a credit against tax of 4 per cent of any dividends received after July 31, 1954, and included in gross income. However, this credit is limited to 2 per cent of the tax for any taxable year ending before January 1, 1955, and 4 per cent of the tax for any taxable year ending after that time.

The general rule concerning deductions for dependents has been broadened by the new law. Now, a deduction may be had for a child who is under 19 at the close of the calendar year or who is 19 or older and a full-time student, regardless of the amount of the child’s income. The new Code affects his present business organization and future plans and what savings are afforded him.

Allowances for medical expenses have been increased. Now, a taxpayer may deduct the amount of such expenses which are in excess of 3 per cent of his adjusted gross income. Formerly the figure was 5 per cent. Further, the maximum of such deduction has been raised to $2,500 per exemption claimed, with the further limit of $5,000 on a separate return and $10,000 in the case of a joint return. Medical expenses include amounts in excess of one per cent of adjusted gross income paid for medicines and drugs, as distinguished from toiletries, and monies paid for transportation primarily for and essential to medical care, but not for lodging or food.
In survey after survey, consumers choose

As a home salesman, you can point with pride to "Jackstraw," the product your customers prefer by an overwhelming 20%! That’s how "Jackstraw" rates in nationwide surveys. By all odds, it’s the favorite inlaid linoleum design! Your customers see it constantly in powerful national ads! It sells on sight. And it keeps on selling throughout its long life. Because it’s genuine Gold Seal Inlaid Linoleum, it doesn’t pit, scar, or crack.

As a builder, you’ll be interested in the installation economies made possible by "Jackstraw." Like all Gold Seal Inlaid Linoleum for residential installation, it has an exclusive patented felt backing that eliminates the need for extra lining felt. The random design requires no special matching, eliminates waste. And of course "Jackstraw" carries the famous Gold Seal guarantee of satisfaction—or your money back!

As a decorator, you can do more with "Jackstraw" than with any other design on the market. It comes in 12 different background colors, each highlighted by 3 accent colors. It makes small rooms look bigger, all rooms look airier. It takes to either modern or traditional—goes with any room—and it’s so good it’s featured in your NAHB film: "Million Dollar Castle." See "Jackstraw" now at your Gold Seal Flooring Contractor’s. In 6’ widths or 9” x 9” tiles.

For more information about this wonder-working linoleum design, write Builders’ Service Department. (AB-10)
**AMERICAN BUILDER**

**BLUEPRINT HOUSE**

<table>
<thead>
<tr>
<th>SQUARE FOOT AREAS:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>House, full area</td>
<td>1.500</td>
</tr>
<tr>
<td>Basement portion, 1/2 area</td>
<td>437</td>
</tr>
<tr>
<td>Front and rear steps, 1/3 area</td>
<td>70</td>
</tr>
<tr>
<td>Planters and retaining walls, 1/3 area</td>
<td>10</td>
</tr>
</tbody>
</table>

Total number of square feet: 2,017

House built in 1950 at a cost of $12.50 per square foot.

*For computation purposes, the basement, front and rear steps, planters and retaining walls are fractional, so that their cost will be in ratio with the house.*
In this house the severity of the white stucco walls are pleasingly broken up by the redwood trim, red brick veneer and buttress walls. The three views of living room below show (from left to right) the dining room portion, a part of the living room window wall, and the all-over brick fireplace and entrance way.

**design and lighting—they work together**

The use of built-ins, sloping ceilings and adjoining outdoor areas have brought into focus the value and importance of artificial lighting, both from a practical and design standpoint in today's homes.

By placing recessed spotlights in the overhanging cornice of this house, as well as in the soffit of the projecting living room bay, several objectives are accomplished. (1) The flight of steps from the driveway to the front entrance of the house is brightly illuminated. This supplements the spotlight placed in the wall at start of first step. (2) The augmented driveway of the garage approach, often used as an outdoor terrace, is effectively lighted. (3) The placement of these lights together with the indoor lighting which shows through the continuous battery of windows in the living room, tends to enhance some of the architectural features of the house. Other illumination features are cove lighting in the living room, recessed lens light over the dining room table, and a generous supply of convenience outlets in all rooms.

This house is well fitted to its sloping site, being one story on the high side and literally two stories on the low side, with basement wall entirely exposed.

Exterior is a combination of face brick and stucco, with a stucco-covered planter and bay, the bay extending...
The L-shaped counter is well adapted to this medium-sized kitchen. Space is available for serving bar at right.

(Continued from page 73)

the full length of the living room. The concrete steps which lead from garage drive to first floor are cleverly concealed from the street by a retaining wall for half the flight and planting from there to the entrance porch.

Planters are used by this designer to give proper scale to the end of retaining walls at front and rear of the house and at the end of the brick fence adjoining the house.

The house contains a combination living and dining room, kitchen, two bedrooms, lounge, bath and powder room, and six closets. The lounge is provided with sliding doors for the opening and can be converted to a guest room when desired. The master bedroom, which extends across the rear of house, can easily be converted into two bedrooms by installing a dividing wall in the center. The excavated portion of the basement contains a two-car garage and utility room.

The house is placed on poured concrete foundation and footings with walls above of frame and masonry veneer. All concrete walls that extend above grade are faced with brick. All exterior frame walls not faced with brick veneer are covered with a 3/4-inch thick sand finish stucco. This includes the soffit of the wide roof overhang. The roof, which has a 3 in 12 pitch, is covered with four-ply built-up roofing having aggregates composed of granulated green slate.

BRAND NAME PRODUCTS USED

Armstrong blanket insulation
"Barcol" garage doors
"Benform" fireplace damper
"Blu-fon" combination light and fan
Chrysler Air-temp furniture
Clark electric water heater
Crane bathroom fixtures
Formica counter tops
General Electric dishwasher
G-E mercury switches
G-E Slimline fluorescent lighting
Hall-Mark bath accessories
Johns-Manville Sheetrock
Johns-Manville asphalt shingles
Kleen-Track sliding door hardware
Kitchen-Mandy cabinet accessories
Lowan medicine cabinet
Molokay mahogany plywood
Master Bat country wall insulation
Minneapolis-Moneywell controls
Moore's tires
National cabinet hardware
Norton ball and clock
Portsmouth water softener
Pratt & Lambert paints
Schlage hardware
Thermopane windows
Trane air filter
Westinghouse circuit breaker
Westinghouse disposal

For information about complete one-quarter inch working plans of this house write American Builder Home Plans Service, 79 W. Monroe St., Chicago 3, Ill.

For details, see Gatefold Blueprint
PHILLIPINE MAHOGANY

ALL SLIDING DOORS 2°0° KG-8"x 10" EXCEPT LOUNGE 2-4°

NOTES:
ALL DOORS 6°8" HIGH, INTERIOR DOORS 1½" THICK, EXTERIOR DOORS 1¼" THICK
ALL FLOORS EXCEPT KITCHEN, BATH & POWDER ROOM, 15/16" x 2½" OAK
KITCHEN, BATH & POWDER ROOM IS LINOLEUM
PLASTER WALLS & CEILINGS THROUGHOUT EXCEPT LOUNGE WHICH IS PLASTERBOARD
ALL SLIDING DOORS 30°x 6°x 1½" EXCEPT LOUNGE WHICH IS 30°x 6°x 1/8"
# Quantity List of Materials

**For American Builder Blueprint House No. 212**

**William V. Kaeser, Architect**

## General Information

<table>
<thead>
<tr>
<th>House — Type</th>
<th>Frame and Masonry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>1,500 sq. ft.</td>
</tr>
<tr>
<td>Basement, ½ of area</td>
<td>437 sq. ft.</td>
</tr>
<tr>
<td>Front and rear steps, planters, and retaining walls, 1/3 of area</td>
<td>80 sq. ft.</td>
</tr>
</tbody>
</table>

Average height taken for cube was 16 ft.

## Excavating

| Trench for foundation | 140 lin. ft. |
| Chimney and column footings | 4 |
| Excavation for basement | 220 yds. |

## Cement Work

| Foundations | 1,490 cu. ft. |
| Concrete work | 900 sq. ft. |
| Thickness | 5 in. on 6 in. gravel |
| Anchor bolts | 50 — ¥,"x12" |
| Waterproofing — foundation | 800 sq. ft. |
| Miscellaneous | 20 concrete steps |

## Masonry

| Type | brick cavity wall |
| Walls | 835 sq. ft. |
| Window sills | wood and stone |
| Glass block | special glass lights built in chimney and entry |
| Chimney | |
| Flue lining | 1 — 12"x12" — 15'0" |
| 1 — 8"x12" — 36'0" |
| Cap | 4" precast concrete |
| Fireplace | 1 |
| Throat and damper | 1 |
| Lintels | 2 |
| Miscellaneous | stone caps on planter boxes, rubbish burner built into garage |

## Iron Work

| Structural | 61'10" — 25#/1 |
| Lally columns | 2 — 4" |

## Millwork

| Windows — Type | casements, fixed, and awning |
| Fixed | 1 — 69"x50 |
| 2 — 80½x50 |
| 1 — 56½x50 |
| 1 — 50 x35 |
| 1 — 50 x48½ |
| Casements | 19 — 13½"x44 |
| 4 — 14"x33½" |
| 3 — 11"x32½" |
| Awnings | 2 — 38"x10 |
| 1 — 48"x36 |
| Fixed window at entry door | 22'8x80 |
| Exterior doors | wood |
| Garage door | 1 — 15"x70 |
| Asbestos board for ceiling | 768 sq. ft. |
| Interior doors | 1 — 30"x68 |
| 3 — 28"x68 |
| 3 — 26"x68 |
| 3 — 24"x68 |
| 2 — 20"x68 |
| Wardrobe doors | 2 — 40"x68 |
| Broom closet door | 18"x68"x1½" |

## Special Interior millwork

- Kitchen cases — serving bar
- Living room shelves
- Living room flower box

## Carpentry

| Foundation Plates | 187 lin. ft. 2"x6" |
| Joists | 23 — 2"x10" — 16'0" |
| 23 — 2"x10" — 22'0" |
| 20 — 2"x10" — 24'0" |
| Bridging | 360 lin. ft. 1"x4" |
| Studlings and plates | 300 — 2"x4" — 8'0" |
| Ceiling joists | 24 — 2"x4" — 16'0" |
| 45 — 2"x4" — 8'0" |
| 20 — 2"x6" — 24'0" |
| 20 — 2"x6" — 12'0" |
| Roof rafters | 50 — 2"x8" — 20'0" |
| 70 — 2"x8" — 18'0" |
| 44 — 2"x6" — 24'0" |
| Framing lintels | 4 — 2"x10" — 10'0" |
| 4 — 2"x8" — 10'0" |
| 4 — 2"x6" — 12'0" |
| Carpenter stairs | 2 — 2"x12" — 16'0" |
| 13 — 2"x10" — 3'0" |
| 12 — 1"x8" — 3'0" |
| Flooring — hardwood | 1,250 sq. ft. softwood |
| 250 sq. ft. |
| Exterior material | 720 sq. ft. ¾" cement plaster |
| Eaves | 180 — 2"x6" fascia |
| Soffit vent | 360 lin. ft. 1"x6" |
| Copper Screen | 180 lin. ft. 6" wide |
| Insulation | 1,600 sq. ft. |
| Ceiling | 1,000 sq. ft. |

## Sheet Metal

| Copper flashing and drip | 202 ft. |
| Miscellaneous | 2 flower box liners and drain |

## Roofing

| Type | four-ply built-up with green granulated slate aggregates |
| Area | 25 squares |

## Interior Walls

| Area to be covered | 510 yds. plaster |
| Wood paneling | 207 sq. ft. |

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

<table>
<thead>
<tr>
<th>Year</th>
<th>KWH (in Kilowatt Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930</td>
<td>547 KWH</td>
</tr>
<tr>
<td>1940</td>
<td>934 KWH</td>
</tr>
<tr>
<td>1949</td>
<td>1,643 KWH</td>
</tr>
<tr>
<td>1953</td>
<td>2,330 KWH</td>
</tr>
<tr>
<td>1963</td>
<td>Estimated 5,000 KWH</td>
</tr>
</tbody>
</table>

- Thousands: 1 2 3 4 5 6
you're under wiring-- here's why

Air conditioning and television have put spotlight on need for better wiring.

Buyers' interest spurred by new devices and by wiring drives as power use rises.

It took air-conditioning plus television finally to awaken U.S. homeseekers to the importance of up-to-date wiring.

Now there is so much talk about voltage drop, overloaded circuits and blown fuses that they are very wide-awake indeed. They not only ask about wiring but they are willing to pay extra to get a job that will absolutely insure full-power use of their equipment.

Thus wiring has become a useful and powerful sales tool. The builder who still puts in a 1926 style job is at a sharp disadvantage competitively. And he makes dissatisfied customers. Wiring is the heart of today's home, and when equipment fails to work well because it is choked for lack of "juice," reputations suffer.

Use of electric power in the home has skyrocketed 400 per cent in the past ten years. It has doubled in the past five years. It is expected to double again in the next ten years.

Some new houses, still wired by 1926 standards, are obsolete when the customer moves in. When he connects his television (300 watts), his roaster (1,650), his ironer (1,650) and his air conditioner (1,500 for a one-ton unit) he is in trouble right away. And of course he wants to have and use a clothes washer (700), dishwasher (700), waste disposer (500), and many other of the 100 appliances now available on the market. He can't make them work properly without 1955-style wiring.

Still more wiring devices are on the way: color television (perhaps 500 watts), electric frying pans and

(Continued on page 82)
Broiler, toaster, percolator all going; so what happens to the TV? It shrinks. And when room cooler is turned on—bang!!

VOLTAGE DROP—out go the lights. How Con Edison of New York dramatizes need for wiring by putting on one-act play.

Sauce pans, more air conditioners, more labor-saving devices, more amusement devices.

Because the building industry puts so much emphasis on electrical equipment to help sell houses, it is clear that more emphasis must be put on the hidden but highly vital wires that make that equipment able to work at full capacity.

Plenty of power just when and where it is needed for every appliance is a sales feature that builds a quality reputation.

Five developments have focused interest on the importance of efficient, up-to-date wiring and make it more than ever a help in selling homes:

1. Acceptance of a 3-wire, 100 ampere voluntary service entrance standard for all houses by the National Association of Home Builders.
2. Aggressive new programs by public utilities to create consumer interest in better wiring; and parallel programs to assist builders to check wiring needs and to see that new homes have an up-to-date standard.
3. Advertising and promotion campaigns by manufacturers of wire and equipment aimed to arouse public interest in better wiring.
4. Education and service by national and local adequate wiring bureaus and electric institutes. There are 71 such service groups who work with builders and builder associations as well as consumers. Utility companies will also usually provide wiring advice and assistance as well as promotional help to builders.
5. A wave of public irritation, made acute by the problems of thousands of home and apartment dwellers who have had difficulties with electrical devices—especially air conditioners and high wattage roasters and broilers. The difficulties have usually been due to overloaded circuits, causing voltage drop and poor operation or failure of the equipment.

So today the builder who says "I'll put in anything the buyer wants and will pay for" has a conclusive answer. The public wants and will pay for a high 1955 standard of electric wiring.

In addition, considerable recent progress has been made with mortgage appraisers in getting recognition for the higher value of an adequately-wired house. FHA and VA have recognized the higher value of adequate wiring.
### Why Wires Are Loaded

More than 100 electric devices are now used in the home. Here are 35, with "juice" they use:

<table>
<thead>
<tr>
<th>Device Description</th>
<th>Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room cooler (one ton)</td>
<td>1500 Watts</td>
</tr>
<tr>
<td>Room cooler (¾ ton)</td>
<td>1250</td>
</tr>
<tr>
<td>Roaster</td>
<td>1650</td>
</tr>
<tr>
<td>Television</td>
<td>300</td>
</tr>
<tr>
<td>Color television</td>
<td>500</td>
</tr>
<tr>
<td>Ironer</td>
<td>1650</td>
</tr>
<tr>
<td>Hand iron</td>
<td>1000</td>
</tr>
<tr>
<td>Radio</td>
<td>100</td>
</tr>
<tr>
<td>Toaster</td>
<td>1100</td>
</tr>
<tr>
<td>Grill or waffle iron</td>
<td>1000</td>
</tr>
<tr>
<td>Dishwasher—waste disposal</td>
<td>1500</td>
</tr>
<tr>
<td>Clothes washer</td>
<td>700</td>
</tr>
<tr>
<td>Bathroom heater</td>
<td>1500</td>
</tr>
<tr>
<td>Home freezer</td>
<td>350</td>
</tr>
<tr>
<td>Portable heater</td>
<td>1000</td>
</tr>
<tr>
<td>Furnace mechanism</td>
<td>800</td>
</tr>
<tr>
<td>Coffee maker</td>
<td>1000</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>150</td>
</tr>
<tr>
<td>Portable fan</td>
<td>100</td>
</tr>
<tr>
<td>Food mixer</td>
<td>100</td>
</tr>
<tr>
<td>230 Volt dryer</td>
<td>4500</td>
</tr>
<tr>
<td>Water pump</td>
<td>700</td>
</tr>
<tr>
<td>Electrostatic air cleaner</td>
<td>60</td>
</tr>
<tr>
<td>Floor lamp</td>
<td>150-300</td>
</tr>
<tr>
<td>Electric blanket</td>
<td>200</td>
</tr>
<tr>
<td>Sun lamp</td>
<td>400</td>
</tr>
<tr>
<td>Vacuum cleaner</td>
<td>125</td>
</tr>
<tr>
<td>½ Horsepower motor</td>
<td>500</td>
</tr>
<tr>
<td>Table lamp</td>
<td>50-150</td>
</tr>
<tr>
<td>Corn pepper</td>
<td>600</td>
</tr>
<tr>
<td>Floor polisher</td>
<td>200</td>
</tr>
<tr>
<td>Hair dryer</td>
<td>100</td>
</tr>
<tr>
<td>Hot plate</td>
<td>1000</td>
</tr>
<tr>
<td>Small tool motor</td>
<td>100</td>
</tr>
<tr>
<td>Soldering iron</td>
<td>150</td>
</tr>
<tr>
<td>Glass panel heating</td>
<td>1500</td>
</tr>
</tbody>
</table>

These are typical wattages, may vary with different makes. Exact rating usually given on nameplate. If expressed in amperes, multiply amps by volts to get watts. If in horsepower, figure one horsepower equals 1,000 watts.

### How to Be Sure There's Enough Power at All Times

A good wiring job for 1955 electrical living boils down to three simple points:

1. Bring in enough "juice" from the power line: service entrance should be 3-wire (± 2 size) capacity 100 amperes.
2. Provide enough branch circuits (at least 8) of big enough wire (± 12 or more) to carry the load when and where needed at all times.
3. Install outlets, switches and fixtures at the right spots and in sufficient numbers to keep a 1955 U.S. family happy.

The electrical service entrance is of course the key to an adequate wiring job. The 30 to 60 ampere capacity installations of the past are proving inadequate to handle present electric loads in the average home. On the basis of a study of conditions across the country, the National Association of Home Builders' Wiring Committee has now adopted a voluntary standard calling for 3-wire (± 2 size) service entrance cable or conduit with capacity of approximately 100 amperes. Other authoritative studies show that this is a sound standard needed to accommodate today's electrical loads and those anticipated in the next few years.

Of further importance, the NAHB standards call for a service entrance panel capable of handling at least eight circuits (preferably 10 or 12) and designed so that at least two may be 3-wire circuits with fuses or circuit breakers of up to 50 ampere capacity.

The three-wire circuits will enable the householder to (Continued on page 81)
electric wiring

(Continued from page 84)

add an electric range or other 240-volt equipment.
Also called for are spare circuits, for future expansion, to accommodate air conditioning, home workshops, dryers, freezers or other heavy-load equipment.
The NAHB standards, which are expected to become the basic standard for all the home building industry, will in one step practically eliminate the power shortage in private homes so wired.

Branch Circuits

The 1955 style of electric wiring calls for three types of branch circuits, and a minimum of eight circuits in a house, but preferably more.

1. General purpose circuits are roughly calculated on the basis of one for each 500 square feet of floor space. The rule needs checking in the light of actual requirements of the buyer. Sound current practices recommend use of #12 wire with 20 ampere fuses or circuit breakers (top load 2,400 watts). This greatly steps up their capacity over the #14 wire, 15-ampere circuits of the past.

2. Small appliance circuits (to take care of kitchen, laundry and dining devices) should be provided:—at least two in a small house and three or more in larger ones.

There is growing use of the 3-wire, split-receptacle system for small appliance circuits. In effect this divides the openings at each convenient outlet between two different circuits, greatly reducing the possibility of overloading one when several devices are plugged in at the same time.

3. Individual Circuits. These special circuits should be installed to accommodate major appliances, one for each, sized according to its need. In addition, at least two spare circuits should be allowed to take care of future heavy load equipment. Each of the following requires a special circuit: range, 40 or 50 ampere, 3-wire; dishwasher-disposal, 20 ampere, 2-wire; clothes washer, 20 ampere, 2-wire; clothes dryer, 30 ampere, 2-wire; attic fan, 2 ampere, 2-wire; room cooler, 20 or 30 ampere, 2-wire; home freezer, 20 ampere, 2-wire; bathroom heater, 20 ampere, 2-wire; work shop, 20 ampere, 2-wire.

Four good wiring rules for builders are as follows:

1. Base your wiring plan on a detailed analysis of the buyer's 1955 electrical needs. Get technical advice from the local utility, adequate wiring bureau, or a progressive electrical contractor.

2. Have a detailed wiring plan and schedule of outlets, switches and receptacles prepared as the basis for obtaining your cost estimate. Then stick to it.

3. After you have installed an adequate, up-to-date wiring job, merchandise it to the buyer. Install cards, tags or placards at key points to describe the difference between the 1926 job (of your competitor?) and the sound 1955 installation you have made.

AMPLE POWER assured
with NEW NAHB
service entrance standards

1. There shall be a 3-wire 110/220 volt "drop" from the pole to the service entrance lead. (Usually responsibility of the power company.)

2. From the service entrance lead to the meter and service entrance panel run 3-wire #2 service entrance cable or 1 1/4" conduit containing 3-2 wires. (Approximate capacity 100 amperes.)

3. The service entrance panel (box) shall provide for circuit breakers or fuses for at least 8 circuits (preferably 10 or 12) and shall be so designed that at least two of these circuits may be 3-wire and equipped with circuit breakers or fuses of up to 50 ampere capacity.

4. When the service entrance panel (box) is installed in a way which might require "remodeling" to utilize the spare circuits, provide two "dead" 3-wire #6 cables or two empty one-inch conduits (rigid or flexible) as follows:

   (a) One to an accessible location in the attic; the other to an accessible location below the first floor, or—

   (b) Both to accessible locations either in the attic, or below the first floor, or—

   (c) If slab construction, one to the attic and one to the equipment wall in the kitchen, and if both slab and beam and plank ceiling, then both to equipment walls in the kitchen or elsewhere in the house.

5. If there is an attached garage, run one "dead" 3-wire #12 cable or empty one-inch conduit (rigid or flexible) from the panel (box) to an accessible location in the garage. This provides for use of power tools, home freezer, or laundry equipment in the garage. In some cases, what is recommended in 4 above can be arranged to take care of 5.
### The Three Kinds of Branch Circuits

<table>
<thead>
<tr>
<th>Area</th>
<th>They Serve</th>
<th>For Protection, They Require</th>
<th>You Can Connect All at Once On One Circuit</th>
<th>Your Home Should Have</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Purpose Circuits</td>
<td>Lights all over the house and convenience outlets everywhere except in the kitchen, laundry and dining areas.</td>
<td>15-Ampere Fuse or Circuit Breaker</td>
<td>1800 Watts</td>
<td>One for each 500 square ft. of floor area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A 20-Ampere fuse or circuit breaker may be used if No. 12 wire is used in the circuit. This allows...</td>
<td>2400 Watts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Appliance Circuits</td>
<td>Only the convenience outlets—no lights—in the kitchen, laundry and dining areas, where portable appliances are most often used.</td>
<td>20-Ampere Fuse or Circuit Breaker</td>
<td>2400 Watts</td>
<td>At least two. Larger homes need three.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Circuits</td>
<td>Automatic Heating Plant (regardless of fuel to be used) Electric Range (larger circuit needed if it is double-oven) Dishwasher—Waste-Disposer (one circuit serves both) Electric Water Heater Automatic Washing Machine Electric Clothes Dryer Summer Cooling Fan (Attic) Air Conditioning Unit Home Freezer Built-in Bathroom Heater Work Shop or Work Bench</td>
<td>Various sizes and types of fuses and circuit breakers, depending on the rating of the appliance.</td>
<td>Nothing more than the appliance served by each circuit.</td>
<td>One for each piece of equipment listed in the second column at the left.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Important:** There should always be spare terminals in the Branch Circuit Box from which additional branch circuits can be run later.

**BRANCH CIRCUIT CHART** describes three kinds of circuits, what each does. There should be one general purpose circuit for each 500 square feet of floor area. Every house should have two or more small appliance circuits.

---

*Use of #12 wire for all general purpose circuits greatly steps up capacity at small cost. This permits 20 ampere fuses instead of 15, increases capacity of each circuit from 1,800 to 2,400 watts.*
good lighting sells houses—here's how

Good wiring and effective lighting go hand in hand as selling aids for home builders. Once the basic job of well-planned and complete wiring is accomplished, there are innumerable ways in which the builder can give visible evidence of his interest in the buyer's comfort, health, and sense of beauty.

Light fixtures have the advantage of being seen and, if carefully selected, often contribute that "something special" that sets a house apart, giving it an undoubted competitive edge over others less thoughtfully outfitted.

In addition to the lavish supply of unusual and striking lighting fixtures now on the market, there are a number of related features which should be considered, such as valance lighting, cove and cornice lighting, pin-hole, spot and recessed lighting. These recent developments are still very advanced in conception to most people but their use has become such common practice in newly built homes that they will soon be requirements for all houses.

An even greater amount of public interest in new homelighting methods is bound to be aroused this month throughout the United States because it is the seventy-fifth anniversary of the perfecting of the incandescent bulb by Thomas A. Edison. The "Diamond Jubilee of Light" is to be observed and celebrated, and builders will have an excellent opportunity to capitalize on this new interest in lighting.

The electrical industry is going to great effort to create public interest and excitement and acquaint a wide audience with the tremendous advances recently made in this field. Light-conditioned homes by the hundreds have been built throughout the country, and more are on the way. These houses reveal a completely "new look" in lighting, rendering many of the old fixtures inadequate and ugly.

What will be the outstanding points of interest?
First to catch the eye will be the new fixtures: "spray" designs, copper and brass clusters, perforated dome lights, adjustable track and pulley fixtures, suspended plastic globes. There are inspired designs in such well-known and popular styles as Swedish, Italian, Japanese, Baroque, Modern, and Period. There are new colors, new materials, new uses of plastics and metals.

The next point to stress is the scientific and health value of the new ideas in light-planning. It should be seen that fixtures and outlets are provided to eliminate dark corners and safety hazards, and that work spaces in kitchens, laundries and other such areas are lighted according to tested recipes of illuminating engineers.

A builder is well advised who points out such provisions with signs, placards, tags and sales talk.

Valance lighting will be found to be smart and relatively inexpensive. This method throws a soft, pleasant glow on window fabrics, and makes the dark area of a large picture window glowing and attractive at night. Valances are provided with fluorescent tubes which should be four inches out from the wall, and at least 10 to 12 inches below the ceiling. The valance light may be directed down, up to ceiling, or may throw light both ways.

Cove lighting is another spectacular item that is a good selling feature. It provides indirect illumination from fluorescent tubes concealed by moldings of wood, plastic or metal. Tubes should be 10 to 12 inches below the ceiling to distribute light well up and out. Cove lighting is most effective when it fits naturally into the architectural character or construction of the room.

Cornice lighting, another sales help, is used to throw a pleasant glow over a wall, or part of a wall, or over a fireplace, sofa or even an important picture or wall decoration. One or two rows of fluorescent tubes may be used, and a choice of colors to enhance the decorative effect of the room.

Recessed lighting is a form of illumination that may be used purely for decorative effect, or as a local illumination over dining rooms, sips, niches, foyers, etc.
It's the Diamond Jubilee of Light

This month marks the 75th anniversary of the development of the first practical incandescent lamp by Thomas A. Edison. It is being celebrated throughout the world—a good opportunity for builders to capitalize on lighting as a sales help in their homes.

The larger units, backed by low intensity tubes, throw a soft glow over a considerable area, which is inviting. For a more concentrated type of lighting a smaller recessed unit is used, with higher intensity bulbs or tubes.

For a spectacular effect the recessed pinhole or spot lighting is a striking feature. Light is projected through a small opening, may be directed at a specific grouping of furniture, a desk, game board, art object, or musical instrument. It is dramatic and effective.

One of the latest lighting ideas is the “mood lighting” idea. By means of a simple control the lights in a given area may be raised or lowered to any degree of intensity. One wall of a living room, for example, may be flooded or softly tinted with light, a convenience especially where the desires and whims of television viewers are concerned.

Outdoor lighting plays a part in creating selling appeal. It is important not only for garage entrances and front and back entrances, but also for terraces, walks,
ROOM-BY-ROOM CHECK LIST FOR OUTLETS AND SWITCHES

<table>
<thead>
<tr>
<th>LIVING ROOM, BEDROOMS and GENERAL LIVING AREAS</th>
<th>CONVENIENCE OUTLET</th>
<th>SPECIAL OUTLET</th>
<th>PERMANENT LIGHTING</th>
<th>SWITCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, at least, every 12 feet, placed so that no point along floor line of usable wall space is more than 6 ft. from an outlet.</td>
<td>Required for FM Radio, Television</td>
<td>1 Ceiling Light (2 in long, narrow rooms) Wall, cove or valance lighting may be substituted</td>
<td>1 Ceiling Light over table</td>
<td>1 on latch side of each frequently used doorway</td>
</tr>
<tr>
<td>DINING AREAS</td>
<td>1 for each 20 feet of usable wall space, with one located near hostess' chair.</td>
<td>Required for Electric Range, Dishwasher-Disposer, Home Freezer, Clock, Ventilating Fan</td>
<td>1 Ceiling Light over sink</td>
<td>Rooms with entrances more than 10 feet apart should have multiple control switches</td>
</tr>
<tr>
<td>KITCHEN</td>
<td>1 for each 4 feet of work counter</td>
<td>Electric Drier</td>
<td>1 at washing area, 1 at ironing area</td>
<td></td>
</tr>
<tr>
<td>LAUNDRY</td>
<td>1 at washing area, 1 at ironing area</td>
<td>Automatic Washer, Ventilating Fan</td>
<td>1 at washing area, 1 at ironing area</td>
<td></td>
</tr>
<tr>
<td>UTILITY ROOM</td>
<td>1 at workbench, 1 near furnace</td>
<td>Fuel-Gas Heating Equipment, Electric Water Heater</td>
<td>1 for each enclosed space, 1 at workbench, 1 near furnace</td>
<td></td>
</tr>
<tr>
<td>BATHROOMS</td>
<td>1 adjacent to mirror</td>
<td>Required for Built-in Heater</td>
<td>1 on each side of mirror, 1 in enclosed shower compartment</td>
<td></td>
</tr>
<tr>
<td>ENTRANCES</td>
<td>1 weatherproof near front entrance</td>
<td>1 at front, 1 at rear</td>
<td>1 inside front, 1 inside rear</td>
<td></td>
</tr>
<tr>
<td>HALLWAYS</td>
<td>1 for each 15 feet of hallway</td>
<td>1 at least; 2 in long halls</td>
<td>1 each at head and foot</td>
<td></td>
</tr>
<tr>
<td>STAIRWAYS</td>
<td>1 each at head and foot</td>
<td>1 each at head and foot</td>
<td>1 for each closet over 3 ft. deep</td>
<td></td>
</tr>
<tr>
<td>CLOSETS</td>
<td>1 weatherproof for each 15 feet of usable outside wall</td>
<td>1 for each 150 sq. ft. of enclosed porch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PORCHES, TERRACES, PATIOS</td>
<td>1 weatherproof for each 15 feet of usable outside wall</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The requirements given here for number and placement of outlets, lights and switches are the bare minimum requirements. For additional suggestions and more details, ask your electric power supplier or an experienced electrical contractor about the accepted Standards of Wiring Adequacy, approved by the National Adequate Wiring Bureau.

driveways and patios. New lines of fixtures of aluminum and other rust-resistant metals are on the market, specially designed for outdoor use, to let water run through without damage, washing away bugs and leaves through bottom openings. An outdoor game area, lighted so that it can be used through the evening, is another idea now used by builders of model homes.

Here is a brief summary of the number and type of fixtures needed to light-condition a typical 6-room house (25 fixtures total):

Hall fixtures. Two for small front hall. Minimum 60 to 100 watts. Rear hall—100 or three 40-watt in ceramic-glass shielded fixture.

Bedroom fixtures. Minimum 17-inch diameter bowl with four or five sockets for four 50-watt or five 40-watt bulbs. Bowl should be of such shape and translucency
HOW AND WHERE TO PUT OUTLETS, SWITCHES

1. Place double or triple convenience outlets so that no part of any unbroken wall space is more than six feet from an outlet.

2. Every small usable wall space of three feet or more should contain an outlet.

3. Leave one outlet in a room free for vacuum cleaner, fan, etc., so that it can be reached without moving furniture.

4. Locate convenience outlets 12 to 18 inches above floor except in kitchen, laundry, bathroom and garage where they should be 48 inches above floor.

5. Cluster several double outlets at points of heavy use, such as head of beds—or install plug-in strips.

6. Locate wall switches on lock side of door within six inches of frame and from 48 to 54 inches above finished floor.

7. "Light the way" with switches through rooms, halls, and up and down stairs. Where commonly used doorways to a room are more than 10 feet apart, provide 3- or 4-way switch controls. Place 3-way switches at head and foot of stairs.

that light is diffused comfortably throughout entire room.

Dining room fixture. Recommended: 3-effect fixture having separately-controlled spotlight in center and four 50-watt lamps in 17-21-inch diameter bowl. This type requires two circuits for switch control of three effects.

Dining room valance or wall bracket (4-foot minimum length) for more pleasing effect than fixture alone.

Living room valances or cornices, total of 16 to 20 feet in length needed for general lighting—to supplement portable lamps, provide comfortable light for TV viewing or other uses not involving close seeing.

Kitchen—Four fixtures or wall brackets. Typical set includes:

1. Two 25-watt fluorescent or 150-watt (12-inch globe) incandescent center ceiling fixture
2. Similar fixture over sink
3. 25-watt fluorescent bracket over range
4. A 20- or 50-watt fluorescent bracket over work counter.

Bathroom fixtures—Three or four if there is a separate shower stall. Fixture for one 20-watt fluorescent or two 10-watt incandescent lamps (minimum) at either side of mirror and on ceiling above front edge of washbowl.

Laundry—Two fixtures (unless laundry is in kitchen, in which case kitchen ceiling light may serve for ironing): One 150-watt silvered-bowl lamp in reflector or two 25-watt fluorescent fixture 40 inches above center of set tubs and ironing location.

Garage—One fixture for 100-watt bulb on each side of car, six feet back of front bumper.
Model homes have helped many builders sell better wired, lighted and equipped houses. They are frequently sponsored by utilities, publications, associations or by manufacturers, as in the case of the "Wonder Home" shown here. This is one of a series by General Electric Company in which a builder, architect and a consumer cooperate.

Located at Hamden, Connecticut, it was built by Brentwood, Inc., of New Haven, designed by Hugh Stubbs of Lexington, Massachusetts and decorated by Gladys Miller of Family Circle magazine which also shows it in its October issue.

The thousands of visitors who went through this model were able to see for themselves just what adequate wiring, light conditioning, and modern electric equipment can do for today's living.

There are 15 electric circuits, protected and controlled by a 100 ampere load center in which circuit breakers take the place of fuses. The 24-volt remote-control wiring system has master selector switches in living room, entry and master bedroom which control important lights and outlets inside and outside the house.

Lighting includes extensive use of fluorescent cornices for general illumination and in alcoves, over the fireplace and over window-walls. It has a fully equipped electric kitchen and laundry including a combination refrigerator-food freezer.
Two 20 amp appliance circuits supply the equipment in this kitchen, plus special circuits for stove and dishwasher. There are two overhead lighting fixtures and fluorescent tube lighting under cabinets. Compact U-plan is efficient, saves steps.

**MODEL HOME ELECTRICAL FEATURES:** 100 ampere service, 15 circuits, remote control wiring, circuit breakers, light conditioned, air conditioned, electric kitchen, master selector switches, outdoor floodlights, triple outlets, cornice and alcove lighting, complete laundry, "stand by" circuits.

Two-level plan puts living room on lower floor, provides big dining-reading-play room on upper level near kitchen. Carport and main entrance are on upper level. Floor area, 1,650 square feet.

October 1954
Foyer of Ideal model has 5x14-foot translucent plastic ceiling panel concealing four rows of fluorescent tubes

here is a planned
"electrical living" home
35,000 people came out to see this model "electrical living" home. Features include planned electric kitchens and laundries, fuseless wiring, ample circuits and outlets, valance, cornice and pin-hole lighting, grounded outlets.

This home was one of three model houses inspected by thousands of visitors daily for three weeks as part of an Electrical Living Exposition staged in Columbus, Ohio, by Westinghouse Electric, and Columbus & Southern Ohio Electric Company, and local builders.

Located in Lincoln Village and called the "Ideal" model, it illustrates a high level of electrical living: is a 13-circuit house.

In all three model houses electrical devices and appliances are serviced by: 1) adequate wire capacity; 2) ample circuits; 3) plenty of convenience outlets; 4) silent switches to provide a "path of light" ahead; 5) fuseless service entrance and circuit protection; 6) efficient lighting, using newest techniques.

The Ideal model was built by Peoples Development Company. It is air conditioned, has fully equipped electric kitchen and laundry, and an unusual low-pitch, exposed-beam ceiling. A striking feature is the translucent ceiling in the foyer, lighted by concealed fluorescent tubes. House also features cornice, valance and special fixture lighting. It was designed by R. H. Gamortsfelder, architect.

Suspended ceiling trough supplies general illumination. Each major appliance has separate circuit.
how to build a trussed machine shed

Farm construction accounts for 50 per cent of the business of Frank Piehl, who operates a lumber yard in Seymour, Wisconsin. Part of Piehl's service is a drafting department where farm buildings are designed to owner and builder specifications. The machine shed shown here is based upon the experience and advice of many builders as to what they believe a trussed farm building should be.

Keeping in mind that the use of used lumber is one of the best cost-cutters in the building of farm structures, the trusses designed for this machine shed have no members that are longer than 16 feet. Drawings indicate two types of construction as to siding. Left portions of drawings show construction necessary for drop siding, while right portions indicate construction recommended for the use of steel siding and roofing.
a door
is only as good as its parts

that's why RO-WAY makes its OWN!

Ro-Way designs, engineers and manufactures all the exclusive features that go into every Ro-Way overhead type door. Power-metered springs. Ball bearing Double-Thick Tread rollers. Seal-A-Matic hinges. Taper-Tite track. That means you can be sure the operating parts of Ro-Way doors are engineered to do the job... quality controlled from start to finish... built for a long life of dependable, trouble-free service and customer satisfaction.

Every part—from the carefully selected West Coast lumber to the heavy gauge hardware that's both Parkerized and painted—helps make Ro-Way the best possible door for any home or commercial building. Every part is built to give permanently smooth easy-up, easy-down operation—year 'round, year after year. Mortise and tenon joints are both glued and steel doweled. Muntins, rails and stiles squared up with precision... sections rabbeted to assure weather-tight joints. And the Power-metered springs are individually matched to the weight of each door.

Yes, top to bottom—inside and out—Ro-Way builds its doors to its own highest standards of quality. And that's what makes the big difference in service and dependability. So remember, when you're specifying garage doors—for residential, commercial, or industrial installations—don't settle for anything less than a Ro-Way!

ROWE MANUFACTURING COMPANY, 724 Holton Street, Galesburg, Ill.

there's a Ro-Way for every doorway

Nationwide sales and installation service. See your classified telephone directory for nearest Ro-Way distributor.
April 5, 1954

American Houses, Inc.,
165 W. 46th Street,
New York 36, N.Y.

Attention: Mr. John Pollock.

Dear John:

Enclosed you will find a number of photographs that you requested on our Deer Park Heights job.

We have been very well satisfied with the results of our sales campaign at this project. We have sold close to a million dollars worth of houses in four weeks. We believe that one of the reasons for our excellent sales is that this is truly a quality house.

We have noticed that our customers are anxious to get homes which incorporate first class materials and design. That is one of the reasons why we use American Houses.

I wish to thank you for your personal cooperation on the advertising and merchandising. I am sure they contributed greatly to our success.

Yours truly,

ALLEN & ROCKS, INC.

Ralph D. Rocks
President

ROR: jhp
encl. - 11

American Houses Inc.
165 W. 46th Street, New York 36, N.Y.

AMERICAN BUILDER

...a million dollars worth of houses in four weeks

Allen & Rocks built 170 family units of the "Commander," a 3-bedroom duplex, and now another 200 are under construction. Equipped with gas range, refrigerator, and garbage disposal unit, they sold for $12,950 a unit.
How you can put up a genuine masonry chimney in 3 man hours or less

Sectional masonry construction of the Van-Packer Packaged Masonry Safety Chimney with "Brick-Panel" Housing is shown in this cut-away view. Van-Packer is listed for all fuels — coal, oil, gas — for all home heating plants and incinerators by Underwriters' Laboratories, F.H.A. and major building codes.

Chimney support with heavy iron support straps is nailed to wood construction members of the floor. Van-Packer installs without special skills.

Flue sections made of 1/2" fire clay tile inner lining, 3" vermiculite-concrete insulating wall, and cement-asbestos outer jacket. Here first 2' section is installed in support.

All parts needed to install the Van-Packer Chimney are delivered to the job completely packaged. Construction delays eliminated. Saves up to 50% on time and material.

Openings quickly prepared in the floor, for the chimney support, and in the ceiling and roof to permit passage of flue (floor suspended method).

Chimney support with heavy iron support straps is nailed to wood construction members of the floor. Van-Packer installs without special skills.

Flue sections made of 1/2" fire clay tile inner lining, 3" vermiculite-concrete insulating wall, and cement-asbestos outer jacket. Here first 2' section is installed in support.

Acid-proof, leak-proof cement joins masonry sections up to desired height. Cement comes in easy-to-use plastic squeeze bags. Each joint is secured with aluminum drawband.

Aluminum flashing is installed on the roof. Van-Packer's "Brick-Panel" Housing over its aluminum flashing gives chimney a weathertight seal.

Brick-red cement-asbestos panels are cut to roof pitch, then assembled with corner angle irons and sheet metal screws provided.

Corner angle irons quickly fasten housing to roof. Deep embossed mortar lines retain natural color if housing is painted to match other brick colors.

Aluminum housing cap, chimney pot and refractory rain cap are added to complete installation. Van-Packer develops 34% more draft than standard code brick chimneys.

Massive "Brick-Panel" Housing adds beauty of conventional brick to all homes while saving on construction time and material.

CENTRA combination lavatory fitting with convenient pop-up drain. Compact, one-piece body saves space, makes installation and cleaning easy.

ROCKFORD top-mounted sink fitting. Easy to install—need not be disassembled. Arched spout simplifies filling of bottles, vases. One-piece body is easy to clean and clean around. Available with or without hose sprayer.

KOHLER CENTRA and ROCKFORD FITTINGS with long-wearing interchangeable valves

Kohler chromium-plated brass fittings are of first quality, with modern, clean-cut designs that harmonize with Kohler fixtures. Specific features of the Centra lavatory fitting and Rockford ledge and counter-top sink fitting simplify installation and maintenance, assure maximum convenience and lasting serviceability.

All parts subject to wear can be easily and economically replaced. The removable seats have hard chromium-plated surfaces that resist wear. Removable sleeves have double-action threads, deep and cleanly cut for positive water control. Stems and sleeves have long-life "0" ring packing, easily replaceable. Large waterways provide ample volume.

All Kohler fittings are tested under greater-than-normal water pressures, and closely inspected. Spouts are designed so that the beauty of the fitting is maintained whether furnished with or without aerator.
NOW...our laboratories have perfected

**Long-Bell**

**FLAKEWOOD**

NEW...satin smooth paneling with 3-D depth!

Here's Distinctive Home Paneling at a price to meet any budget! FLAKEWOOD is a rich, decorative wall surface that's ideal for dens or recreation rooms. It's perfect, too, for offices and commercial buildings!

FLAKEWOOD Is Made Of Millions of wood fibers and flakes, sealed tightly together under heat and pressure. Broader flakes of a single type of wood make up the smooth, level surface. And, FLAKEWOOD is available in a choice of pine, fir, cedar or maple—in 4' x 8' panels or 12" and 16" squares, ½" thick. Available in cars with other products.

For A Free Sample Of FLAKEWOOD and complete technical information, see your local Long-Bell representative—or write direct to our Kansas City, Missouri or Longview, Washington office, Factory Sales Dept.

---

**The Long-Bell Lumber Company**

Established 1875 — Kansas City 6, Mo.

**DIVISIONAL OFFICES**

**EASTERN DIVISION** — KANSAS CITY, MO.  **WESTERN DIVISION** — LONGVIEW, WASH.

OCTOBER 1954
"We sold 42 houses the
...with kitchens

Here are two views of the G-E Kitchen that appealed so much to prospects in Fairfax, Va. It features the G-E Range, G-E Refrigerator, G-E Under-Counter Dishwasher, G-E Disposall, G-E Washing Machine, G-E Dryer, and G-E Exhaust Fan. Here is a really modern kitchen within the reach of every home-buying prospect.
first day!
and laundries completely G-E equipped!"

Stafford Builders Inc., Fairfax, Va. Left to right: Mr. R. E. Stafford, Mr. R. J. Harris, Mr. J. A. Cason. These are the builders of Country Club Hills in Fairfax County, Virginia.

Mr. Stafford says: "Outside of the World Series, we never saw such crowds as came to our Fairfax, Va. model homes.

"Naturally, we were delighted. For a down-to-earth price we had built a quality house of solid masonry, with 2 fireplaces, and fine fir lumber construction comprising over 1300 feet of floor area.

"AND we equipped our quality homes with quality appliances—completely General Electric.

"We take credit for building the quality that prospects want. And we give G.E. credit for presenting kitchen and laundry appliances that prospects want most, too. Are we happy? We sure are... 42 Stafford-built homes were sold the first day!"

G.E. can help you, too—the way G.E. helped Stafford Builders, Inc.

By installing the G-E Kitchen-Laundry in houses... you offer a modern and appealing home! A home that builders tell us will sell far easier in today's tough, competitive market.

See your G-E distributor. Let him help you sell more houses... faster and easier!

G.E. has a Kitchen-Laundry for your homes—regardless of price range!
(See your G-E distributor for answers to your kitchen problems)

IN YOUR $9,995 HOUSES
Include G-E Refrigerator, G-E Range, G-E Dishwasher, G-E Disposall, G-E Cabinets. Add as little as $3.36 monthly to mortgage payments.

IN YOUR $12,500 HOUSES
Include G-E Refrigerator, G-E Range, G-E Disposall, G-E Dishwasher, G-E Automatic Washer, G-E Cabinets. Add as little as $5.31 monthly to payments.

IN YOUR $16,000 HOUSES

HOME BUREAU
GENERAL ELECTRIC
OCTOBER 1954
Completely new—Totally different... the fully automatic Calculator that PRINTS!

The Model 99 Printing Calculator multiplies, divides, adds and subtracts. It performs every one of these calculations with greater efficiency than any previous machine of its kind. Among its many outstanding features, it provides automatic multiplication and credit balances plus Simpla-tape, the two color printed record of each and every calculation. Write for free booklet number C669.

Remington Rand
Room 2063, 315 Fourth Ave., New York 10, N. Y.
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Kenbo Corp., builder of Rancho Monterey homes near Los Angeles, uses Drive-It “400” to fasten 2” x 4” sleepers to the concrete floor slabs. Superintendents Walter Johnson and L. B. Swann, Drive-It users three years, say Drive-It fastenings are quick, dependable, economical.

ControHed Power. First and only tool which requires but one standard power load regardless of penetration desired. No need to buy and stock various strength power loads.

Three-way Safety. Cannot be discharged accidentally, due to the push and turn firing sequence. This, plus the large, swivel safety pad, makes DRIVE-IT triple safe.

Drive pins are Underwriters' Laboratories approved.

POWDER POWER TOOL CORP.
DEPT. S. W. Macadam, Portland 1, Oregon
Canada: Ammo Power Tool Co., Ltd.
735 Broadway, Vancouver, B. C.

☐ Please send FREE-catalogue and literature.
☐ I want a FREE demonstration of DRIVE-IT.

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NEW EXCLUSIVE

DRIVE-IT 320 WITH BREAK-OPEN ACTION

Snap open action results in the fastest operating tool on the market. Easiest method to load and eject cartridges under any condition.

More fastenings per hour with this speedy way of loading and ejecting cartridges.

SEND THIS COUPON FOR FULL DETAILS

DRIVE-IT

THE ORIGINAL POWDER-ACTUATED TOOL

OCTOBER 1954
style and performance makes houses sell easier!

For 53 years, U/R has pioneered in making bathroom fixtures more beautiful—producing the first concealed front overflow lavatory, the first free-standing unit closet, and many other styling and performance "firsts." That's why U/R fixtures offer the very latest in beauty and dependability.

You can depend on U/R for top fixture quality, too—the whitest white in the industry... matched colors... harder-than-steel surfaces that stay lovely... performance backed by hydraulic laboratory research.

And when you show your prospect Universal-Rundle fixtures, he recognizes a familiar name, for he has seen U/R fixtures advertised in leading national magazines. He knows you are showing him quality!

Write for FREE Catalog!

The World's Finest Bathroom Fixtures
by Universal-Rundle

Plants in Camden, New Jersey; Milwaukee, Wisconsin; New Castle, Pa.; Redlands, Calif.; San Antonio and Hondo, Texas

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AMERICAN BUILDER
They’ll clean up
on maintenance savings here!

Here, the outside air around this laundry is full of salt water. And you can imagine what it’s like inside. The air soaked with moisture. Walls and windows wet. But the Fenestra* Industrial Steel Windows in this building will never rust!

They are Fenestra Super Hot-Dip Galvanized Industrial Steel Windows. They’ll save thousands of dollars in paint and labor—every few years, for the life of the building—because they never need painting. And they cost no more than regular steel windows with two inside-outside field coats of paint!

Fenestra has the only plant and equipment in America especially designed for the highly specialized job of window galvanizing. For complete details on Fenestra Super Hot-Dip Galvanized Industrial Steel Windows, call your Fenestra representative—he’s listed in the phone book yellow pages—or write the Detroit Steel Products Company, Dept. AB-10, 2260 East Grand Blvd., Detroit 11, Michigan.

*Brittle Galvanizing
BEND TEST shows why Fenestra Steel Windows are called Super Hot-Dip Galvanized. When two pieces of galvanized steel are bent, then straightened, some types of galvanizing crack open, leaving the steel vulnerable. The Fenestra piece stays protected.
Rain puts no "damper"

Celotex National Advertising Builds Business for YOU

To help you really score in '54, Celotex hits the residential construction market with a great new advertising campaign. Month after month you'll see big, colorful, eye-stopping ads — working for you — in THE SATURDAY EVENING POST, BETTER HOMES & GARDENS, AMERICAN HOME.

Make the most of this powerful sales help. Tie-in by stressing to prospects that your homes are built with genuine Celotex Products. This smooths the way to sales because over a third of a century of national advertising has created nationwide preference for the brand name Celotex!

Impartial survey shows
ARCHITECTS PREFER
CELOTEX
INSULATING SHEATHING
2 to 1
over the next leading brand
When you use Double-Waterproofed
CELOTEX INSULATING SHEATHING

"During the past few years we have built 300 homes in the suburban Pittsburgh area, and have always considered Celotex Double-Waterproofed Insulating Sheathing a must. Our close working schedule doesn't permit any unnecessary wet weather delays, and we found out years ago that the extra coating of asphalt on Celotex sheathing sheds water like a duck's back. That means we can resume work almost immediately, even after heavy rains, without worrying about sealing damaging moisture into the walls of our houses."

J. R. and R. L. Wells
Wells Brothers Corporation
Mollenauver, Pennsylvania

It's the same story everywhere. Builders across the nation confirm the Wells Brothers' experience. Celotex Double-Waterproofed Insulating Sheathing offers all these practical job advantages—saves time, labor and money—makes it possible to build stronger, more comfortable homes with fully insulated sidewalls. Applied, Celotex Insulating Sheathing costs no more—usually less—than ordinary sheathing. Yet it gives you all these big, added values...

1. Insulates and Weatherproofs as it builds. All at one cost. No building paper needed.

2. Laminated for Extra Strength and rigidity. All Celotex "32" Insulating Sheathing, both 4' wide and 2' x 8', is made of 2 plies, specially bonded.

3. No Corner Bracing Needed to meet F.H.A. requirements, with 4 ft. wide, %3/8" thick Celotex Insulating Sheathing. Has approximately 30% greater strength than ordinary sheathing with let-in bracing.

4. Goes Up 30% Faster. Easier to cut and fit. Up to 15% less waste.

5. Excellent Base for Wood or Asbestos Shingles. Use special methods for direct application; or apply over Celotex Impregnated Backer Board.

6. Double-Waterproofed. Outside, by protective asphalt coating. Inside, by special processing of the fibers. Yet has more than twice the vapor permeance advocated by government agencies.

7. It is the Only Sheathing made of tough, strong, long Louisiana cane fibers—protected by the patented Ferox® Process from dry rot and termites.

Mail coupon for factual FREE new booklet, "40 Questions and Answers about Insulation Board Sheathing."

Build Better... Build with Genuine

CELOTEX INSULATING SHEATHING

The Celotex Corporation, 120 S. LaSalle Street
Chicago 3, Illinois

MAIL TODAY!

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120 South LaSalle Street, Chicago 3, Illinois

Please send me free the new Celotex booklet, "40 Questions and Answers about Insulation Board Sheathing."

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Address __________________________________________
City___________ Zone_________ State_________

OCTOBER 1954
American-Standard ready-built
LAVATORY-DRESSING TABLES

with new counter tops of MICARTA

now more beautiful, practical, and easier to install!

THE DRESSLYN is a luxurious 3-in-1 combination with a gleaming lavatory of genuine vitreous china. Available in four sizes—42, 46, 58 and 62 inches. And in your choice of either the smart-looking kneehole model or the extra serviceable straight front model with center storage compartment. Complete Dresslyn unit is factory-assembled and shipped in one carton for easy installation.

THE MERRILYN AND HIGHLYN feature one-piece Micarta counter tops. The Highlyn has heavily enameled cast iron lavatory; the Merrilyn features lavatory of genuine vitreous china. Post-formed Micarta top provides one continuous area of easy-to-clean counter space. Available in single cabinet model (24" wide), kneehole or straight front models (42" wide), models with lavatory on left or right (43" wide) and twin lavatory model (66" wide).

- American-Standard lavatory-dressing tables are now re-designed for greater beauty...and for wider latitude in bathroom and powder room planning.

Now made with new design counter tops of durable, decorative Micarta, and available in wide choice of cabinet sizes and lavatory arrangements. American-Standard lavatory-dressing tables are the most distinctive ready-built combinations on the market. Cabinets come in gray, peach, buff, blue and white; Micarta tops in tan, mulberry, and gray; lavatories in white and popular American-Standard colors.

The handsome dressing tables feature a fine quality lavatory and a vanity-cabinet. Most models include such built-in conveniences as a medicine chest, specially designed drawers for cosmetics and toilet accessories, as well as plenty of storage space for towels.

The new and improved line covers the Dresslyn with its deluxe vitreous china lavatory; the Merrilyn (vitreous china lavatory) and the Highlyn (heavily enameled cast iron lavatory).

For details regarding models, colors and dimensions, please contact your nearest American-Standard sales office or write for Form 384-3.
For variety in windows there's nothing like a "family"

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Each grade in hollow-core or solid-core construction.
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Here are 12 pages of "know how" to help you keep that job moving in

Use American Builder's Weather Service — Here's How —

Monthly weather service is a must for long range planning

Builders can foresee the weather future with American Builder's monthly weather service prepared by Irving P. Krick, Ph.D., noted expert in the field of weather forecasting. Dr. Krick's weather predictions are proving to be phenomenally accurate, right at least three out of four times.

This weather forecasting information, found monthly in your American Builder, is prepared 30 to 45 days ahead so builders can plan future operations.

The weather page is very easy to use. First turn to the weather page (see index in every issue). You will find a map similar to the one shown here. Pinpoint your area on the map and note the block number. Then read the weather in the corresponding numbered area.

Across the top are numbers 1 to 30 which represent the days of the month. Below is the forecast for rain during the month, and on the bottom of the horizontal bar chart are the temperature forecasts.
Do you fold up shop when nature unleashes bad weather on your building project?

You shouldn’t, for today’s equipment, material, and technical know-how make non-operational days few and far apart. Builders who use the construction tips on the following pages and American Builder’s long range weather forecast in their planning, can continue to build and profit despite bad weather.

**HOT — WET — COLD weather**

**Short range forecast**

On the preceding page rain is indicated for the 25th to the 29th of the month. Builders planning their long range operation at the first of the month should not schedule pouring of slabs those days.

However, by adding the short range weather forecast found in his daily paper a builder can supplement the service. He will be able to confirm the likelihood of rain as much as 3 or 4 days before the 25th. If the rain is not coming (local forecast), the builder can make last minute changes to suit his building needs.

Weather needn’t stop today’s builder because modern building materials, construction techniques, equipment and accurate advanced weather predictions can, with few exceptions, permit uninterrupted building operations.

Here is a compendium of useful tips for avoiding trouble in licking what, in the past, have been costly interruptions, whether the weather is freezing and snowy in the north, hot and arid, particularly in the southwest, or sticky and rainy as is often the case in many southern and coastal areas.

The various major operations which, in the past, have been adversely affected by bad weather are listed here. and the ways to beat them are presented in tabular form, each under its particular bad weather condition. Builders in northern climes will want to study the cold weather techniques, while southern and coast builders who have plenty of rain and humidity in the winter months will want to study these building techniques. The hot weather information, frequently applicable in all sections of the country, should be studied, then filed away for use during next summer.
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<td>Prolonged hot spells dry some soils to a rock-like hardness which is hard on trenching machine cutters. If such a soil condition exists, it is best to procure case-hardened cutters from trencher manufacturers. Otherwise, no other problem exists for this operation.</td>
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<th>3 — Forming</th>
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<td>No unique problems encountered.</td>
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<td>Canvas and waterproof paper need to be used as shading devices where direct sunlight and heat must be kept from newly laid concrete.</td>
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Portable tent covers concrete work in cold or wet weather

Large circus-type tent top can be placed over building for protection in inclement weather
**WET WEATHER**

Builder’s problem depends on degree of saturation of the soil. To dig basements when very wet soil conditions prevail, a well point can be driven into the ground at the approximate center and the water pumped out. This method will dry out areas up to 1/2 acre.

For smaller areas a pit can be dug beside the foundation about one foot lower. Water can be pumped out of the pit. When water stands in the pit lower than the proposed footing level, work can start.

Many gumbo soils will clog trencher in extremely wet weather. Operator will frequently have to stop machine, scrape off sticky soil, start again—and so on until the job is done.

Stabilize soil where form will set with gravel when mud is encountered. Tamp gravel well.

Canvas, waterproof paper and plastic should be ready when rain threatens newly laid concrete. Lumber materials and power tools should also be protected.

**COLD WEATHER**

Modern excavation machinery has little trouble digging in frozen ground up to one foot. Large scale machines and large hydraulic back hoes can penetrate frost even deeper. Once machine is below frozen ground, it will break off frozen top layer and the excavation continues as normal.

To keep excavation from freezing during cold weather, 10 to 12 inches of hay or straw should be placed in the excavation. This is important as footing should not be poured on frozen ground.

Where frost has penetrated deep into the soil a fire is needed to thaw out ground first. Hay or straw two or three feet thick covered with a few inches of sand will smolder for a long period. Wood scraps and petroleum products can also be set afire.

Flame throwers are beginning to make an appearance for thawing small sections at a time.

Cold weather trenching is much like that of hard soil. Case hardened cutters are recommended where temperatures are below zero. Trenching gets progressively harder as temperatures drop.

Many operators will start a charcoal or coal fire the night before. Fire is maintained over night. Trenching is easier in the morning.

Do not place form on ice or snow. Also exercise care that ice or snow do not get on form before the concrete is placed.

Portable and temporary shelters made from canvas, waterproof paper, plywood, lumber, insulation board, and hard board are musts for most cold weather building. Provision must be made for temporary heat inside these shelters.

Temporary winter shelter can be made with standard framing materials and waterproof paper

Frozen ground does not stop large power tools

Simple canvas shelter offers protection in inclement or cold weather

October 1954
HOT WEATHER

Recommended procedure is not to pour or finish concrete when temperatures are over 90 degrees. Many builders who live in areas where daytime temperatures are over 90 degrees for long stretches pour very early in the morning or very late in the afternoon. For high strength concrete every effort must be made to keep the concrete under 80 degrees by shading.

Concrete can be kept below 80 degrees by covering with hay or straw, burlap, canvas, cotton matting and kept wet.

Membrane curing is finding favor in road building industry. Membrane is petroleum, bituminous, or resin material sprayed over the finished concrete to reduce evaporation. Black membrane coatings should be white-washed in hot weather to reduce heat gain.

Masonry units must be kept wet in hot weather. Old time masons kept bricks under water. Saturated brick reduces suction of water in mortar resulting in better bond.

Oil-fired blower heater warms masonry units

Gas-fired heater warms concrete in mixer

Tarps or waterproof paper over the wall will keep the wall shaded and cooler. The wall can be sprinkled after the mortar has set to keep it cool.

Mortar and masonry need to be warmed when temperature is below 40 degrees.
WET WEATHER

At certain curing stages wet weather is most beneficial to concrete. Prior to concrete setting it must be protected if rain threatens a newly poured slab. Waterproof paper, tarps, portable tents are used. Rain after slab has set has no ill effect. Cement and concrete aggregates should be kept dry in rainy weather.

Wet weather is beneficial to concrete curing. In wet weather where speed of setting is essential and it looks as though time is limited before another rain, concrete men have been using high early strength concrete to speed setting.

Concrete should not be poured over ice or snow. Many builders put calcium chloride in bottom of trench to thaw ice and snow. Concrete should be maintained between 70 and 80 degrees. This requires batching plant to know exact pouring time. If concrete is mixed on job, all aggregate should be free from ice and snow and pre-warmed before use to maintain the 70 to 80 degree temperature.

The Portland Cement Association recommends the mix be maintained at 70 degrees for three days or 50 degrees for five days for proper setting of normal concrete. For high early strength concrete, curing temperature should be 70 degrees for two days or 50 degrees for three days.

Calcium chloride can be added to concrete. Two pounds per bag of cement are recommended by the Portland Cement Association.

Builders concreting in cold weather need to plan in advance so as to have shelter and heat when temperatures drop below 32 degrees. Straw and hay will protect concrete at slightly over freezing temperatures.

Keep masonry units dry while being stored. Place on planks that are raised off the ground. Cover with tarps. Reason is to keep moisture out of brick. It is liable to freeze.

Mortar mix in cold weather must be properly prepared and heated. Aggregate and water should be heated to 150 degrees, not to exceed 160 degrees. Sand should not be scorched.

Further precautions are:
1. Never place masonry units on snow or ice.
2. Keep walls covered.

Structural Clay Products Institute recommends that 1:1:3 mortar (cement, lime, sand by volume) should be heated to over 40 degrees when outside temperature is below 40 degrees. Air on both sides of wall should be 40 degrees for 48 hours. Time of air on both sides of wall at over 40 degrees can be reduced to 24 hours with high early strength cement.

For 1:1:6 mortar the same procedure as above applies except protective period is 72 hours and 48 hours with high early strength cement.

Tarp, waterproof paper, or temporary tent shelter should be placed over wall to keep it dry.

Aggregate must be warmed in cold weather to maintain concrete of 70-80 degrees

COLD WEATHER

Concrete should be protected if rain threatens a newly poured slab. Waterproof paper, tarps, portable tents are used. Rain after slab has set has no ill effect. Cement and concrete aggregates should be kept dry in rainy weather.

Masonry can be laid under shelters in wet weather. Rain will not affect wall if mortar has set up enough so it doesn’t smear. Keep covered if mortar is not set up.

Fire under coils warms water

Tarp, waterproof paper, or temporary tent shelter should be placed over wall to keep it dry.

Aggregate must be warmed in cold weather to maintain concrete of 70-80 degrees

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Straw covering protects poured concrete foundations

OCTOBER 1954

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9 — Lumber

Lumber is kiln dried to certain moisture standards that approximate the humidity conditions where it will be used. Keep lumber covered with waterproof paper. Store on level ground as hot, dry weather has tendency to warp lumber.

10 — Insulated Sheathing

No adverse effects to this material.

11 — Plywood

Hot weather has no ill effect on plywood. However, it is suggested that the material be kept covered.

12 — Roofing

Wear sneakers or some flexible rubber soled shoe to avoid marring of asphalt shingles in hot weather. Store asphalt shingles indoors or, if necessary to store on job, keep shingles covered and in the shade. Do not place packages of shingles on the ground. Place on 2x4's or on wooden platform. Don't drop shingles from the truck. Shingles may be marred in hot weather. Do not stack over three feet. shingles might bleed. When storing roof roofing stand it on end as it may bleed or stick if stacked like cordwood.

Dry conditions are most important for laying built-up roofing. Frequently built-up roofs are laid over insulation board. The insulation material must be dry. Moisture will cause built-up roof to blister.

Rolls of felt used for built-up roofs must be stored off the ground. If stood on end on the ground, rolls may absorb moisture and later cause blistering of roof.

13 — Insulation

Temperature has no adverse effects on this material.

Correct piling of lumber is important in summer. Heat can cause warping.
Lumber, especially trim stock and moldings, is kiln dried to standards which will reduce contraction and expansion after it is installed. Deliver trim lumber after house has been closed in. All other lumber should be covered.

Keep insulated sheathing covered, especially those that do not have a waterproof coating. Store sheathing off ground.

Do not apply shingles on wet days over a wet underlayment or on a wet deck. Moisture in either shingle, underlayment or deck will cause buckling and give roof poor appearance. Store shingles off the ground on 2x4s or a wooden platform.

When using emulsion don’t apply if there is likelihood of rain within 24 hours after application. Emulsion will absorb water. This is important when applying the new 2-12 asphalt shingle roof. Store roll roofing in wet weather on end.

For built-up roofs wait for break in weather as it is most important that deck, insulation and material are dry. Store rolls of felt off ground as they might absorb moisture. Wear sneakers or other rubber soled shoes to keep shingles from cracking. Store shingles indoors as shingles will get brittle and difficult to work with in temperatures under 45 degrees. If shingles must be stored outside, keep off the ground and see that they are well covered. Do not drop shingles off truck. They might crack if weather is cold. In cold weather, do not stack shingles over three feet; bottom shingles might crack on edges.

When using emulsions in valleys or on 2-12 pitched roofs, do not let emulsion freeze. For roll roofing it is not best to apply when temperatures are under 45 degrees. If it is necessary to apply at these temperatures, warm roll before unrolling to avoid cracking. Cut roll into 12 to 18 foot lengths and lay on a flat surface until roll lays flat without curls or waves. Then apply. Don’t ever warm or heat asphalt cement directly over a fire. Put unopened can in hot water to warm. Store roll roofing on end and off ground. For built-up roofing keep all materials, deck, insulation and felt dry. Any dampness will cause built-up roof to blister. Store rolls of felt off the ground as they may absorb moisture. In cold weather do not throw chunks of asphalt that are covered with ice or snow in kettle. This will cause kettle to overflow and start a fire.

Many insulations break down after repeated soakings. Most insulation has its insulating qualities impaired when wet. If installed, other moisture vapor problems could arise such as roof buckling, paint peeling, etc. It is best to store insulation inside, out of the weather. If it must be stored outside, keep from contact with ground and keep well covered.

Temperatures have no adverse effects. Keep material dry. Cover to keep off ice and snow. If surface is damp, freezing tends to widen splits and roughen face.

For built-up roofing keep all materials, deck, insulation and felt dry. Any dampness will cause built-up roof to blister. Store rolls of felt off the ground as they may absorb moisture. In cold weather do not throw chunks of asphalt that are covered with ice or snow in kettle. This will cause kettle to overflow and start a fire.

Temperature has no effect on this material. Keep covered from ice and snow. Keep dry. (See conditions under wet.)

Tarp covering is invaluable for protecting lumber in wet weather. Lumber should be stored off ground. Tarp shown is a waterproof paper variety.

OCTOBER 1954
HOT WEATHER

14 — Painting
Do not paint in direct sunlight. Paint will seal over, underneath thinner will be trapped. Surface could blister. Solvents dry out of paint fast in hot weather, making it hard to apply. Paint shady side of house a couple of hours before it will be in direct sunlight.

15 — Plaster
Cover all openings of building during hot weather to prevent drying effect of hot winds. Use a coarse mesh fabric. Unless this is done “dryout” may occur. “Dryout” results from a rapid evaporation of water from plastered wall with insufficient water remaining for setting action of gypsum. It results in a soft and crumbly appearance. To correct this condition apply water to “dryout” portions with spray nozzle of hose. Continue operation every two hours until plaster sets hard and firm.

16 — Gypsum Wallboard
Temperature has no adverse effects on this material or in its finishing.

17 — Flooring-Doors-Millwork
It is best to store flooring, doors, and other millwork under cover at normal temperatures in normal relative humidity conditions.
Have this material delivered to job when needed and plaster has dried. Do not store on ground. If it must be stored on job site, keep off ground and keep covered. It would be best to wrap it completely in waterproof paper.

18 — Interior Decorating
If building is too hot, paint might set up too fast. There is danger of lap marks showing. The addition of a paint drying retarder will help. Paint small area at a time in hot weather.
Wallpaper is not affected by temperature.

19 — Plumbing
Temperature has little effect on this operation. Heat might slow up tradesmen’s efficiency but does not affect material.

Window frame is pre-primed before cold weather installation
Sliding should be pre-primed on both sides before applied. Sliding in photograph has been dipped in stain before application
## WET WEATHER

Paint will not anchor properly with too much moisture. Sooner or later peeling will occur. Do not apply to wet or green lumber or heavy dew that might be on siding. Dew, however, is not as serious as water that is in the wood. In humid areas, a fungicide is recommended to prevent mildewing of the paint.

Open doors and windows to stimulate more rapid evaporation of water in plaster. In very humid conditions artificial heat or dehumidifier should be used. If plaster cannot dry in a reasonable time a “sweat-out” exists where plaster has musty odor and loses strength. Plaster in this condition is worthless and no known remedy exists.

Gypsum board is highly susceptible to wet or rainy weather. If should be stored under roof. If it must be stored outside, place off ground and take extra precautions in covering to see that gypsum board is kept absolutely dry. Wet weather slows down the drying of joint taping. Heat or dehumidifier could be used.

Do not let doors, flooring, or millwork get wet. Warping, swelling and raised face grain will result. Keep under cover. Deliver to job only when needed after plaster has dried. Do not store outdoors.

Painting the interior in wet weather offers no particular problem if ventilation can be secured. Wet weather slows drying. Applying wallpaper in wet weather presents a problem with the paste. Paste might sour and spoil paper. A tablespoon of carbolic acid to a bucket of paste will keep paste good three or four days. If paper won’t dry in three or four days, turn on heat or use dehumidifier if one is available.

Rain has little effect on plumbing but does affect the running of sewer and water lines from mains to house. Shelters could be placed over ditches if installing had to be made during these weather conditions.

## COLD WEATHER

Do not apply exterior paint if temperature is under 55 degrees. Paint will not dry properly and will substantially lose its durable qualities. It is best to pre-prime in a heated-ventilated shed and finish painting in the spring.

Provide heat to dry plaster when temperatures fall below 40 degrees. Plaster that has frozen before it has set results in damp, dark colored walls with reduced strength. In thawing plaster provide ventilator, in addition to heat, to remove moisture and prevent “sweat-out.” (See conditions under wet weather.)

Temperatures do not affect the material if it is in a dry state. Do not let material get damp and freeze. Do not let applied joint cement freeze—apply heat.

Deliver doors, flooring, or millwork from heated shed to heated house after plaster has dried. Apply material only after furnace can be turned on. Do not store outside. Best procedure to apply flooring in winter weather is to heat house to 70 degrees. Pile flooring loosely inside house four or five days before laying.

Temperature for interior painting is no problem as heat will probably be turned on. Some ventilation is needed to dry paint. Some paint does poor job below 60 degrees. It is best to heat house. Wallpaper should be applied in warm room. Coated papers will crack when unrolling in temperatures under 60 degrees. If heat is not applied, souring of paste could occur. (See wet weather.)

Temperatures under 50 degrees are considered too cold to do plumbing work. Plumber cannot work with plumbing tools when conditions are such. Temporary heat is suggested to continue operation.
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### 20 — Electrical
Temperature has no effect on the material but does affect the efficiency of the tradesmen.

### 21 — Heating—
**Air Conditioning**
Temperature does not affect material.

### 22 — Temporary Enclosures
Simple framed skeletons over concrete work, etc., with canvas or waterproof paper coverings will give protection from hot sun.

### 23 — Portable Tools
Heavier grades of oil must be placed in the gear case. Do not overheat tool. See that air vents are not clogged.

### 24 — Machinery
Use heavy oils and greases. Make sure radiator is filled with water and is properly cooling engine. For crawler tractors be sure there is oil for lower rollers. Put in proper weather oil in hydraulic systems. If dust must be considered, clean oil filter often.

### 25 — Safety
Keep building site clean—not full of rubble. Do not stack material too high. See that all scaffolding is well braced or supported. Don't let burning scrap piles get out of hand. Shore deep trenches. Do not use poor ladders. Secure loads. Supply fresh drinking water on the job.

---

*Use your bulldozer to remove snow. Check battery, points, plugs and anti-freeze often in cold weather*

*Cover your bulldozer in wet weather for easy starting*
WET WEATHER

Electrical wiring put in houses is known as "dry type" and should not be installed in direct rain. If water does not fall directly on the wiring, however, electrician can install it.

It is very seldom heating or air conditioning would be stored outside. If this is the case, it should be raised off the ground and covered with tarps or waterproof paper. Installation usually takes place in substantially completed building.

Heavier, braced, framed skeletons with canvas or waterproof paper covering will give protection from rain. Framing needs to be stronger because of winds sometimes accompanying thunder storms.

Builder might also rent tents to cover work.

Important caution for using power tools in wet weather is to see that tool is grounded. Portable tools should be grounded at all times, but it's most important in wet weather. Under certain conditions in wet weather a man could be killed. Check ground wire. Store in dry place.

Check starting mechanism if gasoline engines are used. Keep engines dry. Keep ignition system dry.

For clutch-type tractors with dry clutches, see that holes to let water out are open. Track system or crawler type tractors need proper lubrication in wet weather.

Ground all power tools.
Use low voltage extension cords.
Block wheels of trucks on slopes.
Caution against wet scaffolds, ladders, other walk ways.
Secure loads.
Shore trenches.
Caution in working at high levels that have slippery surfaces. Winds during thunder showers mean caution at high levels.

COLD WEATHER

Temperature has little effect on the material though it does affect tradesmen. It is best to place temporary heat in building when temperatures drop below 50 degrees.

Temperature has no effect on the material. Installation should be made with temporary heat (salamanders, etc.) when temperature is under 50 degrees.

Wet systems will need temporary heat (salamanders) for test period.

Temporary enclosures should be well built. Snow load must be taken into consideration. For large enclosures, plywood, hardboard, or insulated sheathing should cover framework and canvas or waterproof paper should be placed over the sheathing material.

For small areas or small storage enclosures a well braced frame with canvas or waterproof paper will suffice.

When starting tool in freezing weather let it run without load until it warms up before using it. Store the tool in a warm place. Use thin oil in gear case.

See that battery is fully charged and that points and plugs are set according to manufacturer's specifications. Check anti-freeze often. Use thinner viscosity oils.

For diesel (capsule starting) systems, be sure system is clean.
Use proper viscosity oil for hydraulic system in cold weather.
Clean ice and snow from track. In moving, make sure track is not frozen to ground. Starting off when track is frozen will break gears—a common mistake during winter weather.

Caution men to dress for winter weather. Several layers of thin clothes are better than a few layers of thick clothes.
Wear earmuffs and gloves in extreme cold.
Watch for frostbite.
Watch for slippery ice and snow patches.
Watch for ice and snow covered ladders, scaffolds, etc.
Make sure salamander and other temporary heating equipment does not set fire to canvas tarps.
Keep building site clean. Frozen debris under snow could be dangerous. Secure loads.

Ground electric tools. Make certain the ground wire (the third wire) on every portable electric tool is attached to suitable ground. Report all unprotected tools to the foreman. A shorted circuit can give such a jolt you may loose your balance and fall, or, if you are standing on wet ground, the shock can kill! Be sure of your ground.

Credits for assisting compilation of this material goes to: Aetna Plywood and Veneer Company; American Concrete Institute; Armstrong Cork Company; Armco Corporation; Aseaberg Roofing Industry Bureau; California Brick Association; Caterpillar Tractor Company; Crane Company; General Electric Company; Institute of Boiler and Radiator Manufacturers; Insulated Board Institute; Jewel Paint Company; National Concrete Masonry Association; National Electric Manufacturers Association; National Lumber Manufacturers Association; National Ready Mixed Concrete Association; National Safety Council; Oliver Corporation; Portland Cement Association; Richcraft Company; Skill Corporation; Structural Clay Products Institute; United Wallpaper Company.

OCTOBER 1954
New wood from New Guinea brings New Profit for you!

- **UNIQUE PATTERN**—decorative, uniform
- **PERFECT FACE**—no joints, patches
- **STRUCTURALLY STRONG**—no core voids, shims
- **WORKS BETTER**—finishes easier
- **ATTRACTIVE PRICE**—prompt delivery
- **ALSO AVAILABLE**—in utility grades

**KLINK II**

**THE PERFECT PLYWOOD**
NEW GLAMOR
People are intrigued by this romantic wood, wrested from its Stone Age habitat by a modern mechanical miracle!

NEW EYE-APPEAL For walls, cabinets or furniture, Klinkii appeals to the most sophisticated taste...compliments any application!

NEW ECONOMY Attractively priced and saves dramatically in work. Fine furniture finish, for example, in half the usual coats!

NOW
WHILE IT'S STILL NEWS
SHOW YOUR PROSPECTS
KLINKII

FIDDES-MOORE & CO.
400 W. Madison St. Chicago 6
Rush me details on KLINKII, the perfect plywood.
Name..................................................
Firm..................................................
Address............................................
City................................ Zone.....State..
Dealer □ Distributor □ Other.................

OCTOBER 1954
Sell your houses while

And get your price with the

New feature-packed 48" Electric Sink

General Electric's new custom model Electric Dishwasher-Sink changes the sink area in new homes from a work center to the glamour spot of the kitchen.

Let this feature-packed new appliance add the customer appeal you need for quick sales of your new homes.

1. New improved dishwasher racks. Amazing capacity! Easiest to load. No racks to lift or shift!
3. Selective control with Tel-a-Wash lights shows stages of cycle. Control provides completely automatic or manual operation as desired. Drying cycle can be used as plate warmer!
5. New sink top—specially designed "no-drip" edge.
6. New single-control faucet, back-mounted for easy cleaning.
7. New built-in fluorescent light over sink bowl.
8. New and bigger under-sink storage.
10. Utility door—holds many accessories.
12. Special rack for hand towels.
13. Special racks for soaps and detergents.
15. Extra intermediate shelf—specially for scouring materials.
16. Automatic touch latch on the door.
the paint's still fresh!
help of these G-E sales-makers!

New low cost Disposall®

Introducing the new FC-20, at a price you, as a builder can't afford to overlook!


The FC-20 joins the de luxe models FA-4 and FA-45. De luxe models feature safety Twistop control, and written 5-year customer protection plan.

New variety in Dishwasher designs
Even one with a wood front!

What style does your customer want? G.E. has it!
Models that fit to the right or left of sink! Models on wheels. Even models with wood fronts in knotty pine, birch, mahogany or oak!

Every model is a spacesaving under-counter model. 24" wide. Built-in models are pre-plumbed, easy to install. Free-standing model, with separate top, is also available.

Get more information. See G-E catalogue in Sweet's file, see your G-E distributor, or send this coupon.

General Electric Company
Electric Sink & Cabinet Department
Appliance Park, Louisville 1, Ky.

Please send me
... detailed information on Disposalls
... detailed information on Dishwashers
... name of nearest G-E distributor.

Name
Street
City

[Insert address]

General ELECTRIC
OCTOBER 1954

129
From the Heart of Africa...

HERE'S A CLOSE-UP OF SAMARA! Naturally a black and white picture cannot do justice to Samara's warm soft coloring, but notice the distinctive grain pattern... see how much sales appeal it has on a wall... and think how little it costs!
Weldwood brings you SAMARA the genuine hardwood paneling that costs only about $21* for an 8' x 12' wall area.

There is absolutely no substitute for the natural beauty and sales appeal of real wood paneling. Samara is an exceptionally beautiful wood! Judge for yourself how it compares with your present walls in sales appeal and cost.

Here's genuine African hardwood that compares favorably in cost, when installed, with conventional finished walls.

You can see for yourself why it is no longer necessary to finish off interior walls in the same old way. In fact, you are missing a house full of sales appeal if you do!

With Samara you can panel single walls or do entire rooms, at no additional cost. No other solid wall covering material even comes close to matching the natural beauty and serviceability of real wood paneling. It's a beauty that is away from the ordinary, sets a house apart—has a prospect reaching for his checkbook!

LIFE-OF-HOME GUARANTEE PACKS SELLING PUNCH. Like all Weldwood interior paneling, Samara needs little or no care. It's easy to clean. Its cheerful natural color is on the order of light mahogany. It can be left natural or finished in any number of interesting ways.

You have a real selling feature in the fact that Samara is guaranteed for the life of the home!

EASY TO INSTALL. Samara can be quickly installed and finished by conventional methods. Pre-finished Samara panels are particularly suitable for the new Weldwood Contact Cement Method of installation, which eliminates nails. Weldwood mahogany molding provides still another way. Your nearest Weldwood distributing unit will be glad to provide complete installation instructions.

OUR SALESMEN ARE AT YOUR SERVICE. As a service to you and your lumber dealer, our salesmen are available to assist you in planning the use of Samara and other United States Plywood Products in your homes. Call any of our branches for this service.

SEE YOUR LUMBER DEALER. See Samara and other fine Weldwood paneling at your lumber dealer's today! See the complete line, including Weldwood Stay-Strate® Doors and Fire Doors at any of the 73 United States Plywood or U.S.-Mengel Plywoods distributing units in principal cities, or mail coupon.

This Weldwood Guarantee display plaque in genuine walnut, 11½” x 7½”, is available free for builders featuring Weldwood paneling. Ideal for model homes.

AVAILABLE IN HANDY 4' x 7' AND 4' x 8' SIZE PANELS—1/4” THICKNESS

*Approximate price for unfinished panels. For factory-finished panels, ready to install, contact your Weldwood dealer for prices.

Weldwood®
United States Plywood Corporation
World's Largest Plywood Organization
55 West 44th Street, New York 36, N. Y.
U.S.-Mengel Plywoods, Inc., Louisville, Kentucky
In Canada, Weldwood Plywood Ltd., Toronto and Montreal

United States Plywood Corporation
55 West 44th Street, New York 36, N. Y.

FREE □ Please send me free sample of Samara.
□ Send me 24-page Contractors and Builders Book packed full of Weldwood data and specifications.

NAME ...........................................................
ADDRESs ....................................................
CITY ............................................................ STATE .................
Simplicity of construction creates a straightforward architectural design. "A" frame wood members are anchored to concrete piers. Piers are not connected laterally; there is no continuous footing. They are, however, connected beneath the floor slab with steel. Each pier is connected with the one opposite to prevent spreading.

Plan indicates multi-purpose of nave by use of folding chairs for 150 persons and the use of folding partitions, creating 10 classrooms. Choir and organ are concealed by a movable screen; area forms eleventh classroom. Dinners can be served cafeteria style from stainless steel counter between kitchen and nave.

A Reseda, California, Lutheran congregation wanted a building for worship, Sunday school, church dinners, recreation and administration. They wanted a building that would lend itself gracefully to future expansion. A cost of at least $50,000 seemed conservative.

But with the congregation's rockbottom budget of $25,000, the building of a church fulfilling all of these requirements became not only an architectural challenge but a battle of the budget as well.

The answer lay in simplicity of design and construction. "A" frames made of three 2x12's bolted together at the job site, form the nave. Anchored in concrete piers, the frames are set eight feet on center. V-joint planking, forming both the roof and the ceiling was nailed over the "A" frames.
To accommodate the many activities of the church, the nave became a multi-purposed room seating 150 persons by means of folding chairs. Acoustical folding panels swing from the falls to provide eleven Sunday school classrooms. The pastor’s study and kitchen furnish adult classrooms.

Tables for church dinners are stored in a closet next to the chancel. The carpet can be rolled back creating a space 24x28 feet, available as a parish hall.

When the bid came in, it was $23,204. This allowed an additional bay to be added to the length of the nave and a brick veneer on the facade. The final price of $24,822 included: paving of parking area, walks, landscaping, sprinkler system, chancel furnishings, carpets, dossal curtain, radiant heating and ventilation system.

“A” frame is left exposed on inside; is painted a dark blue. Ceiling planking is painted a soft blue-grey, chancel is of redwood; walls, yellow ochre; floor, tan.
School rooms that face south in this Columbus, Wisconsin, grade school have egg-crate or louvered overhang that restricts direct sunlight from large glass areas along south wall, but permits open view, plenty of light and air.

A Sun shade overhang helps create ground-hugging lines of the building. Design of building won the architects an honorable mention in a national competition for better school architecture.

School is fairly small, but very adequate for its needs: additional classrooms may be added to the west should expansion be necessary.
sun shade solves window wall light problem

Top illustration is section through classroom wing showing angles of sun at various times of year. Direct penetration of sun is negligible. Sun shade cuts glare of sun down below window line (see bottom photo). still allows needed light to penetrate into classrooms
Here's another home equipped with Ceco-Sterling Aluminum Windows/Jack Boeder; Building Contractor—Architect

how to get bigger rooms

in small homes...
Builder Jack Boeder adds

the vistas of nature...with

Ceco-Sterling Aluminum Windows

Seven little words just about sum up what buyers want in homes today—"Small houses with lots of big rooms." That's the way Jack Boeder, Western Springs, Ill., builder, sees it. So that's what he gives them... and he does this neat trick with windows...Ceco-Sterling Double-Hung Aluminum Windows. Slender frames add more glass area... which means more view, with nature coming right into the home, and rooms looking as big as all outdoors. This is economical expansion—no expensive special-size glass—natural ventilation provided at no extra cost with standard sash. Yes, Builder Boeder gives his home owners open glass area—and at the same time plenty of inside wall space for furniture and pictures. Spreading over the entire interior is new beauty, too... beauty born of light. Here are five other reasons why you'll find Ceco-Sterling Windows better:

1. Easy to install... no weatherstripping necessary;
2. When equipped with storm windows, the cost is no more than wood;
3. Maintenance cost is nil... no painting necessary;
4. Won't stick, warp or rot;
5. Modern, functional beauty complements any design.

In construction products
Ceco Engineering
makes the big difference

Ceco Steel Products Corporation
Offices, warehouses and fabricating plants in principal cities
General Offices: 5601 West 26th Street, Chicago 50, Illinois
THESE ARE MEMBERS OF AND CONTRIBUTORS TO PONDEROSA PINE WOODWORK:

**LUMBER:**
- Alexander-Stewart Lumber Co.
- Associated Lumber & Box Company
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- Crawford Lumber Company
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- Ideal Co.
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- Missoula White Pine Sash Co.
- Morgan Company
- Northern Sash & Door Company
- Philadelphia Screen Mfg. Co.
- Roach & Musser Company
- Rock Island Millwork Company
- The Rockwell Mfg. Co.
- Semling-Menke Company
- The Silcrest Company
- The Wabash Screen Door Company
- White Pine Sash Company
This eye-catching, revolving counter-top display puts Ponderosa Pine doors "out in front" on the dealer's counter—helps builders select doors of distinction to make homes more beautiful and more salable. It's another evidence of the big promotional push which includes full-page Ponderosa Pine advertising in The Saturday Evening Post—presenting the charm and quality of Ponderosa Pine doors, windows and cabinets to a 20,000,000 audience! For information write Ponderosa Pine Woodwork, 105 W. Monroe St., Chicago, Illinois.

Here's What They Think of This Modern Counter Display

"With your Merry-go-round door selector, our customers can actually see exactly what doors will look like. When a customer sees only a picture of a door, there is always a question of doubt."
(Signed) Walter F. Howe, Vice President,
The New Canaan Fuel & Lumber Co.,
New Canaan, Conn.

"The enthusiastic and constant use which the Merry-go-round gets means easy shopping for our customers. This sort of farsighted merchandising and planning by Ponderosa Pine Woodwork Association is a valuable tool."
(Signed) Clarence Reisen, Vice President,
Reisen Lumber & Millwork Co.,
Union, N. J.

"The Merry-go-round door selector has saved us many steps and much time by not having to take a customer out to our door shed to show him the doors; and it gives the customer a better idea of what the doors look like as compared with a printed catalog."
(Signed) E. W. Van Ness, President,
Van Ness Lumber Co., Pequanock, N. J.

"The selector has caused a good deal of comment from customers when in our office, and several customers have used the selector in deciding on what type of door to select for their own use."
(Signed) Charles Hanan,
Charles Hanan Lumber & Building
Material, Macomb, Ill.

"The display requires only about two feet of our display space. It is a much more effective display than the actual size door."
(Signed) Alvin Levy,
Tennessee Lumber & Building
Material Co., Memphis, Tenn.

"We have displayed the Merry-go-round door selector for six months and find that it has created a lot of interest among our customers, and we believe it has helped us to sell doors. We like the fact that people can see a variety of doors."
(Signed) E. C. Sweedler, Secretary,
Joliet Lumber & Fuel Company,
Joliet, Ill.

"Our stock of doors is several hundred feet from our office and so the selector saves us considerable time as well as being a good way to present our complete line of doors."
(Signed) Fred L. Dill,
Dain & Dill, Inc., Carmel, N. Y.

"Your door selector is the best and most convenient door display I have ever seen. Nearly everyone that comes in the store comments on what a nice door display we have."
(Signed) Melborn Dalton,
Ozark Flooring and Lumber Co., Inc.,
Bismarck, Mo.
We saved $83
'Million Dollar
says Fort Wayne's
John R. Worthman
Regional Vice President,
Executive Committee, NAHB.

This is the "star" of NAHB's new 45 minute
color movie, "Million Dollar Castle."
John Worthman built it. It typifies the house
of today. Via this new NAHB-produced movie,
it helps demonstrate to prospective homeowners
the kind of solid value today's builder offers—
better homes for the money through improved
methods and materials. The Insulite Shingle-
Backer System helped put this story across.
This new, approved way to build double-course
shingle sidewalls added extra insulation
value, greater bracing strength and modern
beauty to this home, yet cut building costs $83
per thousand square feet of wall area.
Pictures at right show how.

Bildrite goes up faster, easier. Cuts
application time as much as 43%. Four-
foot sheets have more than twice the
bracing strength of horizontal wood
sheathing, thus save corner-bracing
(F.H.A. accepted). Waterproofed
throughout with asphalt. Eliminates need
for building paper. Practically eliminates
cutting and matching loss.

build
and insulate with

INSULITE DIVISION
Insulite Shingle-Backer speeds completions. Developed by Insulite, the handy panels apply far faster and easier than wood under-course shingles... cut application time in half. Eliminate waste. Produce deep, modern shadow-line. Add extra insulation value. Waterproofed throughout with asphalt. Come in easy-to-handle packages.

These stars can help you sell. Left to right, Walter Abel, Beulah Bondi, Bonita Granville, Kent Taylor. These star salesmen of your NAHB-produced “Million Dollar Castle” can help you tell the story of today’s big home value. This new color movie is now available for showing to groups in your community. Want to arrange a booking? Just contact your local NAHB chapter. There’s no cost or obligation. Want to know how Bildrite can help cut your costs? Write Insulite, Minneapolis 2, Minnesota.

**double-duty INSULITE**

the original structural insulation board

Minnesota and Ontario Paper Co., Minneapolis 2, Minnesota
give old buildings an exciting
NEW LOOK with

use any color, or color combination: Pastels, deep colors, white, gray or black.

use any texture: Smooth, floated, stippled, spatter-dash, brushed, combed, tooled, striated, rough trowelled or tapestry.

use any pattern: Natural stucco; simulated stone; wood panelling; or masonry.

use any profile: Plane, curved, fluted, panelled, or corrugated. Combine it with other materials as you please.

use over any surface: Stucco overcoating may be applied over wood siding, masonry, stone, tile, terra cotta or metal.

for long,
When you use Keymesh reinforced stucco, you wrap your building in a full inch of reinforced concrete. Think what that gives you: Fire safety; strength; long life; and low maintenance. You get all this at exceptionally low cost. No matter how you figure it, stucco reinforced with Keymesh offers you maximum value for exterior modernization jobs. What’s more, it gives you top value as an exterior finish for new buildings, too. It’s as modern as tomorrow, yet it complements traditional design. That is why it meets any architectural design.

Stucco gives you complete freedom of design when you modernize old buildings: Unlimited color, texture, patterns and profile. You can use it over any surface.

Yet you get all these advantages at amazingly low cost using the same craftsmen you use on any quality construction job: Lathers and plasterers. No matter how old a building may be, it’s easy to give it a fresh new look with stucco.

It will pay you to figure stucco on your next job.

**KEYSTONE STEEL & WIRE COMPANY**
Peoria 7, Illinois

MAKERS OF KEYMESH • KEYCORNER • KEYBEAD • NAILS
TIE WIRE • ORNAMENTAL AND NON-CLIMBABLE FENCE
New BOSCH High Cycle Drill
Germany
Operates on Homelite Power

Here's the very newest in rock drills... a lightweight, ruggedly built tool that combines low initial cost with low operating costs. It's the BOSCH high cycle electric rock drill, complete with high pressure blower, imported from Germany and sold exclusively by Homelite. Drill weighs only 65 pounds yet matches the performance of bulky, expensive compressed air equipment. Both drill and blower operate on power from a lightweight, carryable Homelite Dual Purpose Generator... the all purpose gasoline-engine-driven generator that operates high cycle tools, standard universal power tools, plus floodlights. Write for free on-the-job demonstration.
Prospects getting choosy? Sales a little harder to close? Smart builders and architects nowadays are making their sales job easier by including two Briggs Beautyware bathrooms in all their homes!

No other feature adds more to a new home. There's extra value—extra sales appeal—at a cost that's actually very small, considering the additional profit you stand to gain. And the second bath adds so little extra to monthly mortgage payments that you can offer this big plus feature while keeping your homes competitively priced.

All of your prospects will be impressed by two bathrooms—even more so by handsome Briggs Beautyware. You can give them their choice of the four beautiful Briggs pastel colors—Coral, Sandstone, Sea Green or Sky Blue—in addition to sparkling white.

Let this low-cost luxury help sell your homes. Always specify two sparkling Briggs Beautyware bathrooms in color!

BRIGGS MANUFACTURING COMPANY • DETROIT 26, MICHIGAN
New! Simplex Stairway
BALANCED ACTION
(for effortless operation)

For the FIRST time—here’s a stairway that’s engineered and built for service and durability—built from quality materials, yet it’s made to sell in the low-price field.

- ECONOMICALLY PRICED
  PRECISION ENGINEERED—QUALITY BUILT

- SIMPLE AND EASY TO OPERATE
  No adjustments necessary.

- RUGGED AND STRONG
  Manufactured of highest quality materials—No. 1 kiln dried lumber throughout. All hardware fabricated of heavy galvanized steel.

- TWO STANDARD SIZES
  8’3” and 9’9”. For ceiling heights 7’0” to 8’3”, use 8’3”. For ceiling heights 8’3” to 9’9”, use 9’9”.

- SHIPPED IN ONE PACKAGE
  Shipping weight, 8’3”, 52 lbs.; 9’9”, 56 lbs.

- MANUFACTURED IN PRECISION’S MODERN PLANT
  A Precision-built product, engineered and built for ease of operation and for durability. All parts secured by bolts and screws—no nails. Investigate new low prices on this superbly-engineered and quality-built stairway!

ACCEPTED BY F. H. A. EVERYWHERE

PRECISION PARTS CORPORATION
400-AB North First Street
Nashville 7, Tennessee

WRITE FOR FREE ILLUSTRATED BROCHURE!
New!
Sterling®
Pocket Door
T-Frame
MAKES BETTER
PASSAGE DOOR
INSTALLATIONS

Now you can build wall pockets the modern, improved way with Sterling Pocket Door T-Frame. The new Sterling T-Frame protects against warpage... makes pocket sturdier... insures trouble-free performance. Complete package includes all steel header and split jambs, track, adjustable hangers and guide strip.
Your old saw worth

Safer!
Telescoping Guard
Dependable, pioneered by SKIL. Now furnished with handy guard lift for even more convenient and safer operation.

Less Friction!
All Ball Bearing
Five high quality ball bearings are used in every super duty SKIL Saw to minimize friction, provide long life.

Convenient!
In-Line Rear Handle
Takes advantage of natural guiding motion of arm; gives greater accuracy. As natural to use as a hand saw.

Control!
Full Size Top Handle
Gives the extra control needed for safety, convenience and accuracy on awkward jobs.

More Accurate!
Blade Visibility
SKIL design puts the blade where you can see the cut without leaning or stretching. Sighting notch aids accuracy in close cutting.

VERSATILE!
Foot Design
Base extends on both sides for right or left cut-off. Rigidly supported, front and rear.

Efficient!
Sawdust Blower
Special air duct, built into upper blade guard, blasts sawdust away from sighting notches and leading edge of blade.

More Safety!
Satin Finish
This special brushed finish is applied to every SKIL Saw. Eliminates objectionable glare, gives non-slip grip.

Compact!
 Worm Drive
The design that made SKIL Saw famous. Provides low gear ratio to put exceptionally high torque at cutting edge. Maintains high blade speed.

NEW SKIL 77
(7 3/4" blade)
NEW SKIL 825
(8 1/4" blade)
Newest, finest all-around portable saws—at their price—on the market today!

WE COMPARED SKIL IN ACTUAL CUTTING AND SCORING TESTS AGAINST 4 OTHER WELL-KNOWN SAWS! SKIL WON HANDS-DOWN!

ON CROSSCUTTING
2 x 12's SKIL IS:
117% faster than saw A
95% faster than saw B
164% faster than saw C
35% faster than saw D

ON RIP CUTTING 2"
LUMBER SKIL IS:
100% faster than saw A
44% faster than saw B
63% faster than saw C
71% faster than saw D

ON SCORING STONE TO 3/4" DEPTH SKIL IS:
78% faster than saw A
78% faster than saw B
67% faster than saw C
100% faster than saw D

More Power Per Pound Than Any Other Comparable Tool!
Power increased up to 107%! Blade speed increased up to 40%! Lighter weight, greater performance than ever before!

The SKIL 30th anniversary special offer’s still good till November 15th—so better act now! Yes—regardless of the age, brand, or condition of your old portable electric saw, it’s worth $22.50 to you toward the purchase of the newest and finest in high-speed, high-power SKIL Saws.

Just read about these 2 great new SKIL Saws—see them—try them. See your SKIL distributor or mail coupon now!

**NEW SKIL SAW 77 (7½” Blade)**—Speed increased 40% to 4500 r.p.m. and weight cut to 15½ lbs. Power output boosted 100%. Depth of cut 2½ inches—Bevel cuts 2” dressed lumber at 45°. Most popular SKIL Saw for all-round carpentry—the standard for general construction. Power to cut wet lumber or tough materials such as metal, stone, compositions.

| Price, New Model 77 less case | $112.50 |
| Trade-in credit | $22.50 |
| YOUR COST, ONLY | $90.00 |

**NEW SKIL SAW 825 (8¼” Blade)**—Speed boosted 34% to 4000 r.p.m. and weight reduced to 16½ lbs. Power output increased 107%. Depth of cut 2½ inches. Bevel cuts 2” rough lumber at 45°. A powerful, heavy duty saw, ideal for use on either residential or commercial construction. Powered to easily cut 2” rough lumber—wet or dry—as well as many other tough and resistant materials.

| Price, New Model 825 less case | $134.00 |
| Trade-in credit | $22.50 |
| YOUR COST, ONLY | $111.50 |

---

ON CUTTING CORRUGATED STEEL SKIL IS:

* 78% faster than saw A
* 78% faster than saw B

Saws C & D not recommended for cutting corrugated steel.
MATCHING BEAUTY
by
WESLOCK

the 500 CONCAVE series

Matching beauty in Locks, Knobs
and Pulls for every door, drawer
and cupboard in the home.

Write for further information

WESTERN LOCK MFG. CO.
Manufacturers of Weslock Residential Locksets and Builders Hardware

GENERAL OFFICES: 211 NORTH MADISON AVE., LOS ANGELES 4, CALIF. * FACTORY: HUNTINGTON PARK, CALIF.
REINFORCED CONCRETE GOES with any type of architecture. Whether you build a new modern home, or refurbish an old property, concrete driveways, concrete walks, concrete porches and patios add materially to its value. All plain concrete slabs are subject to destructive cracking so reinforce your concrete with American Welded Wire Fabric; destructive cracking will be eliminated and it will last a long time.

This red and white tag

REINFORCEMENT IS ESSENTIAL in concrete floor slabs. And American Welded Wire Fabric is the best reinforcement for this job. It strengthens the concrete and controls cracking...gives you a good solid foundation on which to build.

marks the best in concrete reinforcement

Concrete that is reinforced with American Welded Wire Fabric meets and often exceeds every standard of the concrete industry. That's because we take great care not only in manufacturing American Fabric, but also in checking the final product to make sure that wire size and spacing are uniform, that welds are sound, that the strength is high. As a result, American Fabric assures you maximum strength in every slab of concrete you pour.

Next time you order reinforcement, specify American Welded Wire Fabric: the brand with the red and white tag of quality. That's the way to get long-lasting concrete.
You can offer home buyers new comfort in every room by sound conditioning the houses you build. Acoustical ceilings take the din out of appliance-filled kitchens and open-planned areas by absorbing noise wherever it's a problem.

A new acoustical tile called Armstrong's Full Random Cushiontone® is designed especially for residential use. It is a low-cost wood fiber material with a strikingly different pattern. This attractive Full Random pattern, plus narrow bevels, provides a modern, almost unbroken ceiling appearance. The non-directional perforations in Cushiontone absorb up to 75% of the noise that strikes its surface.

Since Cushiontone is a pre-painted interior finish material, the ceiling is completed in one quick installation. The 12" x 12" tiles can be installed over furring strips or cemented to gypsum board. In new construction, Cushiontone eliminates the cost of plastering and painting. If it is necessary to match a particular color scheme, Cushiontone can be repainted without losing any of its noise-quieting qualities.

Every day more builders are adding the new comfort of sound conditioning as a valuable extra selling feature that helps turn prospects into buyers. Get full details on Armstrong's Full Random Cushiontone from your local lumber dealer. For a descriptive booklet, write Armstrong Cork Company, 4210 Rider Avenue, Lancaster, Pennsylvania.
BATHROOMS AND BEDROOMS are where most soiled laundry originates. The logical place to locate a laundry is adjacent to these areas, where dual use of plumbing supply and drain lines is possible.

LOW-COST CUSTOM MODELS have all essential features for top performance.

"NEW Way to Wash" Twins Arrive

Famous Westinghouse Laundromat® and Dryer build maximum interest in only 5'-3'' floor space

New home buyers today want complete automatic laundry areas. To satisfy this demand, Westinghouse introduces new De Luxe Twins, styled for attention and engineered for value.

The De Luxe Laundromat offers a "New Way To Wash" with its patented Agi-Tumble Action that makes obsolete all other methods. Its Single Dial Control provides complete flexibility in washing time and temperatures. Its Weigh-to-Save Door and Water Saver allow sizable economies in hot water and detergents.

The companion De Luxe Clothes Dryer features an exclusive direct air flow system that dries clothes faster. The fully automatic Control Dial provides special flexibility for miracle fabrics; also complete drying for storage and damp drying for ironing.

In most cases these De Luxe Twins can be flush installed. Both have the new Laundrofile that keeps operating instructions on the back panel within easy reach.

Get complete specifications from your Westinghouse Distributor or write direct.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division • Mansfield, Ohio

YOU CAN BE SURE...IF IT'S Westinghouse
Of the many Knox Corporation pre-fabricated homes now under erection, 61 are up—or building—in Macon, Ga. Prices range from $11,000.00 to $14,000.00. Every Knox home in this Macon development is enriched with a Mosaic Clay Tile bathroom. Mr. Withers also states, "Mosaic Tile's luxury appeal to the customer outweighs the slight additional initial cost. We have found Mosaic Tile a strong selling point in our new Knox homes."

Bloomfield housewives certainly like their Mosaic Clay Tile...

"We're crazy about our ceramic tile," says Mrs. Theo. Johnson, 2971 Emerson Circle. "It sold us on the house because we know it will last far longer than any 'substitute' material."

Mrs. David O'Neal, 2904 Nisbet Drive, whose daughter, Rachel, is shown here, told us, "Our tile bathroom is no work at all to clean. Just take a wet cloth and, in a minute, you're through!"


Whether you build single units or develop large tracts, by conventional methods or pre-fabrication, it will pay you to study the value of Mosaic Clay Tile in your homes. See Mosaic Tile today at your Tile Contractor's Showroom, or at the Mosaic Showroom near you. For helpful Mosaic Tile literature, write The Mosaic Tile Company, Dept. 35-21, Zanesville, Ohio.

‘Knox and owners are delighted with Mosaic Clay Tile in Macon pre-fab homes,’” ... says K. Knox Withers, Knox Corporation, Thomson, Ga.
One building firm that really sells homes quickly is P. William Nathan, Inc., of Chestnut Hill Corners at Norwalk, Conn. They have included a kitchen which is organized down to the last step-saving detail. It is designed for modern-minded people. Naturally there's an Electric Range, so the homemaker can be modern... cook ELECTRICALLY!

Who really sells homes quickly?

Some builders not only “turn out” homes quickly, but “turn them over” the same way. They do it by offering what customers want—including features like an Electric Range in the kitchen.

Women know this type of range means economy and ease of operation, a clean kitchen as well as a cool one. Builders everywhere know that Electric Ranges help make all types of homes easier to sell, and help to make sales faster.

Builder P. William Nathan says, “Home buyers say they like our houses because they're exactly the kind they would build for themselves. One item of equipment they like is the modern, automatic Electric Range. Best proof of customer satisfaction is this—we sold 20 of our 56 houses in the first 7 days.” (Illustrations courtesy of LIVING for Young Homemakers)
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THE MOSAIC TILE COMPANY
Member—Tile Council of America and The Producers' Council, Inc.

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Women know this type of range means economy and ease of operation, a clean kitchen as well as a cool one. Builders everywhere know that Electric Ranges help make all types of homes easier to sell, and help to make sales faster.

More builders every day are installing ELECTRIC RANGES

Builder P. William Nathan says, “Home buyers say they like our houses because they’re exactly the kind they would build for themselves. One item of equipment they like is the modern, automatic Electric Range. Best proof of customer satisfaction is this—we sold 20 of our 56 houses in the first 7 days.” (Illustrations courtesy of LIVING for Young Homemakers)
Texture One-Eleven combines high style with the strength and dependability of industry quality grade-registered Exterior fir plywood (EXT-DFPA*), made with waterproof glue. Specify it by name. And remember, only genuine T 1-11* gives you all these features:

- Shiplap edges neatly conceal vertical joints.
- Clean-cut grooves, surface texture.
- 3/8"-thickness leaves full 3/4" panel behind 1/4"-deep grooves.
- Comes in 8' and 10' lengths with grooves either 2" or 4" o.c.
- EXT-DFPA* on panel means waterproof glue.

For free full-color idea folder and other data, write Douglas Fir Plywood Association, Tacoma 2, Washington.
there is no substitute for

Texture One-Eleven®
EXTERIOR FIR PLYWOOD • EXT-DFPA

...the exciting new panel material that combines line and texture

Since its introduction only a few months ago, Texture One-Eleven® has been enthusiastically received by architects and builders. Here are examples of the many exciting things being done with this striking new material.

Texture One-Eleven siding combines high style with strength, durability and economy of dependable Exterior fir plywood.

Equally effective for patio fences, gable ends and soffits, T-11 contrasts well with masonry and other materials.

Texture 1-11 meets FHA requirements for combined siding and sheathing which permits major construction economy.

T 1-11's bold groove pattern and subtle surface texture adds drama and interest to residential and commercial interiors.

Texture 1-11 siding weathers well, surface texture is enhanced by exposure. Glue is completely weather & waterproof.

Builders of special demonstration homes report home buyers equally taken with striking beauty of new Texture 1-11.
For QUIET operation and long, trouble-free life, you can depend on the B & G Booster. Send for Bulletin DG-950—see the reasons why this pump is the biggest seller in the field.

Some like it warm, some like it cool... but in this apartment building, B & G Hydro-Flo Heating keeps everybody happy. Each tenant can have the temperature considered most comfortable—and raise or lower it at will!

The building is divided into nine zones, each equipped with a thermostatically controlled B & G Booster and a B & G Flo-Control Valve. Economy of operation as well as comfort is achieved, since zoning permits compensation for differences in exposure, solar effect and temperature preference.

When you install a B & G Hydro-Flo Forced Hot Water System, you've laid the groundwork for the most modern comforts and conveniences. You've provided better heating... uniform temperature—warm floors—draftless rooms. You've assured fuel economy and the convenience of low-cost, all-year domestic hot water. Snow-melting and summer cooling equipment can be added at any time.

Send today for booklet FS-953.
TAKE A GOOD LOOK AT

THE THRIFTY FOUR-FIFTY

series "450"

NATIONAL LOCK SET

Pat. Applied for

FOUR-FIFTY

series "450"

NATIONAL LOCK SET

Pat. Applied for

NOTHING LIKE IT FOR CUTTING INSTALLATION TIME!

LOCK IS INSTALLED AFTER LATCH BOLT IS APPLIED TO DOOR

• Factory Pre-Set for standard 1-3/8" or 1-3/4" doors
• Quality-Built for dependable security and troublefree service.
• Selected Materials... Wrought Brass, Wrought Bronze or Aluminum trim... cold rolled steel mechanism... no zinc die cast parts.

A Superior Cylindrical Lock at a Real Budget Price

WRITE FOR CATALOG "450"

Originator of "Select-a-Pak"... Leader in Merchandising

NATIONAL LOCK COMPANY
Rockford, Illinois • Merchant Sales Division

OCTOBER 1954
Selling at $19,500, three bedroom house is 52 feet long has exact room arrangement as four-bedroom house on opposite page.

"The increased cost of engineering the setting so as to preserve trees and present the proper contours for a split-level house are appreciated by the purchasing public," say the builders of Fawn Hills subdivision, Huntington. In orienting these three- and four-bedroom houses on 100 x 125-foot sites, every effort was made to take advantage of attractive natural grades and tree-studded settings provided by the subdivision's rolling, wooded terrain. This careful plotting brought desired results in the merchandising of these homes. Architecturally, the houses are noteworthy for their simple roof lines and wide overhangs, a pleasing fireplace-window combination, unbroken window and door alignment, skillful blending of exterior materials, and spacious rooms.

Both models feature 23-foot living rooms with natural wood-burning fireplaces; two tile baths with mirrored Formica vanities and built-in linen closets. One bath in both plans has glass-enclosed shower stall. Large dining rooms have picture windows overlooking wooded grounds.
Living room in both models features this eye-appealing fireplace-window wall combination. Fireplace is natural wood burning; has simple design lines that effectively merge with floor-to-ceiling window units.

Nestled in a clump of stately oaks, this model has four bedrooms and double-car garage. It is priced at $22,250.

Kitchens have dining space. Formica counters, custom cabinets, fluorescent lighting, exhaust fans, inlaid linoleum and deluxe dial-selector ranges. Bedrooms have double, sliding door closets. Full basements consist of large utility area, separate laundry room, and playroom area with large window and radiation, single or double-car garage with access through playroom. Exterior wall finish is a combination of double insulated cedar shake shingles blended with antique brick and siding.

Other construction details: poured concrete foundations; three coats of plaster; oak finish double flooring; steel beam construction; custom casement windows in Redwood surrounds; oil hot water heat.

Brand name products used include: American Standard plumbing fixtures; Armstrong linoleum; Formica; Hopes windows; Insulite wall sheathing; Lightolier lighting fixtures; Minneapolis-Honeywell heating controls; Nu-Tone exhaust fan and door chimes; Schlage hardware; U. S. Gypsum lath; Weatherbest shingles.

because ‘we saved the trees’
The designers, employing the central utility core, grouped all of the utility areas in a rectangle extending from an exterior wall into the center of the house. Space for heating and air conditioning equipment is located midway between kitchen, laundry and bath. Placed in this way, disturbance to the other rooms from the operation of the mechanical equipment is minimized. Capacity of the perimeter duct system is increased to care for the cooling system. The ducts are fed from a plenum chamber located under the equipment.

The plan of the house is a basic rectangle with an attached carport and service yard. The separation between these two areas is a wood fence of vertical members extending from grade to the underside of the wood beam. The storage area is placed at right angles to one end of the length of the carport. In this way, the service yard literally is enclosed on three sides. Extension of the fence from the living room wall increases the apparent size of the house.

Exterior walls, faced with vertical redwood boards, are capped with a flat roof having four foot wide projecting eaves on all sides. The roof of the carport is formed by extension of the eaves. Beams, 5x12 inches, are supported on 5x5-inch wood posts. The horizontal lines of the wide overhanging eaves are formed by a double fascia member and a metal gravel stop.

Selected as the national grand prize winner in Carrier Corporation's recent home design competition, it is a good example of the growing trend to consider comfort as one of the principal factors in the modern house.
Living room view, at left, illustrates open shelves with cupboards above and below on left side of room. Exposed beams, strip windows and window wall overlooking terrace and wooded rear yard. Counter and hanging cupboard, pictured below, separate kitchen and multi-purpose room. Skylight in ceiling and roof supplies natural light to kitchen.

Photo at left shows separation of service area from carport by extension of storage unit and fence. Strip windows under roof soffit are used extensively on all exposures.

Illustrated below is multi-purpose room in foreground. Free standing closet in background. Closet forms entryway to living and multi-purpose rooms.

DESIGNERS:
Edwardo Fernando Catalano and Horacio Caminos,
Professors in School of Design,
North Carolina State College
Street view of the basic two-bedroom house with attached garage shown on the bedroom side. Plan of the basic two-bedroom house at right. Rooms are arranged with the living area on the west side, bedrooms on the east, and the entrance vestibule on the north.

**here's something new—**
**it's a modular dimensional unit**

This basic plan and design is prepared to supply a different, but workable approach to the project or mass built house. It is designed to simplify variations that will meet site conditions and orientation requirements with a minimum of expense, but with maximum results.

The basic plan consists of a centrally located mechanical core with living and sleeping areas occupying positions on either side. The plan is the same for all variations. Exterior walls are composed of a combination of solid masonry units and window wall panels that extend from floor to ceiling. The masonry unit and panel are the same size so that they can be interchanged. Much of the variation in the design is obtained in this manner.

The roof is a flat deck with a prepared roofing and gravel surface and exposed...
These block plans show the variations possible by interchanging masonry panels with window wall panels. The heavy lines indicate the exterior masonry walls. These variations make it possible to satisfy almost any site condition or orientation requirement.

Architect:
K. Roderick O'Neal, A.I.A.
Chicago, Ill.

These two illustrations indicate eight and ten positions for placement of the garage against the wall of house.

offering great plan flexibility

wood supporting beams and purlins in the ceiling. While the main roof beams in all cases remain in a constant location, the position of the purlins change so that they always frame out over the masonry walls. This forms a roof line trellis or sunshade at the discretion of the designer. The floor is a concrete slab on fill with panel heating imbedded therein. All walls, roof and slab are insulated. (Continued on page 166)
There's No Substitute for METAL WEATHERSTRIPPED WOOD WINDOWS

Your customers can immediately see the outstanding advantages when you install complete metal weatherstripped wood window units. Window units that have been precision-assembled by the sash and door jobber and are available to you through your retail lumber dealer.

BEAUTIFUL wood windows are warm to the touch and reduce condensation to a minimum.

COMFORT is assured with wood-windows properly weatherstripped with metal weatherstrip. Homes stay cool in summer, warm in winter and dry the year around.

PROTECTION of wood windows with metal weatherstrip prevents needless heat loss and discomfort. Savings in fuel costs alone can amount to approximately 24%.

ECONOMY is guaranteed. First cost is moderate for metal weatherstripped wood windows, compared to any other type windows. And the extraordinary durability of metal weatherstripped wood windows means less maintenance and longer life.

Serve your customers BETTER by installing complete metal weatherstripped wood window units.

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722 Park Ave., Minneapolis 15, Minn.

SECURITY CO., THE
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1915 N. Lince Dr., Minneapolis 12, Minn.

WARNICA PRODUCTS
6418 S. Ashland Ave., Chicago 36, Ill.

ZEGERS INC.
8090 So. Chicago Ave., Chicago 17, Ill.

(Continued from page 165)

Variations in the design are achieved by:
1. Interchanging masonry panels with window wall panels.
2. Placing the garage on any one of the solid masonry walls as their position changes.
3. Locating the garage away from the house to form a breezeway and placing these two units in any one of several different locations and positions.

The number of changes possible are as follows:
1. Sixteen variations to the basic two bedroom house.
2. Sixteen variations to the basic two bedroom house with attached garage.
3. Sixteen variations to the basic two bedroom house with attached garage and breezeway.

(Continued on page 168)
5 reasons why builders are Tickled Pink with the

1. At a glance, you can spot the extra quality features of the "Homegard" Line... screwless roses on both sides; inside rose that snaps on, outside rose that's an integral unit cupped over lock case; knob retainer in the side of knob shank; ball bearing pin tumbler cylinder. 2. Its styling is smart, clean-cut. 3. The way it is made... with pressed steel working parts plus wrought brass knobs and roses... assures long service life. 4. Operation is free and easy, yet unit assemblies are firm, sturdy. 5. Installation is a cinch... a money-saver.

To fully appreciate the "Homegard" Line, you should see it, compare it, and try it. Russwin dealers everywhere are featuring this fast-growing line. Check it before your next job. Russell & Erwin Division, The American Hardware Corporation, New Britain, Connecticut.
There's a Niagara for Any Heating Requirement... deluxe Niagara Series 50 gas for large homes as well as "high-boy" units for basementless homes, both gas-fired and oil fired, or oil-gas convertible.

Niagara Series 50 Deluxe Furnaces provide the utmost in heating equipment... a completely automatic winter air conditioner... 3-speed blower... cast-iron heat exchanger... durable iron alloy combustion chamber... capacities up to 180,000 Btu.

Convertible Oil-Gas Furnaces. Offer your owners the great advantage of choice of fuel. Exceptionally complete units, either down-flow for perimeter heating or conventional up-flow.

*Summer Cooling, Too. Niagara cooling units for dehumidified, refrigerated air in the summer can be attached to Niagara or other existing forced-air furnaces—the modern idea in greater home comfort and value.

Ask your heating contractor for full details of the complete Niagara line, or write us.

NIAGARA FURNACE DIVISION
The Forest City Foundries Co.
2500 West 27th Street - Cleveland 13, Ohio
Contractors prove sanitary drainage systems of copper tubes and fittings cost less

* Contractor "A" bid an "all copper" job for a housing development—water and drainage lines. His bid was 10% lower than others based on copper for water pipe only.

* Contractor "B" was awarded a job. Before start owner changed specification to copper. Completed job cost $19.01 less than original estimate.

* Contractor "C", on his first copper drainage system, cut installation time 1/3, compared with similar size jobs using heavy wrought or cast piping.

*Names and addresses furnished on request.

Long lengths and light weight. **ANAconda Type M Copper Tubes** come in standard 20' lengths. In 4" dia., a length weighs only 93 lb. The light weight makes them easy to install and the 20' lengths save time and fittings when long runs are required. Light weight also permits more pre-assembly work at the shop. Even large units can be easily handled. A copper tube and fittings installation weighs about 1/4 as much as ferrous materials.

Fast, easy-to-make joints. Solder-type fittings save hours. No threading, no pouring and caulking of lead. No heavy, cumbersome equipment needed. The few tools and accessories used to install smaller diameter copper tube water lines are all you need.

Saves carpentry and space. You can install a 3" copper tube stack with fittings within a standard width partition. There's no need to plan for wide plumbing walls or "build-outs." The trim copper tube and compact fittings give greater freedom of placement...reduce cutting of studs and joists.

Base your next bid on an "all-copper" job. Prove its economy to yourself and the owner. To get your free copy of "Copper Tube Drainage Systems" which gives information on tubes, fittings and their installation, fill in and mail the coupon.

**ANAconda® COPPER TUBES**
Sold only through recognized distributors

OCTOBER 1954
There's a BESSLER way
to do it!

There's an easier, better way to get your home-buyers up into their attics and upper floor areas! It's the BESSLER DISAPPEARING STAIRWAY method. Used for over 40 years in new and old homes of every type. Safety-engineered in every detail. Meets all building codes. Attractively priced! Immediate delivery!

FREE BESSLER CATALOG
Gives complete specifications on 7 Bessler Disappearing Stairway models. Hundreds of thousands in daily use. More sales and service features than any other type. Write now!

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Reach Her Heart
with New,
Washable
fabrik-ona

The discerning lady in the picture is the one who'll ask the key questions about wall coverings—including their "washability"! Together with that all-important feature, Fab.krik.ona's smartly-hued woven textures will add depth and "feel" to your interiors—supplying the soft beauty that makes rooms continuously livable, and the year-after-year wear that makes them practical. You're sure to please her with Fab.krik.ona's rugged textured Burlap, or the more subtly woven Amerspun.

Send for booklet with samples.
H. B. WIGGIN'S SONS CO.
56 Arch St., Bloomfield, N. J.

Three bedroom variation
with fireplace

Flexibility of modular units
(Continued from page 168)

In framing this house, wood posts are located at all unit intersections. Beams above are placed in the same position, with purlins installed at regular intervals in the panels. Bedroom storage units are used as room dividers. When a variation causes the bedroom wall of house to be composed of all windows, then the storage unit, acting as a partition, is placed tight against the structural wall post. This creates a pocket between the inside face of the exterior wall and the exposed end of the closet wall. The window drapes can slide into this pocket, thus obscuring the end of the closet from the exterior view.

In arranging the plan variations, the designer found it desirable to place the garage against the masonry walls, except where the garage is placed away from the house to form breezeways. In these cases, the window wall panels were preferred so that access to the breezeway could be obtained by a door placed in the window panel. The two-bedroom plan can easily be adapted to a three-bedroom house merely by extending the third bedroom into the garage area.

This is a sketch sheet which can be used to indicate other possible variations. Each of the squares represents a 12-foot unit.

American Builder
the **duette** custom... by **MIAMI-CAREY**

**Sensational new sales-builder**

Never before such striking beauty, quality and convenience features as in these new Miami-Carey **duette** bath-room cabinets! Your prospects will go for the roomy twin storage compartments, twin sliding mirror doors, jewel-like stainless-steel frames, new translucent lighting. Feature **duette** glamour and convenience in the bathroom—get faster, easier sales! The **duette** comes in Custom and Junior styles (illustrated), and in the budget-priced **duette** Deluxe Model SD 1818 and SD 1818 FL with light (not shown).

---

**NEW!** Sparkling Lucite Towel Rings highlight Bathroom Accessory Line

Feature tomorrow's Fashion Leaders today. These new Miami-Carey chrome and Lucite accessories offer smartness, sparkle and top quality to impress every prospect... help boost sales. See them on display at your Carey dealer's.

**MAIL THE HANDY COUPON NOW FOR COMPLETE INFORMATION**

**MIAMI CABINET DIVISION**

The Philip Carey Mfg. Company, Middletown, Ohio, Dept. AB-10

**Gentlemen:**

☐ Give me all the facts on your complete, nationally advertised line. Include your illustrated literature.

☐ You've sold me. Have your Miami-Carey Representative call

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OCTOBER 1954
A FINISHED PRODUCT WITH FULL RANGE OF DESIGN FLEXIBILITY

...for interior or exterior application

Far more than just a raw material, redwood is a finished product with rare flexibility. Inherent richness of color and grain suit it for use in its natural form to accent or blend with a wide range of materials and backgrounds—high degree of paint retention allows full choice of finishes—workability, weather resistance, freedom from shrinkage or swelling, and maximum dimensional stability give redwood complete versatility in functional and design application. Palco Architectural Quality Redwood offers the extra value of highest uniformity of grade—yet you pay no higher premium. For design flexibility at its best—specify Palco Architectural Quality Redwood.

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The best in Redwood—Since 1869
Mills at Scotia, California
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MEMBER OF CALIFORNIA REDWOOD ASSOCIATION
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BOSTITCH builder’s tools
speed your job,
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LAY SHINGLES TWICE AS FAST. Save up to 50% in nailing
time with asphalt shingles on new roofs, using the Bostitch H4
Stapling Hammer. Drives 50 galvanized ¼" staples without
reloading. Staple legs spread inside wood for added holding power.

CUT INSULATION COSTS by using
a Bostitch H2 Stapling Hammer
to apply batt, blanket and
reflective insulation.
One-hand, one-blow operation
speeds job, frees other hand
for positioning work. Loads
easily from front. Holds 160
staples in one of three sizes.

APPLY CEILING TILE 50% FASTER
with the Bostitch T5 Tacker.
No danger of marring tile.
Small nose locates staples well
in on flange. Use it, too,
for fastening screening to frames,
applying cornerite, sheathing,
paper, flashing, insulation.
Three models. Twelve staple sizes.

GIVE THEM A TRY! Look for these Bostitch
tools at your dealer’s. Try the Tacker, the H2B and H4
Self-Feeding Hammers. Compare their speed, their ease of
operation. Prove to yourself that you can fasten
it better and faster with Bostitch.

BOSTITCH, 830 Mechanic Street, Westerly, R.I.
Please send me bulletin and prices on:
☐ T5 Tacker ☐ H2B Hammer ☐ H4 Hammer
☐ Bostitch machines for fastening

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OCTOBER 1954
"Rheem Furnaces Help Sell Homes,"

Says PAUL SACKS
President of E. W. Rodeffer Co., Inc.
Pasadena Heating Contractor

A section of Whittier Highlands Estates in which Rheem forced-air furnaces have been installed in more than 200 homes by the E. W. Rodeffer Co., Inc., for Herbert B. Shapiro, prominent California home builder.

You Can Profit by Installing Rheem Heating Equipment in Your Houses

You can make more sales faster by installing Rheem heating equipment in the homes you build says Paul Sacks. Read what he has to say:

"Builders I deal with like the Rheem line of heating equipment because it's nationally advertised and it has good acceptance among prospective home buyers. It is a well-designed line, and one just right for every home installation. We've installed Rheem furnaces in many new housing developments and they have proved to be a sound investment for the builder."

Get all the facts about the Rheem "Fire-Tested" Furnace line. Let your Rheem Dealer show you how Rheem heating equipment will help you sell your homes quicker and save you money. For complete details write the Rheem regional office nearest you.
STAINPROOF, ACID-RESISTING PORCELAIN is absolutely impervious to fruit and vegetables, juices, dyes, lotions, soaps, and household acid stains. Cleans easily.

LIGHT WEIGHT for fast, neat accurate installation. Reduces chance of damage. Lowers shipping costs along with storage and handling charges.

DIE-FORMED STEEL assures exact measurements for easy installation on cabinets or in counter tops. Rough-ins never need altering... cabinets and tops never need re-cutting.

LARGE, DEEP SINK BOWL is an Ingersoll design feature. No stacking of dishes or pots and pans until one load is finished. A wonderful, sense making, sales making feature.

For the complete picture on these profitable sinks, write to—

INGERSOLL PRODUCTS DIVISION
Borg-Warner Corporation
310 S. MICHIGAN AVE., CHICAGO 4
ALL new

**Numetal**

**WEATHER STRIP**

for Windows and Doors

---

**FOR DOORS**
Completely packaged—ready to install. Available with regular door bottom or with threshold and exposed hook.

**FOR WINDOWS**
For all standard 28", 30", 32" and 36" double hung windows. Completely packaged—ready to use.

**HANDY PACKAGED SETS**
Ready to hand your customer—Ready to Use!

---

**Nu-WAY**

**WEATHER STRIP**

Easiest in the World to put on!

Works perfectly on windows, storm sash or doors. Made of wool felt and white metal. Individual carton contains one 18 ft. roll with nails and instructions. Packed 12 cartons in free display case.

---

**DEALERS**

Order Today! Your order shipped same day it is received! All M-D products are fast sellers, nationally advertised.

**BUILDERS**

For highest quality and dependability always specify M-D products. Sold by hardware, lumber and building supply dealers throughout the country!
Weather Strip Needs for homes or old!

**Nu-GARD**

**AUTOMATIC DOOR BOTTOM**

and Draft Eliminator

For all doors—inside or out. Completely solves old problem of clearing rug or floor every time door opens. Smartly designed with silvery-satin finish—will not rust or tarnish. Furnished in standard lengths—28", 32", 36", 42" and 48". Packed in individual cartons.

**Numetal**

**DOOR BOTTOMS**


**On-GARD**

**COIL WEATHER STRIP**

Available in stainless steel or bronze. Packed 2 ways—six 16 ft. rolls in free display carton, or in 100 ft. and 200 ft. individual cartons.

**Nu-Glaze**

**GLAZING COMPOUND**

Always stays “put”! Packed in cans—1/2 pint, pint, quart and in drums 25 lbs., 50 lbs., 100 lbs. and 880 lbs.

**Nu-Calk**

**CALKING COMPOUND**

The world’s best calling compound. Comes in handy loads: or 1/2 pint, pint, quart and gallon cans, also 5 gallon and 55 gallon drums—gun or knife grade.

MACKLANBURG-DUNCAN CO.

OKLAHOMA CITY 1, OKLAHOMA

Leaders in the Building Specialty Field for 34 years!
Mr. Allen Dean, one of Toledo’s outstanding builders, built this and other prominent homes in Ottawa Hills, Toledo’s fine residential area.

"CENTURY" Asbestos-Cement Roofing Shingles
Compliment the Finest Homes!

This splendid house has been given added beauty and distinction with a roof of “Century” No. 5 Green Asbestos Shingles. It is the residence of Mr. J. L. Heinl, 2616 Edge Hill Road, Ottawa Hills, Toledo, Ohio. Mr. Heinl is President of Heinl’s Greenhouse, Toledo, and also President of the Plant of the Month Club.

For any roofing need—from the most modest to the most elaborate home—“Century” Shingles are the outstanding choice. Because they are made from asbestos fiber and portland cement, they won’t burn, rot, or corrode. They are long-lived, dependable and never need protective paint.

A house roofed with “Century” Shingles all but speaks for itself. Buyers can’t help but be impressed by the beauty, durability, economy, and freedom from maintenance that such a roof provides.

Ask your K&M distributor to show you the complete “Century” line of both roofing and siding shingles—the various styles, the many attractive colors. Or write direct to us for information.
NEW Decra-Dor plates by LOCKWOOD

add a magnificent finishing touch to every door

It's the unexpected finishing touch that often makes the sale... the extra touch of charm that catches the prospect's eye. LOCKWOOD's new Decra-Dor plates give you all this and much more. Decra-Dor, designed for use with LOCKWOOD's 'C' Series locksets only, is the most exciting contribution to home decoration offered by a builder's hardware manufacturer in years.

These beautifully etched plates, with design inlaid in color, add new dignity and distinction to every door... flush moderns, traditional paneled styles... from the front door right through the house. The five designs illustrated are available in highly polished brass or satin-finished aluminum.

Easy to install, economically priced, LOCKWOOD's Decra-Dor plates are available through LOCKWOOD dealers from coast to coast. The name of your nearest LOCKWOOD dealer and a full-color brochure will be sent to you promptly on request.

A. HARVEST The classic beauty of a shaft of wheat, modern yet ageless.
B. RONDO This simple circular design frames the door knob in a colorful etched pattern on lustrous metal.
C. COSMIC A suggestion of antique design rendered with truly modern simplicity.
D. WOODBINE Graceful tendrils in an attractive floral pattern.
E. PERSIAN The legendary tree of wisdom, etched and inlaid with color on a quadrant-shaped plate.

ALL DESIGNS AVAILABLE IN BRASS OR ALUMINUM

LOCKWOOD HARDWARE MANUFACTURING CO.
Fitchburg, Massachusetts
First it was *Sea Swirl*, decorative Douglas fir plywood...then Knotty *Sea Swirl*...now, a worthy companion to these popular APMI panels is BIRCH faced plywood.

This new product is top quality—golden beauty outside; SOLID CORE inside. Standard 4'x8' panels are available in 1/4” and 3/4” thickness. Other sizes on special order.

APMI plywood is stocked at company warehouses and selected independent jobbers.

Your inquiries are invited.

**Associated Plywood Mills, Inc.**

*General Offices: Eugene, Oregon*

Plywood plants at Eugene and Willamina • Lumber mill at Roseburg

**BRANCH SALES WAREHOUSES:** 4268 Utah St., St. Louis, Missouri; 4814 Bengal St., Dallas, Texas; 4003 Cary St., Houston, Texas; 1025 Jay St., Charlotte, North Carolina; Wake Forest Road, Raleigh, North Carolina; Wesley Road, Greenville, South Carolina; 925 Toland St., San Francisco, California; Eugene, Oregon; Willamina, Oregon.

**SALES OFFICES:** 31 State St., Boston, Massachusetts; 595 E. Colorado St., Pasadena, California.
Contractor who built his own motel says:

"I needed the best materials for my Trav-L-Lodge—that's why I chose Atlas Mortar"

Concrete block painted in pastel colors is featured on both exterior and interior walls at the Dallas (Pa.) Trav-L-Lodge. That's why mortar joints on this job were particularly important. For this special job, general contractor and owner, Donald Hughes, specified Atlas Mortar.

Says Hughes, "Atlas Mortar is excellent for any type of masonry unit. It's smooth under the trowel—let's us get the true, tight joints that we can count on every time. That's why I've used Atlas Mortar for the past four years."

Mr. Hughes' statement is typical of many we receive from contractors, masons and architects... on-the-job reports... that praise Atlas Mortar for workability, strength and good appearance.

ATLAS MORTAR has proved itself on large jobs and small and in the laboratory as well. It complies with ASTM and Federal Specifications for masonry cement. For further information write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N. Y.


SKILLED HANDS PREFER

ATLAS MORTAR CEMENT

THE SATIN OF MASONRY CEMENTS

OCTOBER 1954
"Because a builder puts his reputation on the line every time he builds a house it would be financial suicide to use anything but quality products," say Brune & Harpenau Cincinnati, Ohio.

In all their homes these quality builders have used REVERE COPPER WATER TUBE... they say, "it costs less to put in our homes than rustable pipe."

For the newest group of 200 homes in the Bel-Aire Section of Green Acres development, BRUNE & HARPENAU again selected Revere Copper Water Tube, for, as they put it, "We consider it our civic duty as builders, to build the best possible home we know how. And since we are known locally and have a reputation to uphold we would be digging our own financial graves to produce anything but a quality home.

"That is why we wouldn't consider anything but Revere Copper Water Tube for hot and cold water and service lines. Revere makes a nationally-advertised, quality product with unquestionable acceptance so it is an added sales feature to tell people that all our plumbing is Revere Copper Tube. And so far as we, as builders are concerned, we like the advantages of copper tube... proved endurance, non-rusting, non-rotting, rust cannot clog it, fewer fittings, solder fittings used require no thread-cutting or wrench work, the choice of 20' straight lengths or 60' coils. And, we have found that with all these advantages Revere Copper Water Tube costs less to put in our homes than rustable pipe. Why shouldn't we prefer it?"

Keep out of trouble with copper... guard your reputation for quality work. Insist on enduring Revere Copper Water Tube. There's a Revere Distributor near you who carries a full stock in both hard and soft tempers. And, in the event you or your plumbing contractor have technical problems, write us direct and we will put you in touch with Revere's Technical Advisory Service.
There's money in the attic!

GET MORE REMODELING JOBS WITH VERSATILE MASONITE PANELWOOD AND TEMPERED PRESDWOOD

How many unfinished attics are there in your community—crowded, cluttered up, old 3rd-floor "warehouses" for junk—fire hazards.

Right now is a good time to line up some profitable inside work for the winter, turning unused attic space into comfortable living quarters for the family.

And depend on Masonite Presdwood for a big assist." Among the 33 types and thicknesses of smooth, rigid Presdwood are the materials for floors, walls, ceilings, built-ins and decorative touches.

Panelwood and Tempered Presdwood are grainless, all wood hardboards made stronger with nature's own lignin. They cut and fit like wood, finish beautifully.

Send coupon for an idea-starting plan. We'll also send you our "Idea Book" with dozens of money-making suggestions for working with Presdwood.

Please send me, without obligation, your plan No. AE-297 for finishing an attic, and your "Idea Book."

Name: .................................................................
Address: ................................................................
Town: ................................................. Zone: ....
County: .................................................. State: ....

OCTOBER 1954
Project builder praises selling feature

VARIETY IN APPEARANCE OF HOUSES is strong point for Flexivents stressed by Strauss Bros. This view of homes being built shows how Flexivents lend themselves to post-and-beam construction through effective use in ribbons, stacks, groups and as a low-cost casement.

FLEXIVENT EASE OF ASSEMBLY also wins praise from Strauss Bros. Here workman builds up Flexivent group in shop right at building site. This single workman handles all assembly for project of 650 homes. From here windows are moved to houses for quick installation in rough opening.
“In Strauss TREND Homes we find our customers are as enthusiastic about Flexivents as we are,” says John D. Strauss of Strauss Bros., leading Lincoln, Nebraska contractors. “As builders, we like Flexivent’s ease of installation, as well as the economy of having to handle only two sizes of windows,” says Mr. Strauss. “And our customers are pleased with the variety of appearance the many Flexivent combinations give to our houses. The women are especially enthusiastic about the ease with which Flexivents can be cleaned.”

Look over the Strauss Bros. operation on this page showing their Eastridge project in Lincoln. Look into the many advantages of Flexivent Windows for the next project you build!

Across the country, Andersen Flexivent Window Units continue to grow in popularity with contractors building homes for sale. And Flexivents are earning this reputation for 3 big reasons.

THEY'RE LOW IN COST. Simplicity in design plus Flexivent's famed ease of assembly and installation keeps cost down.

THEY'RE HIGHLY VERSATILE. Wide choice of sizes, sash operations and window combinations make Flexivent the most useful window you ever saw.

THEY'RE HIGH IN QUALITY. Precision manufacture in Andersen's modern plant by skilled window craftsmen assures trouble-free operation, extreme weathertightness.

FLEXIVERENT as big for homes

For specification data see your millwork dealer, Sweet’s Light Construction File or write Andersen Corporation. WINDOWALLS sold by established millwork dealers throughout the United States including the Pacific Coast.

Andersen Windowallas

Andersen Corporation • BAYPORT • MINNESOTA
Money—its market, source and effect on the builder

By Joseph Nowicki
Loan Officer, Chicago Federal Savings and Loan Association

The money market

Money is a commodity, just like a pair of shoes. When money is borrowed, it is, in effect, rented for a fee as represented by the interest paid for its use. Because it is a commodity, the volume and price of money is subject to fluctuation. When the supply is more than adequate, interest rates are low; when the supply is short, interest rates go up.

Fluctuation in the money market is governed by various factors. Greatest single factor is the action our government takes to either tighten or loosen the supply. In periods of inflation and rising prices, the supply of money can be tightened and controlled. You will recall one such action during and after the war when Regulations X and W were in force. These regulations limited the amount of credit that could be issued for the purchase of a home or other commodities.

Another form of control is action the Federal Reserve Board can take with its member banks. You may have noticed recently that reserve requirements for member banks were cut, freeing some $3 billion in credit. This means that the member bank can carry less cash on hand as a reserve against withdrawals. Such an action, therefore, makes available more money for spending and stimulates the economy.

Still another action affecting the money market is government spending. Such spending puts more money in circulation, usually leads to greater savings which, in turn, increases the availability of mortgage credit. As previously stated, the price of money (or interest rate) fluctuates with its availability. There is one factor, however, that helps stabilize interest rates—the setting of rates by the Federal Housing Administration and Veterans Administration on insured and guaranteed loans. These will be discussed in succeeding articles.

Source of money

When a contractor uses credit to build a house, there must be a source to furnish that credit. Generally, all credit used originates from individuals, representative by various forms of savings programs. The greatest source of builder credit is available through specialized agencies that gather together savings of individuals and then invests them in a few well known types of securities. One of the greatest and most stable of these securities (next to government bonds) is mortgages.

Specialized savings agencies include savings and loan associations, co-operative banks, life insurance companies, commercial banks, investment trusts, credit unions. The relative importance of the different sources of home mortgage money varies with each community. In 1953, savings and loan associations made approximately 37½ per cent of all home mortgage loans. Life insurance companies and commercial banks accounted for 26 per cent, mutual savings banks about 17½ per cent, individuals and others 19 per cent.

Of all of these sources of mortgage credit, savings and loan associations are the fastest growing, the most specialized and most stable source year in and year out. Savings and loans were organized primarily for the purpose of financing homes, and they invest fully 85 per cent of their assets in home loans.

Life insurance companies invest their holdings in a variety of ways, such as government, municipal and corporate bonds, preferred and common stocks, mortgages and real estate. Mortgages may represent less

(Continued on page 188)
NOW! CONTRACTORS WITH 10 TO 24 EMPLOYEES CAN HAVE “BIG COMPANY” BENEFITS!

New “EMPLOYEE PROTECTION PLAN” by New York Life offers low-cost life insurance, weekly income disability and liberal hospitalization benefits for your employees.

Designed expressly for the growing enterprise not yet large enough to carry our regular Group Insurance, New York Life’s new Plan has been an immediate success. In your business, employers with less than 25 employees (minimum for Group Insurance) have been tremendously enthusiastic about all the benefits it makes possible. Even with as few as 10 people, such firms can now—through the Employee Protection Plan—assure the security and freedom from worry that big corporations find so important today in hiring and retaining efficient personnel.

The new Plan offers a combination of coverages in varying amounts and is so flexible it can be tailored to the exact needs of your organization—your employees, their dependents and yourself. It is low in cost, easy to install, easy to administer. It can pay for itself in reduced employee turnover alone! And with Christmas coming, what more sincere expression of good will could you present to your employees than an Employee Protection Plan—security for the years to come?

So if you run an operation employing fewer than 25 people, why not join other leaders in your field and install an Employee Protection Plan? Ask your New York Life agent today—or mail the coupon below for our brand-new, informative booklet.

SEND FOR NEW, FREE BOOKLET!

Offered for the first time—absolutely without charge or obligation! “Getting Down to Cases” is an attractive and interesting booklet containing actual case histories of how leaders in your business and other fields have benefited from their Employee Protection Plans.

New York Life Insurance Company, Dept. A
51 Madison Avenue, New York 10, N. Y.

Please send me, without charge, your new booklet entitled “Getting Down to Cases.” I understand that I am under no obligation.

NAME

COMPANY

ADDRESS

CITY ZONE STATE

NEW YORK LIFE INSURANCE COMPANY

The New York Life Agent In Your Community Is a Good Man To Know

OCTOBER 1954
EVERYBODY

PROFITS WITH

HIDALIFT

the completely modern Sash Balance

BUILDER
Hidalift cuts installation time and costs because it's easier, faster to install and tension.

DEALER
Hidalift sells on sight. It's easy to handle. Builds up sales volume and goodwill.

ARCHITECT
Hidalift doesn't mar the beauty of modern windows because Hidalift is 100% concealed.

HOMEOWNER
Hidalift insures lifetime wear plus ease of operation. Increases resale value of home.

MORTGAGE FINANCING

(Continued from page 186)

than 20 per cent of their total assets. Their investment policy may vary from time to time, being dependent largely on what type of security offers the best return. There may be periods when bonds or stocks are more attractive as investments, and during those periods funds would be less available for mortgages.

This policy of diversified investment creates somewhat of a situation of instability as a source of mortgage credit. These same factors may affect, with the exception of savings and loans, other sources of mortgage credit in the same manner.

Summing it up briefly, the money for financing new homes comes from the savings of individuals which are gathered together and then invested in mortgages by specialized financial agencies.

Effect of money supply on the builder

Very few builders or purchasers can produce or buy a home without the use of mortgage credit.

The supply of money available for mortgage loans varies from lender to lender, and community to community. Lending policies, in turn, are based upon the amount of money available for loans. When money is free or plentiful, loan commitments are easier to obtain, the loan is usually more generous (lower down payment), and will be amortized over a longer period, requiring lower monthly payments.

When money is tight, loan commitments are more conservative, down payment requirements are stiffer, and the number of prospective purchases is restricted.

For the builder, therefore, a steady and stable source of mortgage credit is a must if he is to maintain a continuous building operation. He must be able to foresee fluctuations in the money market and protect his operations with firm financing commitments when a "tight" money period is approaching by aligning himself with a financing institution that will assure him a steady supply of mortgage credit at reasonable terms. Further, he must know when to expand his operations in a "free" money market and limit them in a "tight" market.

Many a builder has gone broke by being forced to carry unsold buildings through a period of tight money. The signs of a free or tight market are there if you can recognize them and plan your operations accordingly.

The next article will deal with types of loans.
There are so many places where it is better to use Trinity White. It is a true portland cement with the "greys" and "off-color casts" eliminated. Use it for architectural units; stucco; terrazzo; or any other job where appearance is important in good concrete. If your dealer does not carry Trinity White, write us direct.

A product of GENERAL PORTLAND CEMENT CO.
CHICAGO • DALLAS • CHATTANOOGA • TAMPA • LOS ANGELES

Trinity White
PORTLAND CEMENT

Cheap Heat
... saves time and money for contractors

For less than 17c an hour in fuel, you can dry plaster, fast, even on cold or humid days; pour and cure concrete safely at any temperature and keep men working, inside or out, in freezing weather.

The working hours you save will much more than pay the cost.

The Master Heater rolls into place, starts at the flip of a switch, blows clean, odorless heat right where you want it... instantly. Thermostat and safety controls are fully automatic; combustion so complete you don't need a vent. Burns inexpensive kerosene or fuel oil. Two models—160,000 or 400,000 BTU per hour. For more information mail coupon.

Send this coupon for full information about the Master Heater to Master Vibrator Company, 336 Stanley Ave., Dayton 1, Ohio. No obligation.

Name. Company
Street. City
Canada builders switch to panel framing; one reports $150 saving

Two Canadian building firms have set up modular panel operations after reading the how-to-do-it articles on Modular Principles which appeared in American Builder from June, 1952, to September, 1953.

The builders, Roy James Construction Company, Ltd., of London, Ontario, and N. O. Hipel, Ltd., of Preston, Ontario, utilize the modular panel system in different ways: James, who builds 100 or more houses a year, uses the panels for his own construction operation, while Hipel, a small volume builder, now sells panels to other builders.

Roy James Construction Company, Ltd.

This firm operates a centrally located panelization operation and trucks the panels and trusses to the job site. Comparing the cost of 12 conventionally built houses with 12 similar panelized units, James found a saving of $150 on each panel framed house. Framing labor on the conventional houses averaged $500 per unit; $350 for the panelized units. The $350 breaks down as follows: $200 for panel erection, $100 for shop labor, and $50 for trucking.

Reduction of material waste also is important, according to the James firm. Short cut-offs of framing lumber can be used for backing, blocking and cripples.

(Continued on page 192)
Roof sheathing of West Coast lumber—the building material with an outstanding record of performance—is strong, rigid and long-lasting. It is easy to handle, easy to apply, offers real nail-holding power.

West Coast lumber is time-tested in conventional construction. And, as always, it remains the natural choice of the day's most creative designers.

For dependable lumber, specify the West Coast species...Douglas Fir, West Coast Hemlock, Western Red Cedar and Sitka Spruce.

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

WEST COAST LUMBER
Douglas Fir • West Coast Hemlock
Western Red Cedar • Sitka Spruce

whatever the job, consider WOOD FIRST!

OCTOBER 1954
GREAT NEW SELLING FEATURE FOR BUILDERS!

Freedom From Fear of Fire

Builders in every price range report the new Edwards Home Fire Alarm is a powerful sales persuader! Here's a $20 feature — easy to install and demonstrate — that gives every new home what every new home buyer wants: fire protection! Add this feature to your new homes.

Complete, integral signal unit mounts behind smartly styled, modern aluminum plate that flush into wall. System can be tested anytime simply by pushing button.

* COMPLETELY AUTOMATIC, ELECTRIC!
* PERMANENT DETECTORS — NEED NEVER BE REPLACED!
* USES LOW-COST BELL WIRE!
* NEEDS NO SERVICING OR ADJUSTING!

Rings the bell with your prospects! Light a match. Hold it under a detector. In seconds, alarm bell sounds off. Dramatic proof that your prospects are protected! Edwards adds freedom from fear of fire to your homes' other selling points!

Home Fire Alarm
Edwards Home Fire Alarm. Catalog #F-100. Two detectors plus complete signal unit. $19.95. Cash in! See your electrical supplier, wire or phone Edwards for full details NOW!

Edwards COMPANY, INC., NORWALK, CONN.

Canadian builders

(Continued from page 190)

Typical small house built by Roy James Construction is 1000 square feet, has three bedrooms and a price tag of $12,000.

Here is a breakdown of shop costs for cutting and assembly of the modular panels:

**SHOP LABOR & ASSEMBLY**

1. **Gables**
   - a Cutting:
     - 2 Rafter @ 5¢ 10¢
     - 2 Joists @ 3¢ 6¢
     - 16 Studs @ 3¢ 48¢
     - 4 Gussets @ 1¢ 4¢
   - b Assembly:
     - Total Cutting Cost
     - $2.12
     - Total cost of gable
     - $2.80
     - 2 gables at $2.80

2. **Trusses**
   - a Cutting:
     - 11 Gussets @ 1¢ 11¢
     - 2 Rafter @ 5¢ 10¢
     - 2 Joists @ 3¢ 6¢
     - 4 Beams @ 3¢ 12¢
   - b Assembly:
     - Total Cutting Cost
     - $3.35
     - Total cost per truss
     - $1.14
     - 25 trusses @ $1.14

3. **Assembly Outside Wall Panels**
   - Incl. Headers Sub-Assemblies
   - Sheathing—118 lin. ft. @ 25¢ $29.50

4. **Interior Wall Panels**
   - 125 lin. ft. @ 12¢ $15.00

5. **Leaves Frames**
   - Rip & Cut—50¢ ea.
   - Assembly 30¢ ea.
   - 2 Frames @ 30¢ $6.00

6. **Cupboard Bulkhead**
   - Cutting—30¢
   - Assembly—50¢
   - 2 Bulkheads @ 80¢ $1.60

7. **Cutting Ext. Wall Panels**
   - Material delivered in bulk lots to saw
   - Approx. 300 pcs. @ 2¢ $6.00

8. **Landing Assembly**
   - a Cutting 15 pcs.
     - 3¢ 45¢
   - b Assembly & Deck
     - $2.50 2.50
   - 1 Landing
     - $2.95 2.95

9. **Gable Rakes**
   - a Cutting
     - 20¢
   - b Assembly 45¢
   - 4 rakes @ 75¢ $3.00

10. **Grooving Fascia Board**
    - 80 lin. ft. @ 1.5¢ $1.20

11. **Assembly Door Frames**
    - 2 doors @ $1.00 $2.00
    - Rehanging temp. doors 2 doors @ $1.00 $2.00

**Total** $98.35

Canadian builders (Continued from page 190)
N. O. Hipel, Ltd., Preston, Ontario

This organization furnishes builders with a modular panelized house package; hopes to serve builders within a 150-mile radius. Package includes everything but heating, plumbing and electrical equipment.

Designwise, the package is a 1000 square foot house with multiple variations; 10 interior floor plans, five roof designs, with or without carports or garages, three window variations, and innumerable exterior material variations.

Hipel’s price for the package ranges from $3500 to $4500 which, he says, is competitive with the cost of materials alone for a builder using conventional methods.

Beauty applied by Colorcrete is there to stay. By a simple spraying process, drab or dirty plans, five roof designs, with or without carports or masonry—concrete, stucco, etc.—becomes gleaming white. Or, if color is wanted there are ivory, cream, pink, green, blue, and 25 more. Colorcrete fuses to concrete surfaces under pneumatic pressure. Gives enduring beauty and protection through a lifetime of service.

You Can Be a Local Colorcretor

Builders and contractors can add to earnings by applying Colorcrete to old or new structures of all kinds. Equipment is compact, portable and modest in price. Work is interesting and highly profitable. A real low-investment opportunity. Write at once for descriptive literature.

Colorcrete Industries, Inc
583 Ottawa Ave., Holland, Mich.

Picture above shows N. O. Hipel shipment of prefabricated panels to site of builder customer. Walls, trusses and roof decking can be erected in one day.

Typical Hipel design has brick veneer. This house is design "C" with carport and check rail windows.

Renew your subscription
here's Detroit's 'ideal home' for '55

Top honors in the 1955 Detroit Builders Show architectural competition went to this L-shaped, ground-hugging ranch house. It was designed by Edward J. Kovach, architectural student at Lawrence Institute of Technology in Detroit. He received a cash award of $800.

Purpose of the contest, sponsored annually by the Builders Association of Metropolitan Detroit, is twofold—arouse and promote interest of students in residential architecture; provide the association an “ideal home” to display at its 1955 home show.

Selections were made on the basis of plan arrangement, external appearance, adequate use of space, structural practicability, expansibility, adequacy of equipment, effective presentation and suitability as an exhibit enterprise.

Indoor-outdoor living, open planning, and an abundance of recreational space are noteworthy features of the winning design. Basement provides for game and social areas, hobby room and bar, as well as ample utility space.
Third award was given to Charles R. Sutton of Cranbrook Academy of Art for the split level shown on this page. Other winners were John V. Yanik, Lawrence Institute of Technology, second prize; and Leon H. Kohls, also of Lawrence, fourth. Last year, Yanik's fourth place entry was constructed as the 1954 "ideal home".
This builder keeps out of hot water...

YOU can keep yourself out of hot water—and keep your customers in it, by installing Electric Water Heaters.

Home buyers want to be modern—to live electrically—so they want this water heater that automatically assures an ample supply of hot water at any hour of the day or night. They like the fact that it is clean in operation, and doesn't heat up the area where it is installed, because the tank is so completely and efficiently insulated.

The Electric Water Heater is good for the builder—as well as his customer. Since it can be installed anywhere, hot water lines can be short—to reduce installation cost and minimize radiation loss. It can help make your home buyers your satisfied customers.

These houses are in Sylvan Springs, St. Louis, Missouri. Builder Matthew Nothum says: "Electric appliances are a part of modern living—and they do sell homes. That's why all our houses here are equipped with Electric Water Heaters. There's nothing like an ample, automatic supply of really hot water to sell home buyers and keep them sold."

QUIZ FOR BUILDERS

Q. What size Electric Storage Type Water Heater should I install?

A. It pays to install a size adequate to take care of every potential need. In the Nothum houses, the 3-bedroom models have the 80-gallon size, and the 2-bedroom houses have the 66-gallon size.

Be modern... live electrically!

Equip your homes with electric water heaters

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Equip your homes with electric water heaters

These houses are in Sylvan Springs, St. Louis, Missouri. Builder Matthew Nothum says: "Electric appliances are a part of modern living—and they do sell homes. That's why all our houses here are equipped with Electric Water Heaters. There's nothing like an ample, automatic supply of really hot water to sell home buyers and keep them sold."

QUIZ FOR BUILDERS

Q. What size Electric Storage Type Water Heater should I install?

A. It pays to install a size adequate to take care of every potential need. In the Nothum houses, the 3-bedroom models have the 80-gallon size, and the 2-bedroom houses have the 66-gallon size.

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Be modern... live electrically!
Air Conditioning *Prediction

"One of the next major design trends in air conditioned houses will be the addition of shading devices outside the house."

Long ago anticipating this trend, RUSCO...the most famous name in windows... was ready with the thoroughly practical, carefully field-tested...

**RUSCO ALL-METAL VENETIAN AWNINGS**

Here are a few of the many advantages RUSCO's modern, precision-built All-Metal Awnings, Canopies and Jalousies offer you:

- **Permanently installed**—they give year 'round protection from sun, rain, sleet and snow.
- **Control of visibility, light and ventilation** to suit window exposure and season.
- **Need no seasonal replacement or repair**—no removal or storage.
- **Available in 13"Decorator Colors" baked on for added permanence. Additional colors available on special orders.**

In any style—RUSCO horizontal shading devices sharply reduce solar heat infiltration—offer genuine year 'round weather protection—add beauty and salability to any structure!

From East, West, North and South has come documented evidence to confirm this forward thinking by RUSCO engineers. Always one step ahead of the weather—RUSCO now offers builders and architects a complete line of ALL-METAL field-engineered

- **VENETIAN ADJUSTABLE AWNINGS and JALOUSIES**
- **VENETIAN FIXED-LOUVER AWNINGS and CANOPIES**

There's nothing "Johnny Come Lately" about Rusco Shading Devices. Their beauty of design—and the many exclusive, patented technical advantages offered—are the result of years of research in contemporary architecture and into basic air conditioning problems. The long sweeping lines of today's homes and buildings are greatly complemented by the horizontal beauty of Rusco Shading Devices!

Of course the ideal window treatment for all climates is RUSCO Shading Devices plus the RUSCO double window insulation—either RUSCO's Self-storing Metal Combination Windows for existing structures or the RUSCO completely prefabricated Prime Window units with Insulating Sash for new construction.

For proper window insulation and shading...so important to efficient air conditioning...LOOK TO **RUSCO**

**RUSCO** All-Metal PRIME WINDOWS...COMBINATION WINDOWS AND DOORS....VENETIAN SHADING DEVICES

*Source: March, 1954 House and Home report on studies and trends in house air conditioning.

OCTOBER 1954
MULLER MIXERS

low in price and upkeep
high in output

Over 40 years experience in mixer engineering makes Muller Plaster and Mortar Mixers leaders in their field. Strongly built...ample drum and power capacity (electric motor or gasoline engine)...2 to 9 cu. ft. sizes (6’ model shown). Rubber scraper blades...life-time shaft seals...power throw-out or clutch, except on 2’ size...prices $180 upward, FOB Factory. Write for name of nearest dealer.

MULLER MACHINERY COMPANY, INC.
Metuchen 4, N. J. Cable Address MULMIX

FOR QUICKER,
MORE PROFITABLE
BUILDING...

AIR-JET
COMPLETE, PACKAGED FIREPLACE
Now even low priced homes can have a fireplace because Air-Jet costs ½ to ⅔ less than a conventional fireplace of like size. Has a 30” firebox and auxiliary heating circuit and is designed for zero clearance on all sides. Nothing else to buy...build...or add.

AND
AIR-JET
PACKAGED CHIMNEYS
Light in weight (less than 100 lbs.) can be installed in 1 hour! Needs no cement...no special tools. UL approved for use with oil, coal, wood or gas fuels and 25 pounds per square foot wind load. Special draft top guards against snow, rain and down-drafts. 3 chimney top models and 3 smoke pipe sizes to choose from.

A few distributorships available. For further information write to:

GENERAL PRODUCTS COMPANY INC.
FREDERICKSBURG 4, VIRGINIA

remodeling tips for that

The low pitch of the main roof was very much in the modern mode anyway. So the builders—Henry and George Bertch of South Pasadena, California—made the most of it in giving this bungalow a fresh make-up.

Main steps were the removal of the front porch, blanking out the small window at left, cutting back overhang from three feet to 21 inches, covering the whole facade with 12-inch A-grade redwood over 15 pound felt. Corbels were also removed. The new double wall brick planter and the overhead eggcrater and porch shelter nicely set off the big window.

Original windows were in-swinging casements. New sash was installed, mounted with roto operators for new out-swinging casements. Frames are the originals. Muntins were removed from the window at left of entrance.

The problem of the heavy wood and brick effect of the Mission-style living room was solved by stripping the face of the fireplace and putting in a stud wall where the offset occurred. Wall is of 1x10 inch Douglas fir. A raised hearth was built on top of the original hearth.

In order to avoid taking out the original ceiling beams in the living room, Bertch furred the ceiling using 2x4 joists 16-inch o.c. and tied them to the existing beams to reduce span. The ceiling was covered with 16x32-inch Firtex insulation boards.

The job cost the owner about $2,500.
ANSWERS
to these questions take the guesswork
out of SLIDING DOOR INSTALLATIONS

Q What are the advantages of center
mounting and 8 wheels per door?
A Hangers that are center mounted
support door weight in a true vertical
position, relieving stress or pressure
against door guides or frame. Hangers
providing eight nylon wheels per door
distribute weight more evenly over
track, providing extremely quiet, ef-
fertless operation. Only custom
Kennatrack offers these two highly
desirable features.

Q When should adjustable hangers
be used?
A Whenever headroom is sufficient.
Vertical adjustment permits easy
alignment of door to jamb. Read-
justments are easy to make if settling
and other changes occur. Kennatrack
also offers non-adjustable hangers of
exclusive design for use where extra
strength and neatness are desired, or
where headroom is limited to one
inch. This type is highly desirable
where plywood doors are used.

Q Why should a steel frame be used
for all pocket door installations?
A To avoid costly as well as frequent
troubles caused by warping of wood
frames. An exclusive development of
Kennatrack Corporation, "Kenna-
frame" is the steel frame that
completely eliminates this danger.
Easy to install, and with center
mounted 8-wheel hangers for smooth-
est performance, "Kennaframe" is
widely used for 2 x 4 wall installa-
tions. Any type of wall material or
trim may be applied. Doors can't
possibly bind if this prefabricated
steel frame is used.

Q Can millwork be eliminated?
A Using Kennatrack hardware, the
need for millwork has been eliminated
for practically all installations. Com-
plete packaged sets include versatile
molded nylon guides that eliminate
need of saw kerfs for doors of
all thicknesses.

Q How can I be sure the right track
is used?
A Selection of the right track for a
specific installation is highly impor-
tant. Reference to the Kennatrack
Buyer's Guide takes all the guess-
Southern Hotel Gets Triple Bonus
Using Certain-teed Firestop Bestwall®

Guests at the Piedmont are safe as well as cool, thanks to the air-conditioning installation. Over 25,000 square feet of Firestop Bestwall Gypsum Wallboard was specified for all corridor ceilings—covering the air-conditioning ducts—because of its great resistance to fire, ease of application, and because it meant less interference with hotel operation during remodeling.

An interesting construction feature: Bestwall panels are left loose in the steel channels (see cut) to give easy access to air-conditioning ducts and to telephone and other wires.

Certain-teed Firestop Bestwall was the first gypsum wallboard to meet Code requirements for one-hour fire resistance over both wood and steel framing in single layer application. Firestop is much more fire resistant than ordinary gypsum wallboard. And it’s stronger and more resistant to sound transmission.

Builders get a bonus from Firestop too. It’s light—cuts cleanly—and is quick and easy to apply, making for a neat remodeling job.

Certain-teed Firestop Bestwall is manufactured under Underwriters' Laboratories service and has been accepted by building officials in more than 200 cities. Recommend it for both new construction and remodeling...for any type commercial, institutional or residential building. Whenever one-hour fire resistance is required, Firestop Bestwall is one of the most effective building materials that can be used. Ask your Certain-teed representative for complete information, or write direct now.
Areas in transition from residential to industrial...

Large-diameter Clay Pipe is solving the sewage problems of this Detroit neighborhood, which is rapidly developing into an industrial center. The project was financed by the McLouth Steel Corp. and designed by the Engineering Department of the City of Detroit. City Engineer George Thompson and Sanitary Engineer Clyde Palmer directed the planning. George A. Odium is the contractor.

Clay Pipe is the safe pipe for sewerage lines that carry both residential and industrial wastes. Clay Pipe permits unlimited industrial expansion—because it handles any concentration of corrosive chemicals that future growth may bring. It protects residents from danger of epidemics and disease...is unaffected by acids and gases formed from any mixture of wastes in the line. It never wears out. The manufacturers of Vitrified Clay Pipe cooperate to make this fine product even better through research and testing. You can be sure you're getting the latest and best when you use Vitrified Clay Pipe.
Tests like these insure the quality of Kentile asphalt tile

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

Specifications and Technical Data

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

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

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

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

Approximate Installed Cost

The exact cost of a Kentile Floor varies according to size of area, condition of underfloor and colors chosen. For an accurate, dependable estimate, contact the Kentile Flooring Contractor listed under FLOORS in your Classified Phone Directory. He'll prove to you that Kentile is one of the most economical floors available today.

Kentile's color groupings range from Group "A," the darkest solid colors...to Group "D," the lightest marbleized colors. Special Kentile is available in Regular and Deluxe Colors.

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

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

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

KENTILE • SPECIAL KENTILE • KENCORK • KENRUBBER • KENFLEX • KENFLOR

KENTILE, INC., 88 SECOND AVENUE, BROOKLYN 15, NEW YORK • 880 FIFTH AVENUE, NEW YORK 1, NEW YORK • 705 ARCHITECTS BUILDING, 37TH AND BROADWAY, PHILADELPHIA 2, PENNSYLVANIA • 1211 HBC BUILDING, CLEVELAND 14, OHIO • 800 PEACHTREE STREET N.E., ATLANTA 9, GEORGIA 202 WALNUT STREET, KANSAS CITY 6, MISSOURI • 4832 BO, KOLIN AVENUE, CHICAGO 32, ILLINOIS • 4801 SANTA FE AVENUE, LOS ANGELES 9, CALIFORNIA

KENTILE, INC., 88 SECOND AVENUE, BROOKLYN 15, NEW YORK • 880 FIFTH AVENUE, NEW YORK 1, NEW YORK • 705 ARCHITECTS BUILDING, 37TH AND BROADWAY, PHILADELPHIA 2, PENNSYLVANIA • 1211 HBC BUILDING, CLEVELAND 14, OHIO • 800 PEACHTREE STREET N.E., ATLANTA 9, GEORGIA 202 WALNUT STREET, KANSAS CITY 6, MISSOURI • 4832 BO, KOLIN AVENUE, CHICAGO 32, ILLINOIS • 4801 SANTA FE AVENUE, LOS ANGELES 9, CALIFORNIA

202 AMERICAN BUILDER
It's the "Success Story" of the year

 Builders who have installed Craftwall have an outstanding story to tell. It's a story that's short . . . but interesting. Builders like Craftwall . . . workmen like Craftwall . . . buyers like Craftwall. In fact, many builders say that nothing can add sales appeal to interiors like Craftwall. One look at Craftwall reveals its sales appeal:

1. Craftwall is different.
2. It is highly decorative.
3. It is durably factory finished.
4. It's easy to install . . . Hardwood trim is available to complete the job.
5. It offers a wide variety of design opportunities.
6. It's promoted by national advertising.

Talk to your Roddisraft dealer and get first-hand information on ways builders are profiting with Craftwall. Get all the facts . . . then get Craftwall for your first installation. You'll find this the start of Chapter One in your own Craftwall success story.

Roddiscraft
RODDIS PLYWOOD CORPORATION
Marshfield, Wisconsin

Warehouses in principal cities. Consult your classified directory.

RODDISRAFT, RODDIS PLYWOOD CORP.
Dept. AB-1054, Marshfield, Wis.
Please send me complete information about Craftwall, the new pre-finished hardwood paneling.

NAME
ADDRESS (please print)
CITY STATE

OCTOBER 1954
When it comes to advanced kitchens

Survey after survey reveals these two facts about kitchen-conscious women: (1) No kitchen is ever too "advanced" for them. (2) Like a man studying a can opener, they are enthralled by surprise features. When you put a new automatic Gas range in the kitchen, you start with a number of such surprise features: with a clock control, a timer and automatic lighting throughout. But you can offer your prospects even more... such as a built-in griddle... a separate high broiler... a staggered range top. Of course there's no question about how well the range works; every woman knows the advantages of Gas cooking. When you add an automatic Gas refrigerator, you can get another wonderful surprise feature to help you sell more houses - an automatic icemaker that feeds non-stick cubes into a basket. No two ways about it, Gas appliances are really advanced.
...nothing makes as much sense as Gas

This New Freedom Gas Kitchen* features an **RCA Estate** automatic Gas range made to “CP” standards by the **RCA Estate Appliance Corporation**.

Cabinets by **Mutschler Bros.**

The **Servel** automatic Gas refrigerator shown (with copper-finish top) is completely silent, has no moving parts to wear, offers the longest warranty in the business... a full 10 years.

---

**Caloric** automatic Gas clothes dryer and **A. O. Smith Permaglas** automatic Gas water-heater.

---

**Every advanced home** deserves Gas in the laundry. Actually, you should consider an automatic Gas water-heater as part of a laundry. Although a water-heater feeds the whole house, it’s the automatic washer that really makes a Gas heater essential. For Gas delivers tankful after tankful of hot water 3 times faster than any other all automatic fuel. Yet it costs less to buy a Gas heater, less to install it and less to use it. Much the same advantages—economy and speed of operation—apply to the Gas clothes dryer. In fact, professional launderettes prefer Gas 30-1—a striking tribute to its superiority. What could make more sense than Gas in any home?

**AMERICAN GAS ASSOCIATION**

Your local Gas company will be happy to work with you on any problem.

---

**Only Gas**

*Reg. A.G.A.

**GAS**—the modern fuel for automatic cooking... refrigeration... water-heating...

... house-heating... air-conditioning... clothes-drying... incineration.

**OCTOBER 1954**
Another PAINE first

"SHOW-HOUSE" selects Paine REZO doors

for full color spreads in

- SATURDAY EVENING POST
  September 11 Edition
- LIVING FOR YOUNG HOMEMAKERS
  October Edition
- HOUSE BEAUTIFUL'S MAINTENANCE
  and BUILDING MANUAL
  (Fall and Winter Edition)

5,418,613 magazine subscribers... over 10,000,000 readers... will see Rezo doors featured and recommended by one of America's top authorities on home planning.

Here's another "first" for Paine — Rezo doors selected and specified all through the SHOW-HOUSE model home. Dramatically presented in full color close-ups in three of the nation's leading magazines... to pre-sell your customers on Rezo's distinctive beauty and unrivalled quality.

You can't offer your customers a better door than Rezo — America's finest hollow core flush door. Proven by nearly 7,000,000 installations... backed by over a century of millwork craftsmanship.

For full details, see your jobber or write:

PAINE LUMBER COMPANY, LTD.
ESTABLISHED 1852 • OSHKOSH, WIS.
Star drilling in concrete for installation of electrical conduit and equipment. Also for breaking through walls and floors for duct work, pipe and fuel line installations.

See where B&D Hammers save you time and money!

New Book shows how!

From drilling in concrete to holing-through walls, B&D Electric Hammers get more jobs done faster, better, cheaper! No other Hammer has so many features for comfort and safety. No other Hammer gives you so much working power in so little weight at such a low price! Get all the facts! Get this great B&D Hammer Handbook FREE! Page after page of on-the-job photos show how you can save time, cut costs on dozens of jobs in your own operation! Write to: THE BLACK & DeCKER Mfg. Co., Dept. H663, Towson 4, Maryland. Meanwhile, ask your B&D distributor for a demonstration!
Builders are confidently using edge-glued lumber outside and in. The supply of desirable wide lumber items has been broadened by Weyerhaeuser 4-Square Glued-up Lumber. With its proved performance record, more and more builders are specifying "glued-up and/or regular stock."

For exterior uses, edge-glued lumber serves as durably as regular stock. Its performance has proved it to be equal to, and interchangeable with, regular stock in species, grades, patterns and uses. It is available in bungalow siding, finish, stepping, selects and wide common items.

Edge-glued lumber is equally effective for interior and industrial uses. The light color of the glue line in Weyerhaeuser 4-Square Glued-up Lumber makes it ideal for natural as well as for enameled and painted finishes. Industrial clears and other grades are available in widths up to 30".

The edge-gluing of lumber for exterior and interior uses is a proved Weyerhaeuser development—one which has been enthusiastically received by the building industry. See it at the yard of your local Weyerhaeuser 4-Square Lumber Dealer, or write for the book on glued-up lumber.

STANDING of Douglas Fir and West Coast Hemlock is available on an "and/or" basis.
WEYERHAEUSER 4-Square Glued-up bungalow siding of Western Red Cedar is fully as durable as regular siding of the same species.

WIDE glued-up lumber in Western Pines and Associated Species is fully as strong as regular stock.

GLUED-UP lumber takes natural finishes very well, and is ideal for a variety of interior uses such as cabinets.

FINISH of West Coast Hemlock and Douglas Fir is interchangeable with regular stock.

THIS BOOK describes glued-up lumber, lists the items available, and summarizes test results. Copies are available without charge.
"We use wallpaper throughout most of our homes," reports the Joan-Mac Corporation, "since it is less expensive to use and provides our homes with an atmosphere of luxury and individuality. As a matter of fact, we can put up wallpaper in less time than any other wall covering — and the men prefer it because only one application is needed."

The Joan-Mac Corporation this year has started over 100 medium priced brick homes on Long Island's south shore. They have found through experience that wallpapered homes have the warmth and individuality to assure a quick sale and higher profit.
In a buyer's market
your customer decides...

Are you influencing his decision?

The customer in today's competitive home building market isn't rushing his decision to buy. He is looking for the home that gives him the most value for his investment—something better than the average.

Successful builders everywhere are offering their customers "extras" that give their homes a unique appearance. They have found that Gate City Wood Awning Windows mean increased customer appeal—here's why!

Versatile, Gate City Windows can be used in almost limitless combinations. Their smart design and clean horizontal lines give any dwelling a distinct, individual appearance. And they provide the home owner with more advantages for year 'round comfort.

Fill out and send in the attached coupon TODAY, for full information on how Gate City Windows influence more sales!

GATE CITY SASH & DOOR CO., Dept. AB-10
P.O. Box 901, Fort Lauderdale, Fla.

Gentlemen: Please send complete information on Gate City Wood Awning Windows.

Name ___________________________
Address __________________________
City ___________________________ Zone _______ State ________

October 1954
GET THE "Inside" STORY ON NATIONALS!

See How Much More You Can Offer as a NATIONAL HOMES BUILDER-DEALER

Inside as well as outside, National homes have what it takes to sell houses today. Not only are the exteriors superbly designed by a famous architect; the interiors are spacious, convenient, appealing in every detail . . . as these photos prove.

Even more important to you is the "inside story" of how National Homes builder-dealers benefit all along the line by buying a "house package" from one reliable source. You get the finest quality "brand name" materials, pre-assembled for quick erection. You operate with far less site labor; less overhead; less invested capital; no inventory. It pays to build Nationals! Write or wire for particulars. Sound financial resources required.

NATIONALS ENJOY HIGHEST PUBLIC ACCEPTANCE

Our continuous national advertising in LIFE and other leading magazines . . . beautiful full-color literature . . . unequalled support for our dealers at local level . . . plus the superior quality and lower cost of our product . . . all combine to make National homes first in popularity, first in sales. Cash in on this pre-sold market as a National Homes builder-dealer!

A step-saving National kitchen: everything streamlined!
Choose the floor that's NATURALLY beautiful!

BRUCE BLOCK

Perfect combination for modern homes!

No other floor can match Bruce Hardwood Blocks for an ideal combination of modern beauty, natural charm, and lifetime durability.

This patterned oak floor gives added style to even the most modern interior. Its interesting grain and rich coloring will never fade nor wear away.

Bruce Blocks are prefabricated for modern construction—can be laid in mastic over concrete or blind nailed over wood subfloors. The factory-applied “Scratch Test” Finish saves time and money on the job... eliminates guesswork as to how the finished floor will look and wear. (Blocks can also be purchased for on-the-job finishing.) See our catalog in Sweet's. Write for booklet.

E. L. BRUCE CO., MEMPHIS 1, TENN.
Now—polyester-glass fiber panels

with specific flame resistance

Now you can take full advantage of the decorative and structural advantages of polyester-glass fiber panels, even where code requirements call for a definite flame spread rating... by specifying panels made with HETRON.

Fire resistance “locked in”

Structural panels, sheets, and other shapes made with HETRON* are permanently self-extinguishing. Typical flame spread ratings of 75 or less (compared with 100 for red oak) by independent laboratory tests, place HETRON-based panels in a bracket equivalent to the BOCA classification of “slow-burning.”

Specific flame resistance is permanently, chemically locked in.

You can get HETRON-based panels and sheets from leading fabricators now.

They cost only a little more than panels and sheets made with ordinary resins. You can get them in a wide range of sizes, gauges, and colors—translucent or opaque.

For applications where ultraviolet exposure will be severe, we suggest you consult with your fabricator or with us.

We do not make the panels, but will gladly send you complete information on where to get them. Write also for technical specifications and flame spread data on HETRON.

*Trade Mark

From the Salt of the Earth

HOOKER ELECTROCHEMICAL COMPANY
17 UNION STREET, NIAGARA FALLS, N. Y.
NIAGARA FALLS • TACOMA • MONTAGUE, MICH. • NEW YORK • CHICAGO • LOS ANGELES
young builders
swap construction ideas—
here are twelve

A group of young home builders met in Topeka, Kansas, recently to discuss new construction techniques. Co-sponsored by *American Builder* and Topeka home builder Jack Sargent, it was the second such meeting held this year (see the June, 1954, issue for a report of the first meeting in Camden, New Jersey).

Of the many construction ideas exchanged at Topeka, twelve have been selected for this report. Many of the ideas and methods are so new they have not been approved as yet by government agencies for insured or guaranteed loans. However, conventional sources of mortgage money have accepted most of the ideas, according to the builders who developed them.

---

1—Use an air conditioner as a dehumidifier

An air conditioner will dry out slabs, crawl spaces or plaster through the dehumidification operation of the cooling system, advised James L. Hoyer, air conditioning engineer, Washington, D.C. Builders easily can convert a two- or three-ton unit into a transportable rig that can be moved from job to job as dehumidification problems arise.

(Continued on page 216)
"I located 8 buried survey stakes in less than an hour with my BERGER Convertible"

... says Joseph Valle, president, Joseph Valle Contracting Co., Yonkers, N.Y.

Watch a builder like Joseph Valle behind his Berger Convertible and you'll see why he says: "It's one of the first things on my jobs and practically the last to leave. I use it for checking existing site contours, staking out foundations, checking cuts and fills, laying out sanitary and storm drains—right up to establishing final grades. And it hasn't been down for repair in the two years I have it."

That's because the Berger is built for builders—designed to be consistently accurate, simple to set up for quick readings, easy to level up. The image you see through the 12", 24 power telescope with its coated optics is right side up. Rigid and sturdy—of brass and bronze construction—it takes the bumps in the field and stays on the job without time lost for repair.

Before buying a Convertible... Compare!

This table compares the Berger Convertible with the other two leading instruments—shows why so many more builders buy BERGER.

<table>
<thead>
<tr>
<th>BERGER Convertible</th>
<th>Convertible No. 1*</th>
<th>Convertible No. 2**</th>
</tr>
</thead>
<tbody>
<tr>
<td>TELESCOPE</td>
<td>24-26 power</td>
<td>24-26 power</td>
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<tr>
<td></td>
<td>34 mm. clear aperture</td>
<td>30 mm. clear aperture</td>
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<tr>
<td></td>
<td>bronze</td>
<td>fabricated</td>
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<td>vial sensitivity 60 sec.</td>
<td>vial sensitivity 90 sec.</td>
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<td>OPTICS</td>
<td>Coated</td>
<td>Coated</td>
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<td>FOOT PLATE</td>
<td>Brass</td>
<td>Aluminum</td>
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<td>Trivet integral</td>
<td>Trivet integral</td>
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<td></td>
<td>Brass</td>
<td>Trivet points separate</td>
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<td>HORIZONTAL CIRCLE</td>
<td>Forged Brass</td>
<td>Aluminum</td>
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<td>YOKE FRAME</td>
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<td>Brass</td>
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<td>TANGENT PIECE</td>
<td>Brass</td>
<td>Aluminum</td>
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<td></td>
<td>Integral with clamp</td>
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<tr>
<td>TELESCOPE CLAMP</td>
<td>Brass</td>
<td>Aluminum</td>
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<td>PLATE LEVEL</td>
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<td></td>
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<td>No</td>
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<tr>
<td>CASE</td>
<td>Mahogany transit case</td>
<td>Level type box</td>
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<tr>
<td>STRAP</td>
<td>Padded leather handle</td>
<td>Plain leather</td>
</tr>
<tr>
<td><strong>Rigidity of beam from Berger</strong></td>
<td><strong>Rigidity of beam from Berger</strong></td>
<td></td>
</tr>
</tbody>
</table>

Quick delivery—thanks to enlarged capacity
Price $219, complete with mahogany transit case, tripod, plumb bob, sun shade and instruction manual.

Write for literature on this and 12" Dumpy Level, Service Transit-Level. And ask about our Engineers' Transits and Levels.


THE BEST IN SIGHT IS
BERGER
ENGINEERING AND SURVEYING INSTRUMENTS... SINCE 1871

2—This slab saves $130, compared to crawl space
Using a trenched foundation and pouring the foundation and wall at one time is a cost saving operation for Jack Sargent. After the forms are stripped from the wall, plumbing, heating, insulation, and vapor barrier are installed and the slab is poured. Note the 4-inch wall above the trenched foundation, how easy it is to install the rigid insulation, and the slab-wall joint that will be hidden under the exterior wall.

3—Tongue and grooved post and beam framing
This is Sargent's latest construction framing method. Built-up columns of 2x4s have a 3/4-inch plywood spacer to bring them to proper thickness. The continuous 2x6 beam also has the 3/4-inch spacer. However, the spacer in the beam is allowed to hang below the beam. This 3/4-inch thick projection acts as a tongue and drops into the void between the built-up 4x4. Keying of the beam to the post adds strength to this type of construction, says Sargent.

(Continued on page 218)
employed to cut cooling costs in

Air Conditioned Village

Once sun heat gets into the air conditioned home, it is too late to do much about it. From then on, the cooling equipment has to work harder to handle the extra load. It makes sense, therefore, to intercept the sun's rays before they enter the house. And the easiest, cheapest way is with exterior shading devices at windows and open areas.

With these facts in mind, the National Association of Home Builders is using canvas sunshades as an important means of reducing heat gain in a number of its test homes in the Air Conditioned Research Village project in Austin, Texas. On south, east, and west exposures, canvas awnings are seen in a variety of different forms and in a dramatic array of colors.

By screening from 65 to 75% of the sun's rays, this heavy fabric is expected to cut electrical cooling bills substantially. Not only that, but the sun problem is solved both flexibly and economically. On east and west, canvas awnings are better than overhangs, because they can roll down low when needed and give complete protection for a fraction of the cost.

Remember, too, the same factors that aid in cooling a house with air conditioning will also make it a cooler, more livable house without air conditioning. So get acquainted with your local canvas goods manufacturer, listed in the yellow pages of your phone book. He'll gladly work with you in designing distinctive canvas installations to complement the particular styles of your houses.

See our catalog 18f/Ca in Sweet's Architectural File or write for a free copy. It contains original and practical ideas, plus helpful instructions for specifying canvas.

Canvas Awning Institute and National Cotton Council

[Image descriptions and additional content]
FEATURE-PACKED FAN

It's outstanding in every feature! You have never seen a fan like this—less watts—less money—less noise—but with a full 300 CFM performance.

Can be installed in wall or ceiling—requires no elbow for vertical discharge. And the modern high-style grille makes a striking installation in any room.

WRITE FOR COMPLETE INFORMATION

Trade-Wind Motorfans, Inc.
7755 Paramount Blvd., Dept. AB, Rivera, California

YOUNG BUILDERS SWAP IDEAS . . .

(Continued from page 216)

4—Fascia-gravel stop saves $30 per house

For 2 in 12 pitched roofs with 2x6 decking over large beams Sargent uses a bigger gravel stop which also doubles as the fascia. This technique eliminates the wood fascia and smaller gravel stop usually customary for this type of construction.

5—Metal grommet pull for sliding doors

Another Sargent innovation is the use of a simple brass grommet (designed for the canvas industry) as a pull when perforated hardboard sliding doors are used. The grommet adds an interesting touch and allows the doors to freely slide past one another.

6—Add sales appeal with carpeting in bedrooms

“We did it for very little more money,” said Chicagoan Bruce Bleitz. Wanting a contemporary look for the lower level recreation room in a tri-level, the Bleitz concern used post and beam with 2x6 d&m sheathing. The floor of the bedroom level directly above the recreation room was covered with 40-ounce padding and carpet for an additional $50.

(Continued on page 220)
Build all year with P&H Homes

Winter is just about as busy and profitable as summer for P & H builders. They build during the rough weather, and their sales prove that people buy P & H Homes in any weather.

This all-year operation for P & H builders not only means a steady profit report, but also a steady payroll, and easier scheduling of subs.

Here’s how it’s done: You put in your foundations in fall, before the ground freezes. Then, it’s just a matter of scheduling the P & H Home package shipments as you want them. The homes are under roof in a day, so your crews can work in practically any weather. There is no waste or spoilage, subs can go to work on schedule regardless of weather, and customers move in on the date promised.

And just a glance at the P & H Home plans and package specifications will show you how much more home you’ll be offering—winter or summer—in any price bracket from $6,000 to $20,000.

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P & H HOMES
HARNISCHFEGER CORPORATION
359 Spring St., Port Washington, Wisconsin
Phone: Port Washington 611

OCTOBER 1954
Use this glass block for lighter, brighter, easier-to-clean kitchens

What woman wouldn’t love a kitchen as cheery and bright as this one? What woman wouldn’t like a kitchen that’s flooded with daylight and easy to keep spic-and-span? You can build these desired selling features into the kitchens of your homes by including panels of Owens-Illinois Glass Block* No. 316.

Behind sink or kitchen counters they flood working surfaces with soft, diffused daylight yet keep the room shielded from view. Soil marks rub right off.

For facts about the many ways you can use glass block to advantage in your homes, write for the information you need to: Kimble Glass Company, subsidiary of Owens-Illinois, Dept. AB-10, Toledo 1, Ohio.

*Formerly known as INSULUX.

Owens-Illinois
General Offices 1 Toledo 1, Ohio

7—Simplified truss saves money
Builder Harold Sarshik of Camden, New Jersey, uses this truss. Larger structural members with a conventional ridge has ring connectors only at each end. The joint on the bottom chord is staggered to minimize plaster cracking. Sarshik says he saves $11 per truss, compared to hardware-type trusses.

8—Under eave finish for 17¢ per square foot
Sarshik also uses an under eave finish of plaster over 1/2-inch gypsum lath, eliminating unsightly joints. The plaster is trowelled to a rough sand finish, remains unpainted. According to Sarshik, such an application has withstood a summer and winter without cracking. plastering firms say the system is structurally sound if the plaster does not come in contact with water.

9—“We save with a one-pour slab”
Builder Ken Stowell of Wichita, Kansas, uses the “Cole” one-pour floating slab. The thick edge of the slab rests on gravel and thin portion floats on sand. Three continuous ¾-inch rods run the entire perimeter of the house. A ¾-inch steel stirrup is spaced every 24 inches for frame and 12 inches for masonry.
10—Stud driver saves $25 per house

“We save $25 per house by using our cartridge actuated driver,” stated Stowell. “We can save time and money by setting our walls after we tilt them in place.”

11—Stowell cuts framing costs

“We save 30 per cent on material and 11 per cent on framing lumber by using a 2 in 12 pitched roof on a 7-foot 3-inch exterior wall with 16-foot 2x8 rafters.” Rafters have a 34-inch overhang. The exterior wall plate height is determined by the size of the header and the 6-foot 8-inch door.

12—Air conditioning cost comparisons

The following chart, compiled by Hoyer, illustrates comparative costs between the popular types of residential air conditioning being installed in new houses today:

<table>
<thead>
<tr>
<th>General Type of Air Conditioning System</th>
<th>Total Installed Costs (above Heating System)</th>
<th>Operating Costs</th>
<th>Factory Warranty on Refrigeration System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A.C. System, 2 HP, water cooled, using city water in areas where permissible</td>
<td>$800 to $1200</td>
<td>Very High</td>
<td>1 to 5 years</td>
</tr>
<tr>
<td>2. A.C. System, 2 HP, water cooled, using water from well on property</td>
<td>$1000 to $1500</td>
<td>Medium</td>
<td>1 to 5 years</td>
</tr>
<tr>
<td>3. A.C. System, 2 HP, water cooled, using cooling towers for water conservation purposes</td>
<td>$1100 to $1500</td>
<td>Medium</td>
<td>1 to 5 years</td>
</tr>
<tr>
<td>4. A.C. System, 2 HP water cooled, using evaporated condenser for water conservation purposes</td>
<td>$1100 to $1500</td>
<td>Medium</td>
<td>1 to 5 years</td>
</tr>
<tr>
<td>5. A.C. System, 2 HP, air cooled, using no water</td>
<td>$800 to $1200</td>
<td>Medium</td>
<td>1 to 5 years</td>
</tr>
<tr>
<td>6. A.C. System, 1 HP, air cooled, using no water, utilizing zone control within the house</td>
<td>$500 to $650</td>
<td>Low</td>
<td>5 years</td>
</tr>
<tr>
<td>7. A.C. System, ½ HP and ½ HP multiple units, window sill type, installed in all major rooms of house*</td>
<td>$1300 to $1500</td>
<td>Medium**</td>
<td>5 years</td>
</tr>
</tbody>
</table>

* Not approved by FHA-VA for new construction.
**All units will not be operated simultaneously.

What prospective homeowner's eye wouldn't be caught with a "see through" wall as attractive as this one? You can build such a desired feature into your homes by including a panel of Owens-Illinois super clear Glass Block No. 370.

Glass Block panels are as practical as they are beautiful. They have the insulating efficiency of an 8-inch thick brick wall. They won't frost or sweat in winter . . . provide better insulation than a window with storm sash.

Give the homes you build the visible evidence of extra value that Owens-Illinois Glass Block* bring. For information or help with a specific problem, just write: Kimble Glass Company, subsidiary of Owens-Illinois, Dept.AB-10, Toledo 1, Ohio.

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Need supplies? Here, again, your American Distributor helps you—with a complete stock of American abrasives, scientifically made for top cutting speed and long life . . . also, American quality finishes for all floors.

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AMERICAN Performance Proved MACHINES . . . Nation-wide SERVICE

Extending along one wall and portion of another in the kitchen, this year ‘round planter is featured in a Leaburg, Oregon, house. Construction is simplified by projecting the entire planter box beyond the exterior striated plywood facing of the frame constructed house, as shown in the detail at right.

Exterior wall of the planter from grade to wood sill is laid up of one thickness of face brick with joints well raked. A six-inch-thick concrete footing under the wall extends to frost line. The 2x6 inch cap, which forms the sill, is covered with metal. This metal continues as a liner for the planter and also as a facing for the inside sill, which is placed at kitchen counter height.

Counters and fixtures are positioned against the inside face of the planter, with the backsplash of each providing a separation.

The portion of the planter from sill line to its top, which is at door height, is enclosed in glass set in aluminum frames. These frames are part of a standard store front unit and are placed to conform to the angle of pitch established by the projecting planter. The top face of this frame is flush with the exterior plywood.

In this house, with its wide projecting roof overhangs, outward extension of the planter is advantageous. A measure of sunlight at midday penetrates into the planter, and the angled glass enclosure helps to diffuse the sun’s rays.
NO. D-115 PLANTER BOX

SECTION

PLAN

DETAILS
Here's the case and what's in it for you!

The Stanley No. 83 Builder's Kit contains a carefully selected, tested and proved collection of time-saving, cost-cutting door hanging equipment for the modern carpenter. Built around the versatile Stanley Electric Router, starring here as a hinge mortiser, this kit has what it takes for up-to-date door hanging.

The same 7/8 h.p. motor that powers the router at 20,000 r.p.m. fits the GA142 plane attachment — a real work eater when it comes to fitting doors.

Other vital accessories included in this builder's kit are:
- Router base
- Template guide
- Straight and circular gauge
- Arbor
- Mortising bits (2)
- Grinding wheel
- Grinding arbor
- Cutter grinding attachment
- Door and jamb butt template
- Carrying case
- Plane cutter

Your dealer has Stanley No. 83 Builder's kit, or write Stanley Electric Tools, 400 Myrtle St., New Britain, Conn.

Here's Stanley's famous 241 hinge...

With round corners for use with electric mortisers. Check off the features that make this hinge the Standard of the World.

1. Flat button tips
2. Hole in the bottom for quick pin removal
3. Clean, accurate countersinking
4. Easily seated, non-rising, lubricated pin
5. Complete interchangeability of leaves
6. Smooth steel, toughened by cold rolling

Stanley Round Cornered Hinges are available in any size or finish desired, in plain joint or ball-bearing, either regular weight or extra heavy. Your dealer has them, or write for details to Stanley Hardware, 105 Lake St., New Britain, Conn.

REMEMBER THREE HINGES TO A DOOR
Bob Scarborough concentrates his activities in Haddonfield, New Jersey, highly favored suburban section conveniently near Philadelphia. Price tags on his homes have wide range; he features Republic Steel Kitchens.

"We design custom kitchens from stock units, at lower cost with Republic Steel Kitchens"

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Builder Scarborough was among the first to use Republic Steel Kitchens when they were introduced in the Philadelphia area. Today, he subscribes enthusiastically to the flexibility and wide range of the line that allows him to specify stock cabinets for any type and price home he happens to be building.

"We have been able to use stock units to obtain the most attractive custom kitchens at prices much below what on-the-job fabricating would cost—and considerably below what comparably quoted custom wood kitchens would cost. Our customers have been extremely pleased with the quiet operation of the drawers and the adjustable shelves in the wall cabinets."

Get the complete story on Republic Steel Kitchens from your distributor, or use the coupon below.
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Dura-seal
COMBINATION METAL WEATHERSTRIP AND SASH BALANCE

Now! Here's the complete story about the most advanced window equipment on the market! It's a new folder that gives all the facts on Zegers Dura-seal Combination Metal Weatherstrip and Sash Balance... how it provides 4 1/2 times better weather protection plus easy window operation. Read about Dura-seal's One-Piece Jamb Member that maintains a constant air seal and smooth opening and closing no matter how the sash may expand or contract... about "Si-vel" coated springs that assure silent operation. See actual scientific proof that Dura-seal provides the best weatherstripping. Write for this important folder today!

Zegers Incorporated
8096 South Chicago Ave.
Chicago 17, Illinois

Glass block often has real possibilities as a solution to the enclosure of difficult spaces in home planning. The details opposite, from a house in Phoenix, show glass block set as the outside wall of a long corridor, and used also to provide daylighting for the front entry and an inside breakfast nook.

The long hall, which serves the bedroom wing, is daylighted by floor-to-ceiling panels of 12-inch glass block set as the north wall. Two outside entrances in this wall lead onto a patio complete with swimming pool. Thus the glass block wall is not only functional but becomes an exterior architectural feature as well. It also makes possible the use of a planter flush with the floor and extending the full length of the hall—a feature which adds beauty and interest to an otherwise spatial monotony.

The front entrance wall combines pumice block and glass block in a strong design, the glass transmitting light into the entrance hall yet providing complete privacy. Breakfast nook uses partitions of translucent glass block as well as a glass block skylight.
Depend on Goldblatt for
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One source for everything you need!

THREE-IN-ONE DRY WALL FINISHING TOOL. A new, improved tool that's amazingly versatile! It shears, shears, finishes! Has 3 interchangeable and replaceable blades . . . made of very flexible, perfectly tempered spring steel. Each blade looks quickly, securely into the lightweight aluminum blade clamp by means of two small brass wing nuts. All blades can be used in reverse travel position (see small photo).

- No. TRIO—Complete with 3 Blades $5.95
- No. DWSB—Bowed Shearing Blade Only, 11-in. x 4-in. with a 3/32-in. concave curve $1.75
- No. DW8—Flat Blade Only, 6-in. x 8-in. $1.75

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- No. DWCT—Each $4.95

CURVED BLADE TROWEL: 12 x 41/2-in. Tempered Spring Steel Blade has a 3/32-in. concave bow—just the ticket for finishing dry wall seams—and perfect for those who prefer a "Trowel" type tool. The fine blade is permanently riveted to a lightweight aluminum shank. Handle shaped for comfort.

- No. DW34—Each $4.30

Write today for details on other money-saving items in the Goldblatt complete line of Dry Wall tools and equipment. Just a few of the many reasons you need for faster, easier and better work.

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Get ready to use these three outstandingly beautiful, eminently practical Malta Wood Window Units . . . to add that final custom-built touch of quality which means quicker, more certain sales to discriminating home-buyers!

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New . . . exciting . . . a truly modern multipurpose unit! Use them in stacks or groups to form intriguing combinations!

2. MALT-A-GLIDE
Extra-convenient, horizontally-sliding removable sash . . . ideal for ribbon windows . . . large picture areas or "light walls."

3. MALT-A-MATIC
Easy-operating, friction balanced removable sash . . . traditional double-hung reliability in handsome, modern styling!

These three great MALTA wood window units . . .

* Precision-milled from select western woods chemically treated for longer life.
* Jamb liners permit use in walls of varying thicknesses.
* Fully weatherstripped to seal out moisture and drafts.
* MALT-A-GLIDE and MALT-A-MATIC sash remove easily, quickly . . . ease painting or cleaning!

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TRIO, Complete with 3 Blades, $5.95 each
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AMERICAN BUILDER
Condensation control plays an important part in the design and construction of dwellings. Paint peeling, wood decay and the trapping of excessive moisture in walls and floors is often the result of poor or no control.

The Housing and Home Finance Agency, based on studies by the Forest Products Laboratory, quote the following: “A good vapor barrier should permit not more than one grain of water to pass through an area one foot square in one hour when the vapor pressure difference is calculated on the basis of one inch of mercury when tested by a dry method.” The HHFA further states that, “It should have sufficient mechanical strength to permit handling during erection without damage. It should also retain its vapor resistance qualities for the life of the building.”

Vapor barriers are manufactured in a number of forms: as a type applied to the face of insulation, a rigid board type, and as a flexible film.

The film type made of polyethylene claims protection against cracking or deterioration with age. It is soft and (Continued on page 230)
Radiant heat piping is shown laid over a moisture barrier film preparatory to the pouring of concrete

(Continued from page 229)

tear resistant. This type can be used both summer and winter and remains flexible in below zero weather. Its weight is negligible; 30,000 square inches of .001 film weighs only a pound. This light weight makes for easy handling with a corresponding reduction in labor costs. The material can be obtained up to 16 feet in width which can be handled with ease.

The polyethylene film is used as a vapor barrier under concrete slabs. For this purpose the .004 thickness is recommended. It is applied directly over a sub-grade that is smoothed to eliminate protrusions which would rupture the film. It is lapped not less than six inches with the top lap placed in the direction of the spreading of the concrete. The weight of the slab seals the joint.

Walls and ceilings exposed to unheated and unventilated areas should be vapor-proofed with .002 thickness to prevent the penetration of moisture; the barrier to be applied to the warm side of the construction. Joints to occur over solid backing with a minimum lap of three inches. Film is attached to studs with staples.

This material can also be used in several ways around the outside of foundation walls. After walls are finished and the forms removed the film is placed against the outside of the walls before backfilling. It can be placed on the inside of forms before pouring. In this way it is used as a form liner which permits slow curing of the concrete while allowing early removal of the forms. Care should be used in not puncturing the material. When the liner is used it is unnecessary to grease or shellac the forms.

Its other uses include adaptability as a protective covering for machinery, cement, steel, stock piles of lumber, etc. It can also be cut and placed over openings as temporary protection during inclement weather.

Photos courtesy The Visking Corporation

Vapor barrier stapled in place at ceiling line. Staples with 1/4 to 3/8-inch legs should be used at 6-inch centers. Film should be stretched fairly tight across the studding.
Vikon research has done it again! Now you can have the finest enameled steel tile possible. A new coating, developed in the Vikon laboratories, is now applied to steel tile to provide complete protection against corrosion, particularly at the edges of the tile. This coating also provides an ideal base for the baked enamel surface—a base which actually improves the enamel coatings' resistance to household chemicals. 26 beautiful decorator colors. Write today for complete information.

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Enameled-Chromatized Steel • Enameled Aluminum
Stainless-Steel • Copper Tile • Plastic Tile • Mastic • Accessories
Matching Electric Receptacle and Switch Plates

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

DEALER DISTRIBUTOR CONTRACTOR ARCHITECT

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Here's a proposition that makes sense . . . and saves dollars. Truscon Interior Steel Doors and Frames can cut your costs. First, they are designed and built to compete in cost with doors of any other material. They offer all the economies of mass production. And, they can be completely installed in less than 1/3 the time usually required to fit and hang conventional doors.

Both swing and sliding steel doors offer flush modern beauty. They are ready for painting to match room decorations. They are dimensionally stable under all weather conditions for perfect fit and permanently trouble-free operation.

Sliding Steel Closet Doors are a great home-selling feature. Women like the extra room floor space they provide, the improved closet accessibility, the greater freedom for furniture arrangement. Useful as room dividers, too.

Truscon door leaves are designed for use in either right hand or left hand position, opening in or out. Door leaves are effectively sound-deadened. Frames are available for right hand or left hand opening. Frames are shipped knocked down for quick assembly and are adapted to practically every type of wall construction. All standard door opening sizes. Most popular sizes ready for prompt shipment from Truscon warehouse stocks. More facts, details, and dimensions in Sweet's; or write Truscon.
dark, reddish stains—

I used a very good grade of insulating sheathing under the best grade of 10-inch cedar lap siding available. After the prime coat of paint was applied, dark reddish stains have come through the paint. Can you tell me what has caused this condition and what you would advise to stop the condition? The house has not been occupied as yet and no dampness has existed within.

J. M. K., Albion, Ind.

Western red cedar is one of the species most prized for siding use because it is classed as "durable" and because it holds paint well. It is durable because of the minerals in the wood. These minerals can be leached from the surface of the wood by water and, because of their color, will stain a painted surface. For this reason, the stains that you speak of are most likely a result of moisture from some source.

As your letter was written in August, indicating that you were building during the summer months, it is possible that condensation has occurred on a surface in contact with the back of the siding. This possibility is based on the fact that warm air will contain more moisture than cold air. If the warm humid summer air comes in contact with a hard, cool surface, moisture will condense from the air. This is a supposition, of course, and is deduced from the fact that Western red cedar is one of the finest insulating materials and would reduce the temperature of any material behind it.

If this material were non-absorbent or, in other words, impervious to moisture, drops of moisture could form on its surface. For greatest ease in removing the stains, some detergent should be added to the water and a good stiff brush used for rubbing.

West Coast Lumbermen's Association

how to build a concrete roof!

I have been asked to put a flat roof on an existing building 20 feet 8 inches by 16 feet 8 inches. The walls of the building are constructed of concrete blocks. Since the building contains expensive equipment and the building adjacent to it is a frame one, the owner wants the fireproof protection of a poured concrete roof.

How can I construct a cheap, but well-built roof for this building. How much steel should I use and how thick should the slab be, figuring for a very light snow load?

I have some forms made of 2x4x2½ inch sheathing that is 2 feet wide which I would like to use. However if there is a cheaper method, than the use of my forms, I would appreciate hearing of it.

R. L., Connell, Wash.

GOT a problem you haven’t solved? Can’t solve? Haven’t the time to solve? Have you solved a problem with an answer you aren’t sure of? Are you doing some particular job—big or little—in a way that you think might be improved?

Then "ASK THE EXPERTS"—a group of industry authorities—experts in their fields. They'll give you the answer.

Address your questions to: "Ask The Experts," American Builder, 79 West Monroe St., Chicago 3, III.

As many questions and answers as space permits will be published monthly in American Builder, under the head—"Ask The Experts."
ask the EXPERTS

try a dehumidifier!

I have my office in the basement of my home. It gets so damp that I cannot open my desk drawers. The basement floor is 4 feet below grade. The foundation is drain tiled and the sand trap is dry at all times. How can I eliminate this dampness?


The dampness does not, apparently, come from any water condition in reference to foundation construction. The condition is probably caused because windows are opened in the summer allowing warm air to come into contact with the cool air of the basement, resulting in condensation of moisture.

Keep windows closed, if possible. Install a fan to circulate air, but if this is not satisfactory, investigate some of the new dehumidifiers that are on the market.

wants slab over basement, radiant heat, non-bearing walls

I was asked to design a floor slab that would include radiant heating for a house with a basement. The slab is to be 40 feet by 40 feet and is to accommodate only non-bearing partition walls.

Will you kindly suggest an economical way of doing it? Cost is an important factor.

M. O., Grosse Ile, Mich.

The drawings shown indicate one solution to your problem. You do not indicate whether the house is to be a one-story or two-story. We are assuming here that it is to be a one-story house. Therefore, you will find a plan for the placement of one column in the basement and a grid of reinforced concrete beams to support a concrete slab. Design for the slab and the reinforcing required is also shown.

Since non-bearing walls are to be used, you will find a truss designed for a span of 40 feet. Trusses are to be spaced two feet on centers.

K. Roderick O'Neal & Assoc.
“You Just Can’t Beat Milwaukee
FOR SMOOTH, High Speed EFFORTLESS SAWING”

Says... Ray A. Anderson
President, Master Builders’ Ass’n. of Milwaukee County

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Model 650
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With Steel Carrying Case . . . $74.50

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favorite on our jobs. The Model 650 has what it takes
to stand up under continuous heavy-duty use. Its
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at lower cost, and with more profit per job.”

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lubricated . . . One-piece rigid steel shoe . . . Telescoping
and automatically retracted blade-guard . . . Ball and roller
bearings throughout . . . Clear-view line sight, Sawdust-
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OCTOBER 1954
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... says builder PETER DOHR

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ask the EXPERTS

roof framing problem

My question deals with the framing of a roof. I am to build an addition to a building which has a hip roof. The new addition will have a hip roof also. In planning for the framing of the new roof in relation to the original one, I decided upon two possible solutions. Which of the two do you think is the best as to strength, cost and length of time necessary for construction?

H. W., Maywood, Ill.

Of the two methods, the diagram shown at "A" is the best way to frame the addition to the existing building. The addition is shown as AXBCD. One word of caution, however—the rafter AO should be doubled and it must be a continuous piece.

K. Roderick O'Neal & Assoc.

plans for a cupola

We have a garage for which we must build a cupola. Can you tell me where I can obtain plans for a cupola to be placed on a garage 22 feet by 22 feet?

A. H. B., Rumford, Me.

See the February, 1954, issue of the American Builder. On page 77 of that issue, you will find a drawing and pictures of a cupola, which will no doubt fulfill your requirements for a garage of the size you plan to build.

AMERICAN BUILDER
Marlite's 25th year of service to dealers, builders, architects, and their customers begins October 7. From the original prefinished tile pattern created in 1930, Marlite's line has grown to provide a wall and ceiling panel for every room in every building.

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ask the EXPERTS

furr before you plaster!

I am to build a cavity wall of 4-inch brick, 4-inch block and 1 1/2 inches air space between. Can I plaster directly to the block wall?

J. V. A., Syracuse, N. Y.

When you build a cavity wall, it becomes necessary to have metal ties at regular intervals to hold the two wythes together. These metal ties conduct moisture. In addition, it becomes necessary to be very careful in setting up the wythes so that mortar and joints are finished off clean in the air space, for an accumulation of mortar between wythes can conduct moisture as well. To not run into difficulty, use 1x2 furring strips 16 inches on center on the inside face of all outside walls.

trouble with termites

Our problem is the prevention of termites in a brick-veneer slab-floor home. As we understand it, termites enter the structure between the brick and the edge of the slab and eat into the bottom plates and on up the studs. Is there a positive or almost positive way to prevent termite trouble?

J. H. H., Kilgore, Texas

On an existing house, the standard method used to eliminate termite trouble is to drill holes with a power drill. Then force chemical under pressure into the holes to reach as much of the slab area as possible. Drill small holes through the mortar joints too so air space can be serviced. Do this annually.

In new construction, ground should be thoroughly poisoned before slab is poured. All plates, stud- ding, screeds should be surface treated to a height of four feet. If this treatment is furnished by an established termite control operator, he will offer a five-year maintenance contract. Contact the National Pest Control Association for names of members who operate in your area.

Hill-Smith Termite Control Co., Inc.

Renew your subscription today!
People Want Basements
They can Use!

This modern entry provides direct easy access to outdoors

The new Service-way gives the homeowner full use of his basement. Makes it easy to store lawnmowers, bicycles, storm windows. The extra-wide opening gives plenty of clearance for freezers, ping-pong tables, bulky garden or shop tools. Provides a quick short cut from laundry to outdoors... eliminates tracking through the house by meter readers and repairmen.

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The Service-way is made of heavy-gauge steel with special reinforcing for greater rigidity. The single-piece door is double flanged to keep out rain, snow and wind. Slide bolts lock securely from inside. No wood to rot, no hardware to break. The Service-way will last as long as the house itself.

Comes fully assembled, ready to install. Made by the makers of the famous Heatilator Fireplace. Write for folder and specifications: Heatilator, Inc., 8610 E. Brighton Ave., Syracuse 5, N.Y.

Service-way
HEATILATOR®

Another First for

This modern entry provides direct easy access to outdoors

The springs of the Silent Glide Sash Balance operate in an aluminum tube that's lined with heavy rayon velour. This new, quiet balance is combined with Triple Seal's famous 1-piece metal jamb covers that give complete seal against the weather, yet permit windows to move up and down at a touch... quietly!

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Everything needed for one window comes in one package. There's no on-the-job material loss. Triple Seal Silent Glide Sash Balances and Metal Weatherstripping can be applied easier because all fastening points are clearly marked. The tough, aluminum tube that houses the spring balance resists construction damage. No replacement loss before the job is finished!

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The Weatherproof Products Corp., Waldo Sta. P. O. Box 8498, Kansas City, Mo.

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OCTOBER 1954
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Ask about the utmost in combination sash balance and weatherstrip—THE CENTRAL SASH BALANCE—smooth, trouble-free, tight and economical.

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Cost $223.56

Symons Forms can be erected and stripped faster, are safer, require a minimum amount of waling and bracing, and produce better looking walls.

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<td>Total</td>
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Take advantage of Symons Engineering and Sales Service. Send in the plans for your next job and get complete layout and cost sheet which will show the number of standard panels your job requires, as well as the number and size fillers and corner pieces needed, plus all form hardware necessary. Our Catalog F-9 will also be sent upon request. Symons Clamp & Mfg. Co., 4201 Diversey Avenue, Dept. J-4, Chicago 39, Illinois.

stair riser is invisible clothes chute

Convert one stair riser into a clothes chute. Choose the riser for the chute which is most convenient for use. Perhaps the second riser from the bottom step would be most practical. Construct the chute as shown in the drawing with the riser swinging inward upon spring hinges so that it will close automatically when the chute is released.

-A. N. Nelson, Kansas City, Mo.

American Builder
You can fill right now

When construction is completed on one job, you want to get started on another as quickly as possible. But you want to leave behind a neat, clean landscape to attract buyers. Here's a low cost way to do both! First, send your men and heavy equipment on to the next job. Then put one man to work with the Ford Tractor and...

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Quickly and easily this team will lift and carry fill wherever needed. At the nudge of a lever you can load, lift and dump 1000 pounds. Because its nine cubic foot bucket is controlled by twin hydraulic cylinders, you get quick, positive action. Ford Tractor maneuverability pays off in quicker turns at lot lines and faster work next to foundations.

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When grading is finished, you can speed down the road on the rubber-tired Ford Tractor. You can soon be at your next site, ready to handle dozens of jobs that are too big for hand labor, yet too small to justify the use of heavier equipment. To find out about all the ways you can profit from Ford Tractor power, see your nearby Ford Tractor and Equipment Dealer or write to the address below.

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Birmingham, Michigan
TUFF-BOND No. 7 is a new and different synthetic rubber base, waterproof adhesive which builders have found ideal (and a great money-saver) for repairing damaged Sisalkraft. It is also useful for the bonding of wood, metal, light texture fabrics, paper and decorative plastics, when the edges are held down by metal mouldings. Easy to use... just spread over both the cleaned surfaces to be bonded, either with brush or finely notched trowel, and permit to dry until it loses practically all tack. Then press together and roll with hand roller. That’s all. It’s stuck for good!

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how would you do it?

ideas for the man on the job

PLUMB CUT

JACK RAFTER CROSS CUT

S Q U A R E C U T

HIP CUT MARK ONLY

Cut rafters without using bevel or square

Use this template to cut rafters without the use of a bevel or a square on the job. Two pieces of wood are needed to make the template.

Secure a piece of material one-inch thick and as wide as the rafters to be cut. This piece of material (board no. 1) should be longer than the eave overhang. As shown in the illustration, cut plumb cuts at each end of board no. 1 and check out for the wall plate. By marking with the use of the template at each end of the rafter, only the length is required.

The second piece of material (board no. 2) should be wide enough to accommodate two thicknesses of rafter plus the one-inch board (board no. 1) to be nailed to the center. Cut one end of board no. 2 square. Cut cross bevels of jack rafters on the other end at the point of intersection of the two boards. Mark the plumb cut of hip on board no. 2 with a fine saw. Cutting rafters according to the cross bevels will give the right and left cut of jack or creeper rafters and the plumb cut combined.

The use of this template, plus a simple sketch of the roof and a knowledge of the lengths of the rafters required, is all that is necessary to do a good job. One template will do many jobs provided that the same pitch of the roof and the same length of overhang is adopted. Each new pitch used would, of course, require a different template.—A. E. Higgs, Benton Harbor, Mich.

plaster on subfloors?

clean them this way

When you get ready to plaster a new house, paint the subfloor with old crank case motor oil. Any plaster which is dropped on the floor will be easy to clean up.—C. L. Corvin, Wytheville, Va.
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to tighten joints in hardwood flooring

Hardwood flooring is sometimes poorly milled so that tongues and grooves do not fit properly. The practice of hammering on the tongue flattens it so that a perfect fit of tongue and groove is difficult to achieve.

To tighten joints in hardwood flooring so as to avoid these problems, take a piece of 1x8 and place it on the floor at right angles to the flooring. Cut a short piece of hardwood flooring two feet or less. Place this at right angles to the flooring also. Block the 1x8 against the baseboard shoe so that the short piece of flooring and the 1x8 are at an angle in reference to each other.

Step on the point where the two pieces meet. This will force flooring to join. After several courses have been laid, place a softwood 2x4 against flooring and strike with a sledge hammer.—I. Perry, Cambridge, N. Y.

to make reinforced steel columns—

Drill four holes in two pieces of plywood of desired size. Space the holes to hold the reinforcing rods at the desired distances apart. Nail one of the pieces of plywood to the sawhorse. Place the ends of the steel rods in the holes of the plywood attached to the sawhorse. Place the other ends of the steel rods on a second sawhorse.

Place steel hoops over the steel rods. Then place the second piece of plywood over the loose ends of the steel rods to hold them rigid and to space them properly. The hoops may now be spaced and tied. After the hoops are tied, remove the steel reinforcing from its plywood jigs. The reinforcing is ready for use.—W. W. Howe, Longview, Wash.

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.
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Opens windows up to 40 lbs. smoothly, noiselessly with minimum effort. For any glazing, including double glazing, up to 1". Finger-tip control operator. Silent, long-wearing nylon glides. Hinging mechanism completely concealed in closed position. Eliminates all problems of wall thickness and trim. Vent can be fully weather-stripped. Exposed operator in Antique Bronze (enamel).

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Baseboard elements of 3/4-inch copper tubes with 2 1/4 x 3 1/2-inch aluminum fins bonded to them afford higher forced circulation hot water rating.


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The Master Builders Co., Dept. AB, Attn. of V. S. Andrews, 7016 Euclid Ave., Cleveland 3, Ohio.

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dual expansion anchors have wide builder application
Dual expansion anchor resists corrosion, has gigantic gripping power and withstands shock and vibration, its makers say. Anchors will not slip, lose grip or shear; can be used at any depth of hole and made to hold at any point, even where hole is drilled too deep or too wide. Made in all sizes to fit standard machine screws, both round or flat head types. Wyem Products Co., Inc., Dept. AB, Attn. of A. Yalen, 2292 S. Taylor Road, Cleveland 18, Ohio.

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Materials handling crane converts any standard truck into a dual-purpose vehicle. Unit will lift up to 5,000 pounds, and spot it anywhere within desired radius of 280 degrees. Unit requires only 18 inches of space behind truck cab.
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Each new product and catalog item also carries complete data so that you can write direct to the manufacturer for more information.

weatherstrip sets contain complete door equipment
Each carton of these door weatherstrip sets contains complete equipment for weatherstripping an entire door. Sets are offered in three combinations, containing all necessary hardware (thresholds and strips) and in two sizes, for 32 x 84 inch and 76 x 84 inch door openings.

Circle No. 6 on Reader's Reply Card

flush sliding doors have novel track
Both units of the Ray-Dor sliding door are flush, improving appearance. Out-of-sight hardware consists of two sets of paired twin-rail tracks, including two switches, permitting easier operation.

Circle No. 7 on Readers' Reply Card
Your Guide to **NEW PRODUCTS** Information

slider window has adjustable fins for on-the-job fitting
Aluminum slider window has adjustable nailing fins for on-the-job fitting to any through-wall thickness from 4½ to 5-5/32 inches. Complete interior trim, made of aluminum extrusions with dip-lacquered, hard-wearing finish, makes window complete package unit. “Built-in” provisions for installation and attachment of screens and storm sash are included. Per-Fit Products Corp., Dept. AB, Attn. M. E. Stewart, 1204 E. 52nd St., Indianapolis 5, Ind.
Circle No. 8 on Readers' Reply Card

lightweight diaphragm pump for muddy seepage control
Two lightweight, self-priming diaphragm pumps handle 3,000 and 3,300 gallons of seepage water per hour; smaller model uses two-inch hose, larger has three-inch hose. Pumps operate on suction lifts up to 20 feet.

Chain drive operates from horizontal position, enabling substantial reduction in size of pump, with improved rigidity of operation. Marlow Pumps, Div. of Bell & Gossett Co., Dept. AB, Attn. G. U. Miller, Ridgewood, N.J.
Circle No. 9 on Readers' Reply Card

hydrostatic level speeds flooring and ceiling jobs
Leveleasy combines a fluid reservoir, tube reel and a 50-foot clear plastic tube in aluminum container. Tube per-

Circle No. 10 on Readers' Reply Card

saw sharpener has 6 to 60-inch capacity
This hand sharpener has a capacity for either rip or cut-off saws from six to 60 inches in diameter without cutting the floor or putting machine on a pedestal.

Leveleasy combines a fluid reservoir, tube reel and a 50-foot clear plastic tube in aluminum container. Tube per-
inches. Unit has six-forward-speed transmission. Three-point hitch and internal hydraulic system accommodate full line of attached implements of all makes meeting standard specifications. The Oliver Corp., Dept. AB, Attn. Robert L. Dinsmen, 400 W. Madison St., Chicago 6, Ill.
Circle No. 12 on Readers' Reply Card

all-purpose tractor takes full line of attachments
Called the Super 55, this four-wheel, adjustable tread type tractor has a 73 inch wheel base and hood height less than 51 inches. Front and rear wheel tread is adjustable from 48 to 76 inches. Unit has six-forward-speed transmission. Three-point hitch and internal hydraulic system accommodate full line of attached implements of all makes meeting standard specifications. The Oliver Corp., Dept. AB, Attn. Robert L. Dinsmen, 400 W. Madison St., Chicago 6, Ill.
Circle No. 12 on Readers' Reply Card
CUT YOUR BUILDING COSTS

... and make your homes still more saleable!

The New Low Cost Fabric-Covered Folding Door

as low as

$19.95

List Complete
2'8" x 6'8½"

Cuts Costs—FOL-AK saves between $10 and $15 when used in place of swing-type doors.

Adda Buy Appeal—Today's space-minded buyers appreciate the advantages of folding doors. With FOL-AK, now you can add this stylish extra feature and save money, too!

Durable Construction! Expect a lifetime of trouble-free operation from FOL-AK. In tests, FOL-AK has been opened and closed 142,725 times—about 30 years of normal use—without noticeable wear! It's a quality door, by the makers of FOLDOOR.

Quality Fabrics! FOL-AK vinyl fabrics feel like cloth, look like expensive drapery material—are easy to wash with soap and water.

Choice of Colors! Attractive, harmonizing colors that blend with and beautify any interior—chosen by leading decorators, Handsome cornice and positive latch included.

Wonderful Space Saver! FOL-AK is ideal for wardrobe or closets. Special non-rigid construction allows FOL-AK to take rough treatment, hard blows.

Easy Installation! Takes only a few minutes. Cornice, screws and instructions included with each individually packed door.

New, Low Price! No other fabric-covered folding door matches the $19.95 price of FOL-AK! Slightly higher on West Coast.

Also available in 3' x 6'8½" and 4' x 6'8½"

HOLOMB & HOKE MFG. CO., INC.
1545 Van Buren Street, Indianapolis 7, Indiana
Please rush me descriptive literature on FOL-AK
I am a [ ] dealer [ ] builder
Name ____________________________
Address ____________________________
City ______________________ Zone _______ State ____________

OCTOBER 1954
**26 Colors**

Caulking Compounds

Match every building material!

With brick, stucco, asbestos-cement siding, shingles, metal or wood...there’s a CALBAR color to match or harmonize perfectly! Non-staining, non-hardening CALBAR Caulk complies with Federal and ACPA specifications. Write for details.

CALBAR PAINT & VARNISH CO.
Manufacturers of Technical Products
2612-26 N. Martha Street
Philadelphia 25, Penna.

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**Built-in Radios**

...Only 3½" Deep!

- Fits in standard 4" partition
- Excellent tone and selectivity
- Installed as easily as any electric outlet
- For kitchen, bath, bedroom, etc.
- Colored plastic panels
- Approved by Underwriters'
- Retails for $43.50 less panels

Write today for specifications and low builder prices.

(Dealer inquiries invited)

**Flush-Wall**

RADIO COMPANY
1012A1 Cleveland St., Clearwater, Fla.

---

**Your Guide to NEW PRODUCTS Information**

All-aluminum carport doubles as patio shelter

All-aluminum "Kawport," 10x20 feet in area, is prefabricated in sections to make up compact kit for assembly on job site. Builders have found that unit also makes a useful patio shelter for family outdoor recreation area as well as a car shelter. While family car is in use, carport finds many uses for all members of family. By integrating carport with basic house scheme it makes versatile shelter for various activities. The Kawneer Co., Dept. AB, Attn. R. Martin Baker, Niles, Mich.

Circle No. 13 on Readers' Reply Card

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Refractories mixer features continuous feeding

Mixing unit, Model 240 Jetcreter, for refractories, insulating material or concrete, is built in air- or water-cooled engine models, with or without multispeed transmission in air-cooled model.


Circle No. 14 on Readers' Reply Card

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Flashing skylight for interior baths

Plastic skylight is designed for use on any flat roof. dome, with copper evaporation trough, are set in position, attached by screws; roofing material is spread over flange to complete job. Installation can be done by roofer. Dome is self-flashing. Unit is available in sizes to fit standard roof joist spacings and roof openings, ideal for new-type interior bathrooms. Architectural Plastics, Inc., Dept. AB, Attn. Dudley D. Hoyt, 20 Fitch St., East Norwalk, Conn.

Circle No. 15 on Readers' Reply Card

---

Steel hinge has aluminum matching finish

Steel hinge with a revolutionary aluminum type finish provides a true color match for all aluminum hardware and trim. It will sell for about one-third the price of a solid aluminum hinge.

C. Hager & Sons Hinge Mfg. Co., Dept. AB, Advertising Dept., 139 Victor St., St. Louis 4, Mo.

Circle No. 16 on Readers' Reply Card

---

Storm door lock has two-way action

This lock is designed to prevent lockouts; under any conditions, the storm door can be unlocked from outside with key. Lock eliminates need for escutcheons, cutting of doors and drilling of plates. It is pre-assembled, ready for immediate installation. Lock has unconditional life-time guarantee. Security Storm Lock & Hardware Corp., Dept. AB, Attn. of Jack Greene, 858 E. 29th St., Brooklyn 10, N.Y.

Circle No. 17 on Readers' Reply Card

---

American Builder
BUILDERS:

Even for low-cost housing... the "sell" of paneled walls!
Now it's practical, thanks to this new no-nail discovery.

Weldwood CONTACT CEMENT

Imagine! Put up Without a Single Nail—
this plywood paneled wall!

Made possible by a revolutionary new Weldwood Wizard
Weldwood CONTACT CEMENT

Now! Plywood wall panels erected without nails, nail holes, putting or extra finishing. Weldwood Contact Cement makes it possible. It's a revolutionary new concept in adhesives. Bonds instantly and permanently on contact. No clamps or presses! Simply install direct to studs or furring.

With Weldwood Contact Cement, pre-finished plywood paneling is practical as never before. Even a single paneled wall is a sales magnet to a buyer.

For applying Micarta and other laminates; new Weldwood Contact Cement is easier to use—bonds equally sure to any base! Investigate this easily added "plus" sell today!—write for full information.

*Trademark

And for Finishing Plywood Panels, use these Wizards with Wood.

FIRZITE — White for "woody" pickled or blond finishes on any wood, and for undercoating for plywood paint jobs. Clear for taming wild grain on fir plywood. SATINLAC — for a rich, modern natural wood finish that also preserves the wood.

See Sweets Catalog for specifications. Write for details NOW!

STA-TITE STEEL BRIDGING FOR WOOD JOISTS

The Most Successful Bridging!

All Sizes Low Cost

If your dealer cannot supply you, WRITE!

STA-TITE, Inc. 4020-28N. Port Washington Ave.
Milwaukee 12, Wisconsin

Jobber Inquiries Invited

COST CUTTER

LION UNIVERSAL TRIMMER

Accurate, razor-like cut any way of grain. Quick adjustments to 45 degrees or 90 degrees. Miters, bevels, squares, chamfers—hundreds of uses! A time saver on every job.

WRITE FOR FULL INFORMATION

POOTATUCK CORP.
50 SAMMIS PLACE
STRATFORD, CONN

Majestic

Circulator Fireplaces

are faster, more economical to install — add more sales value to the finished home

More heating surface ... Patented "Radiant Blades" provide 45% more area

Ample downdraft shelf assures smoke-free operation

Just right for any installation... any mantel treatment

Exclusive "Angle Seal" covers gap between unit and masonry

Saves material and labor in installation

Tight-seal damper for air conditioned homes

Insures full efficiency of operation

Circulates heat that other fireplaces waste

Ask your jobber or write for full details today!

The Majestic Co., Inc.
300-B Erie Street
Huntington, Indiana
All casements drilled and tapped to receive storm sash and screens, operator arm guide channels attached with screws for easy removal and replacement, if necessary; ventilator frames constructed from the same heavy sections as the outside frame. This provides greater rigidity and stronger ventilators.

14-gauge electrically welded frame, fins welded to jamb for quick installation and double contact with leak-proof watershed sill. A plus value incorporates a redesigned latch which assures positive operation under all conditions.

Write us for full information

Write for particulars.

STEEL PRODUCTS CO., Inc.
247 Colorado Ave., Buffalo 15, N. Y.
Published by THE L. F. GARLINGHOUSE CO., INC.

For BUILDERS and DEALERS

Large, beautifully illustrated books showing over 1,250 exteriors and floor plans.

YOUR BEST INVESTMENT!

Complete working plans, specifications, lumber and mill lists are available for every design shown in any of these 18 books. The moderate price of these plan sets represents your best investment when building, since both you and your customer know in advance what is being offered, thus avoiding misunderstandings.

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1. Ranch & Suburban
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8. New Brick Homes
9. Colonial Homes
10. Deluxe Small Homes
11. Small Southern Homes
12. Plans for 100 New Homes
13. New Duplex Designs
14. Successful Fireplaces
15. New American Homes
16. Homes in Brick
17. Plans for New Homes
18. Kamp Kabins and Wee Homes

 Typical of the many beautiful plans shown in the above books, is this popular 3 bedroom ranch design.

ALL BOOKS POSTPAID IN U.S., CANADA

From America's Largest Home Plan Service

OCTOBER 1954
Precision-built for the man behind the gun...

Model 3000 $195.00* complete with tripod.

White gives you the most practical Universal Level-Transit on the market.

HERE'S a Universal Level-Transit specially developed to handle all survey and checking operations. It's sturdy, accurate and exceptionally easy to use. And - a new single truss standard frame design replaces old-style cross bars and wyes. What's more, it has a silvered 4½" horizontal circle and an easy to read 5 minute vernier.

Either operating or fixed vent type. Operating bar folds flush against window in all positions, even when unit is open. Window has double toggle action for tight closure. Aluminum screens clip to inside with integral clips. Southern Sash Sales & Supply Co., Dept. AB, Attn. James F. Crossno, Sheffield, Ala.

Circle No. 26 on Readers' Reply Card

Weatherproof outlet, a duplex unit complete with cast aluminum box, simplifies installation, seals wires from weather. Pass & Seymour, Inc., Dept. AB, Attn. John W. Brooks, Solvay Station, Syracuse 9, N.Y.

Circle No. 27 on Readers' Reply Card

lifetime-guarantee plywood sheathing cuts building costs

Plywood sheathing guaranteed for life of any house is made possible by development of new formula glue. Panels are dryer, lighter, flatter and stronger, have greater dimensional stability, according to makers. With its use, need for corner bracing may be eliminated and framing requirements will be reduced. Panels are 4x8 feet in 1⁄6- to 3⁄8-inch thickness. Georgia-Pacific Plywood Co., Dept. AB, Attn. of John J. Hickey, 270 Park Ave., New York 17, N.Y.

Circle No. 28 on Readers' Reply Card

masonry expansion shield takes single/double head nails

“Dryvin” expansion shield requires only a drill and hammer for fastening single or double headed nails into any type of masonry. No wrenches or screwdrivers are needed. Shield uses nails for expansion and locking. Nail driven in by hammer forces ductile material of shield into irregularities of hole in masonry, locking anchor flange into sides of hole. Star Expansion Bolt Co., Dept. N, 147 Cedar St., New York 6, N.Y.

Circle No. 29 on Readers' Reply Card

rotary hammer makes 6,000 strokes per minute

Electric portable rotary hammer has detachable bit for horizontal and overhead drilling of reinforced concrete, masonry and similar materials. It rotates at 1,000 r.p.m. and strikes 6,000 blows per minute. Operable by one man, it is said to reduce drilling costs by eliminating errors and saving work time. Tool weighs 9½ pounds and is 15 inches long. Demo Tool Corp., Dept. AB, 8173 Melrose Ave., Los Angeles 46, Calif.

Circle No. 30 on Readers' Reply Card

Tempered hardboard called "Forest Board" is available in four-foot panels up to 16 feet long. It requires no prime paint coat in order to get even paint coverage. Forest Fiber Products Co., Dept. AB, Attn. Hugh M. Lineweaver, P.O. Box 68, Forest Grove, Oregon.

Circle No. 31 on Readers' Reply Card
Evans King-Size
10-ft. Steel Tape
STANDS UP STRAIGHT
for UPRIGHT
MEASUREMENTS

Those long upright measurements are easy and accurate with this new EVANS King-Size 10-ft. White-Tape. The 33% wider blade (full 4") stays straight up without bending or buckling. You get a free belt clip and Tenite utility case with every tape. Sliding end hook for inside or outside measuring and . . .

it's marked so you don't have to figure! no other tape is marked this Evans way.

marked in feet and inches with foot markings
at every inch.

marked in inches from 1" to 20".

Which ever way you work, in inches or feet and inches, you read instantly without having to stop and figure.
The EVANS King-Size White-Tape Is the Top 10-ft.
Tape Value at only $2.99 at hardware stores everywhere in U.S.A.

another EVANS value—
THE ONLY
12-FOOT
POCKET
WHITE-TAPE

Standard blade 3/4" wide
Now, a pocket steel tape that measures a full 12 feet—eliminates the inconvenience and inaccuracy of adding two measurements as you do with shorter tapes. Exclusive EVANS double markings (same as King-Size above). Chrome plated case is no bigger than cases for shorter tapes. Self-adjusting sliding hook for 100% accurate inside or outside measurements. Each tape packed in FREE transparent Tenite utility case.

Evans & CO.
400 Trumbull Street, Elizabeth, N. J., U. S. A.
"we get more buyer interest...

with MODERNFOLD"

—SAYS R. B. BILLINGS OF THE AMERICAN BUILDING CORPORATION

The American Building Corporation of Fort Worth, Texas, use Modernfold doors between den and living room throughout their 100-Home "Edgewood Terrace" development. Says R. B. Billings, President, "Customers see at once the advantages of having both a private room and more living area...with Modernfold's wide color selection we get more buyer appeal into the interior decoration, too."

You save labor, cut costs,
insure satisfaction— with Modernfold

There's no need for exact fitting—no need for special casing or trimming, no need to paint the door—with Modernfold. It goes up—complete—in 30 minutes or less. Modernfold's extra-sturdy frame construction means greater rigidity, smooth torque-free action—for longer life...fewer call backs...greater customer satisfaction.

See your installing distributor or mail coupon for full details.

New Castle Products, Inc.
New Castle, Indiana • Montreal 6, Canada

NEW CASTLE PRODUCTS, INC.
P. O. Box 855
New Castle, Indiana

Please send full details on Modernfold doors.

Name: ____________________________________________
Address: __________________________________________
City: __________ County: ______ State: ______

Caster carries weight of ladder when being moved, retracts when ladder is used. The Ballymore Co., Dept. AB, Attn. William B. Hart, 139 Pennsylvania Ave., Wayne, Pa.

Circle No. 32 on Readers' Reply Card

Soldering gun, plugged in on 110/-120-volt a.c. circuit, works hot 2½ seconds after trigger is pressed; cools when trigger is released. Spotlight illuminates work. Wen Products, Inc., Dept. AB, Attn. Miles Blunt, 5808 Northwest Hwy., Chicago 31, Ill.

Circle No. 33 on Readers' Reply Card

asphalt strip shingle locks to roof

Lok-Tab roofing consists of an interlocking, asphalt strip shingle which, upon application, literally locks to the roof. Center of each butt on the strip has a hook-shaped extension which fits into a pre-cut slot in the body of the shingle below it. As each course is applied, locking device is hidden from view. Shingles are 24×18 inches, have a two inch headlap and eight inch exposure. The Ruberoid Co., Dept. AB, Attn. Ross L. Muir, 500 Fifth Ave., New York 36, N.Y.

Circle No. 34 on Readers' Reply Card
saw gauge speeds measuring and cutting

Cut-off saw gauge can be set in a few seconds for any cutting length up to nine feet. Scale ruled in sixteenths is fastened to a sliding bar which moves freely when operating bar is lifted but locks when bar is pressed down. Gauge fastens to front of table or bench, leaving top clear except for stop arm.

Circle No. 35 on Readers' Reply Card

Magnetic catch fits between cabinet door and shelf with no parts projecting into cabinet. Assures alignment of catch with strike for holding power.
The Stanley Works, Cabinet Hardware Div., Dept. AB, Attn. E. C. Benfield, New Britain, Conn.
Circle No. 36 on Readers' Reply Card

home heating gas boiler installs in kitchen

This gas boiler can be installed in kitchen work surface line. It is enclosed in a white cabinet with porcelain enameled top and backsplash. Unit is 36x36x25 inches so that it aligns with other cabinet units and gas range. Boiler can be installed flush against wall with chimney connection through back or either side. Unit is A.G.A. approved. York-Shipley, Inc., Dept. AB, Attn. J. W. Gingerich, York, Pa.
Circle No. 37 on Readers' Reply Card

Garbage disposal unit with built-in centrifugal pump grinds all types of food waste materials. Cutting edges are flame hardened to give long wear.
Circle No. 38 on Readers' Reply Card

"we save at least $10.00 per opening..."

with SPACEMASTER

... SAYS BUILDER W. G. TABBERT

"Spacemaster doors cost us $10.00 less per opening than the cheapest wood door—and received almost unanimous public acceptance," says W. G. Tabbert—whose "Hilltop Heights" development in Sioux Falls, South Dakota, has 100 homes completed— plans for 600 more! "I'm going to use Spacemaster even more from now on."

With Spacemaster folding doors there's no need to trim and case the opening—no need to paint the door. Spacemaster goes up with eight screws in 11 minutes—and its initial cost is the lowest in the history of quality folding doors. See your building supply dealer—or mail coupon for full information.

New Castle Products, Inc.
New Castle, Indiana; Montreal 6, Canada

OCTOBER 1954
If you like fine tools...get Greenlee

The minute you take hold of a Greenlee tool, you can 'feel' the fine quality and extra craftsmanship that go into its making. All Greenlee tools carefully formed and finished for accuracy and correct cutting edges. All are properly heat-treated for strength and long life. All are made by craftsmen for craftsmen.

GREENLEE 22 SOLID-CENTER AUGER BITS bore accurate holes smoothly, quickly. Solid-center design gives extra strength and provides fast, positive chip clearance. Every Greenlee 22 Auger Bit has accurately sized, perfect cutting edges that last through long use. "Plastic Sealed" to reach you factory-sharp. Available in 18 sizes: from 4/16" diameter through 2-1/4/16". Buy singly or in sets...in handy plastic rolls, steel boxes, or metal holding panels.

HIGH-QUALITY CHISELS, GOUGES Various types of tang butt, socket butt and firmer chisels. All are carefully balanced, easy to hold. Blades are of selected tool steel that long retains its fine-cutting edge. Attractive green plastic handle provides comfortable, sure grip. Buy singly or in sets. Greenlee socket gouges available with inside and outside bevels...same top quality as all Greenlee tools.

NEW PRODUCTS

wall tie and trough speed cavity wall construction
Galvanized steel cavity wall tie, used for spreading and tying parallel masonry walls, is made in 3/16- and 3/4-inch diameter sizes. Tie has three-inch wing at each end that lies in the horizontal mortar bed, and six- or eight-inch stems that dip to form a two-inch spacer which helps align walls. Metal trough hangs between walls during construction to catch extra mortar and prevent formation of bridges. Conver Steel & Wire Corp., Dept. AB, Attn. Howard W. La Morte, 600 E. 132nd St., New York 54, N.Y.

Circle No. 39 on Readers' Reply Card

Five new appliances include a redesigned Laundromat and matching electric clothes dryer, four restyled dishwashers, a refrigerator and a range, both styled in copper finish. Westinghouse Electric Corp., Appliance Div., Dept. AB, Attn. Consumer Service Dept., Mansfield, Ohio.

Circle No. 40 on Readers' Reply Card

fire alarm system for individual homes
Easily installed fire alarm system consists of a bell fitted flush into wall of home living area. Bell is connected directly to thermal detectors sensitive to heat changes and which set off alarm to reveal a dangerous condition before fire starts. Detectors are set to close alarm circuit when temperature reaches 136 degrees F. The Edwards Co., Dept. AB, Attn. J. J. Lane, Norwalk, Conn.

Circle No. 41 on Readers' Reply Card

Non-settling paint, produced with new vehicle called Burnok, has thick, jelly-like consistency in oil base. It is available in flat, semi-gloss and high gloss enamels. T. F. Washburn Co., Dept. AB, Attn. Ralph FitzSimons, 2244 N. Elston Ave., Chicago, Ill.

Circle No. 42 on Readers' Reply Card

Write for free descriptive folder. Greenlee Tool Co., 2210 Twelfth St., Rockford, Illinois
If some building terms PUZZLE YOU...

BANK-RUN is not a panic.
BUS CONDUCTOR is not a fare grabber.
FISH PLATES are for beams, not streams.

... this is a book you need!

By Herbert R. Waugh and Nelson L. Burbank
Former instructors in construction and building trades, Bridgeport, Connecticut and Cincinnati, Ohio schools.

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THE WORLD'S LARGEST-SELLING
GAS UNIT HEATERS

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42 UNION ST., MERCER, PA.

Please send me a copy of your new bulletin, "Application of Gas Unit Heating."

Name ____________________________ Title ____________________________

Company ____________________________

Street ____________________________

City ____________________________ Zone ____________________________ State ____________________________

AMERICAN BUILDER BOOKS
30 Church St., New York 7, N.Y.

I enclose remittance of $5.00. Please send me postpaid, one copy of HANDBOOK OF BUILDING TERMS AND DEFINITIONS. I have 10 days to examine the book and, if not satisfied, can return it within that time for full refund.

Name ____________________________

Address ____________________________

City, zone, state ____________________________

OCTOBER 1954
... because it offers LUXURIOUS BEAUTY at MODERATE COST

Specify the tile that tile installers prefer. They prefer Tilemaster plastic wall tile because it goes up more quickly and because of the large variety of tile pieces available. You can install Tilemaster with entire confidence because its exclusive quality features eliminate troublesome and costly repairs—assures completely satisfactory installation. Architects and builders specify it because they know enthusiastic home owners will applaud its lifetime beauty. Good reasons why Tilemaster tile on the wall will help you make easier sales.

NEW PRODUCTS

portable nail driver has automatic feed

Automatic hopper feed enables operator to drive 40 to 50 nails per minute for sustained periods with this tool. Unit operates by compressed air, requiring 14.7 c.f.m. at 80 to 90 p.s.i.


Circle No. 43 on Readers' Reply Card

Gas furnaces in two lowboy and one highboy models have compact, cast iron, venturi design heat exchangers featuring quiet operation and greater square footage of radiation. Herbster Products Co., Dept. AB, Attn. F. D. Miller, 877 Addison Road, Cleveland 3, Ohio.

Circle No. 44 on Readers' Reply Card
drafting instrument produces accurate engineering layouts

Accurately spaced lines for architectural and engineering drawing and lettering are made with the Linemaster drafting instrument. It is a heavy plastic disc, 2 1/4 inches in diameter, with 17 slots for pencil or scriber; proper use of slots produces accurate parallel lines 1/4", 3/8", to 1/2"-inch from a base line in steps of 1/8"-inch. Dri-Flo Mfg. Co., Dept. AB, Attn. R. F. Yeager, 642 E. 10-Mile Road, Hazel Park, Mich.

Circle No. 45 on Readers' Reply Card
two-wheeled portable compressor has 125 cubic feet per minute capacity, is suitable for small construction jobs. Water-cooled unit has gas or diesel engine. Gardner-Denver Co., Dept. AB, Attn. C. L. Ruyle, 100 Williamson St., Quincy, Ill.

Circle No. 46 on Readers' Reply Card
Why was the "Wonderair Home"

AT AIR-CONDITIONED VILLAGE, Austin, Texas

one of the First homes sold?

OUTSTANDING SERVEL FEATURES

- No moving parts (long life, vibration-free)
- Unique absorption principle of refrigeration
- Uses gas—the clean, economical fuel
- Simple lever switches unit from heating to cooling
- Occupies only 8.7 sq. ft. of floor space
- Protected by five-year warranty

Servel Wonderair All-Year ® Air Conditioning does it again!
The Wonderair Home—Servel equipped—has already attracted so much attention that it was one of the first homes in "Air-Conditioned Village" to be sold.

Sound architecture, outstanding construction, and the exclusive advantages of Servel Air Conditioning make an unbeatable combination.

Architect Eugene Wukasch and Builder C. Ben Hibbetts have given charm and livability to this compact home through the many features they have included in it.

By installing Servel Air Conditioning, they achieved not just one, but SIX important sales features. And ALL these features occupy only 8.7 sq. ft. of floor space!

What are these features? Cooling in summer, heating in winter; dehumidification; cleaning and circulation of the air; and ventilation with outside air.

For a few of the other distinctive features added by Servel, see the box at left. For more information on Servel Wonderair All-Year Air Conditioning, send coupon.

SERVEL, INC., Dept. AB-104, Evansville 20, Indiana
Please send further information on Servel Wonderair All-Year Air Conditioners.

Name

Firm

Address

City, Zone

County, State

OCTOBER 1954
disposable saw blade

cuts production costs

Hard-tipped circular saw blade requires no resharpening or reworking and is disposable when teeth become dull. It is said to give an exceptionally fast, smooth cut. Short teeth eliminate vibration, require less power for cutting operations, have less tendency to "grab," thus affording greater safety to operator. The F. Heinemann Saw & Mfg. Co., Dept. AB, Attn. Ralph E. Kreiger, 2017 Navarre Road, S.W., Canton 6, Ohio.

Circle No. 47 on Readers' Reply Card

Fedders-Quigan Corp. announces its convector radiators have new slide-in front panels which cut installation time, eliminate drilling, present smooth surfaces. Dept. AB, Attn. T. L. Arnold, Hancock & Lalor, Trenton 7, N.J.

Circle No. 48 on Readers' Reply Card

portable door vise

for trim carpenters

This non-slip door vise is designed to mount at the bottom of door, holding it rigidly in open position while boring holes for locks, weatherstripping or painting. Adjustable to doors up to two inches thick, vise has money-back guarantee. E-Z Mark Tools, Dept. AB, Attn. William A. Priebe, P.O. Box 7-8444, Los Angeles 16, Calif.

Circle No. 49 on Readers' Reply Card

Cross-corrugated aluminum roll roofing and siding is available in 26, 24 and 22 gauge, in 24 and 48 inch widths and in 50, 100 and 200 foot rolls. Quaker State Metals Co., Dept. AB, Attn. A. H. Charlton, Lancaster, Pa.

Circle No. 50 on Readers' Reply Card

For beauty that attracts buyers...
durability that keeps them sold—

Specify PLYALOY®
pre-cut overlaid plywood SIDING

"Definite Sales Feature", says Fargo-Moorhead Home Builder

Pre-cut to 12", 16" and 24" widths; Packaged and Sold "by the Square"...Complete with Wedges and Furring Strips

Yes—buy Plyaloy siding packaged by the square. Easier to order, without complicated figuring. Easier to apply; comes in standard siding widths. Easier to handle. Saves time and labor all along the line!

Remember: Plyaloy siding has a superior paint surface. Gives maximum protection against grain-raise or checking.

For beauty, plus extra durability—specify Plyaloy pre-cut siding.

SPECIFICATION DATA: Plyaloy comes in pre-cut 8' lengths, 12", 16" or 24" wide; 5/16", 3/8" or 1/2" thick. Edges beveled for drip. Packaged for protection; wedges and shadow-line furring strips included. One side surfaced with fused resin-fiber overlay. Base panel is DFPA-Inspected Exterior-type fir plywood (EXT-DFPA). Other sizes available. For complete information write St. Paul & Tacoma Lumber Co., Dept. AB, Tacoma, Washington.

ANOTHER MEMBER OF THE FAMOUS TREE LIFE FOREST PRODUCTS FAMILY

NEW PRODUCTS

disposable saw blade

cuts production costs
WITH RAYNOR YOU ENJOY

**Maximum Profit**

ON BIG DOOR INSTALLATIONS

You’ll find Raynor doors are designed and engineered with door building know-how that guarantees the ease of installation and trouble-free performance necessary for maximum profit to the builder who sells and installs them.

Raynor doors are built exclusively in Raynor factories—thus you are assured complete Raynor supervision—a feature of vital importance in producing the quality and dependability every builder desires in his source of Wood Sectional Overhead Doors.

Check your telephone book for the name of your nearest Raynor representative.

**Raynor**

MANUFACTURING COMPANY, DIXON, ILL.

 Builders of a Complete Line of Wood Sectional Overhead Doors

OCTOBER 1954

---

**These SISALKRAFT PRODUCTS can help you keep Quality Up keep Costs Down**

**SISALATION**

(Aluminum both sides)

Reenforced reflective insulation and vapor barrier. Provides more than sufficient insulation for sidewalls and floors. Sisalation is equivalent to about 1 inch of fibrous material. As a vapor barrier it helps prevent condensation that results in paint peeling, wood rotting. Sisalation costs less than 3¢ per square foot.

3 oz. of copper per square foot. Widths from 4” to 60”.

**COPPER ARMORED SISALKRAFT** used for all concealed flashing provides permanent protection at 1/5th the cost of heavy gauge copper. It is pure electro-sheet copper bonded to heavy asphalt, steel-like fibres, creped kraft paper. Available in weights of 1, 2 and 3 oz. of copper per square foot.

**SISALKRAFT** reenforced paper used as membrane over fill saves concrete, results in a moisture-free, more dense concrete slab. Also used to back up stucco, under flooring and as waterproof covering for material and equipment.

**AMERICAN SISALKRAFT CORPORATION**

Dept. AB-10, Attleboro, Mass.

Please send samples and facts concerning:

- [ ] SISALATION
- [ ] COPPER ARMORED SISALKRAFT
- [ ] SISALKRAFT

Name ..................................................

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City ..................................................

Zone ..............................................

State ..............................................
PERMANENT
AND DURABLE
CAST IRON
SOIL PIPE

Cast Iron Soil Pipe is the only pipe approved by ALL Building codes—national, state and city—to carry out disease breeding waste. It is recommended by an overwhelming majority of architects and contractors for these sound reasons:

Cast Iron Soil Pipe lasts for centuries, as proved by authentic records.

It never needs repairs.

It has zero moisture absorption.

Tree roots cannot penetrate and clog.

The pipe joints are permanently tight, yet flexible to take care of expansion or contraction.

Its rugged metallic strength withstands stress and exterior load of underground service.

Cast Iron Soil Pipe is easy for the contractor to use. Easy to cut. No tricky trenching required. No complicated joints to make. No need to “sculpture” trench to fit the pipe. Lay in loam, sand, gravel or any kind of soil—12’ deep or 10’.

Woodward Iron Company is America's largest completely integrated merchant iron producer. It supplies many of the nation's leading cast iron pipe foundries and manufacturers of modern plumbing ware with uniform quality pig iron from which permanent cast iron pipe is made.

WOODWARD IRON COMPANY
WOODWARD, ALABAMA

NEW PRODUCTS

front-end loaders fit standard-make tractors

A new basic design for larger of two heavy-duty loaders has been developed for Fordson Major diesel tractor; basic design for smaller unit also has been completed for all Ford and Ferguson model tractors. Both models are of all-welded construction and have a two pin installation for removal in less than ten minutes. Shawnee Mfg. Co., Inc., Dept. AB, Attn. W. J. Wills, 1947 N. Topeka Blvd., Topeka, Kans. Circle No. 51 on Readers' Reply Card

Double-compartment sink, with double drainboards, is now available in peach, blue, yellow, green and gray, to match or complement kitchen walls or floors. Kohler Co., Dept. AB, Attn. R. C. Angelbeck, Kohler, Wis. Circle No. 52 on Readers' Reply Card

power vise stand
for hand tools

Portable power drive for hand pipe tools, called “Lightweight Champ,” has 1/4- to two-inch pipe capacity and up to eight-inch pipe capacity when hooked up to a geared drive shaft. Besides driving die-stocks, pipe cutters and reamers, unit can be used to turn up or back off fittings. The Oster Mfg. Co., Dept. AB, Attn. R. C. Chambers, 2067 E. 61st Place, Cleveland 3, Ohio. Circle No. 53 on Readers’ Reply Card

Two wall-type and two ceiling type ventilating fans are now available in 8-, 10- and 12-inch sizes for residential use. Broan Mfg. Co., Inc., Dept. AB, Attn. M. E. Borngesser, 1669 N. Water St., Milwaukee 2, Wis. Circle No. 54 on Readers' Reply Card
INVISIBLE RADIANT HEATING
fills every room with sun-like warmth

There's more livable space and your clients are happier with modern heating units which are out of the way and invisible.

plan homes for more Comfort
with THRUSH RADIANT HOT WATER HEAT

HEAT HOMES BETTER AT LOWER COST

NOW YOU can provide the finest automatic heating comfort in the homes you plan or build, for Thrush Radiant Hot Water Heat is well within the budget of the smallest home. It is one of the most efficient, economical and completely automatic controls for radiant hot water heat offered today.

Fuel is saved because there is never any overheating. There is no chilling or discomfort, because radiant heat is present. Room temperature varies less than one-fifth of one degree. Installation costs are reduced. Also, a plentiful supply of hot water for kitchen, laundry and bath is available the year 'round from the regular heating boiler. Get the facts now!

write for new booklet
Send coupon below for our new, illustrated booklet which tells all about Thrush System. Also see our catalog in Sweet's.

The Thrush equipment shown at right maintains room temperature without noticeable variation throughout the heating season.

H. A. THRUSH & COMPANY
Department G-10, Peru, Indiana
Please send, without obligation, a copy of your new, illustrated booklet describing Thrush Radiant Hot Water Heat.

NAME
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OCTOBER 1954
There's a Majestic fully-automatic year-round air conditioner for every installation requirement. Oil or gas-fired from 76,000 to 400,000 BTU; cooling units to match. Thulman chimney... ultimate in flue design. This factory-fabricated patented flue for all fuels may be installed in one or two story homes by one man. Clearances to combustibles required by the National Building Code are built in.

The new Thulman packaged fireplace; clearance is built in. May be quickly installed and used with any construction... new or old. Write for complete details on this new and scientifically designed fireplace unit, and the entire Majestic home heating line.

Write for full information. Write for complete details on this new and scientifically designed fireplace unit, and the entire Majestic home heating line.

WIREMOLD products are backed by a firm guarantee. See page 7 of Wiremold Catalog No. 19.
NEW PRODUCTS

aluminum roll doors for recessed tubs

Aluminum shower closures are adjustable for wall variations and off-level rims due to overhead rollers. Choice of metal finish, glass and widths is available. Towel bar, safety grip are standard equipment. Lehman Spray-shield Co., Dept. AB, Attn. W. T. Flanagan, 3355 York Road, Philadelphia 40, Pa.

Circle No. 55 on Readers' Reply Card

Automatic gas or electric incinerators operate by principle of dehydra-
tion to point of combustion by a con-

Circle No. 56 on Readers' Reply Card

Crawler machine has 1/2-cubic yard shovel capacity, is convertible as hoe, clamshell, dragline, magnet or crane. Power box construction minimizes driving machinery space. Harnischfeger Corp., Dept. AB, Attn. Robert Sawyer, 4603 W. National Ave., Milwaukee 46, Wis.

Circle No. 57 on Readers' Reply Card

Gas heater, circulator type, has 20-year guarantee on porcelain-enameled combustion chamber. Unit is 16 inches high, uses all types of natural or manufactured gases. Perfection Stove Co., Dept. AB, 7609 Platt Ave., Cleveland 4, Ohio.

Circle No. 58 on Readers' Reply Card

Automatic washer, Model 451, features rinse water temperature pre-selec-
tion control which allows rinsing in hot, warm or cold water. Unit performs complete wash cycle in 18 minutes. Thor Corp., Dept. AB, Attn. Bill Johnston, 2115 S. 54th Ave., Chicago 50, Ill.

Circle No. 59 on Readers' Reply Card

Fork lift truck has 3,000-pound ca-
cacity at 24-inch load center and a turning radius of 72 inches. Heavy duty clutch and constant mesh transmission give minimum engine wear. Lamson Mobilift Corp., Dept. AB, Attn. H. G. Boutin, 1604 S.W. 10th Ave., Portland 1, Ore.

Circle No. 60 on Readers' Reply Card

OCTOBER 1954
Unique, invisible SOSS HINGES are completely hidden from view when doors or lids are closed. This feature eliminates ugly protruding hinge butts. SOSS HINGES make possible the flush, streamlined surfaces so necessary for smart, contemporary architecture. SOSS HINGES increase the beauty and quality appearance of any home. Use them whenever you build or remodel.

SOSS MANUFACTURING COMPANY
21721 HOOVER ROAD • DETROIT 13, MICHIGAN

NEW PRODUCTS

air conditioning unit cuts power needs

Home cooling units in two- and three-ton models cut operational costs up to 25 per cent. Units employ suction cooling with refrigerant vapor for motor compartment, permitting use of smaller h.p. compressors. Acoustical and aluminum-faced vinyl plastic insulations are used. Installation is said to be simple. Richmond Radiator Co., Dept. AB, Attn. F. Reichert, Box 111, Metuchen, N.J.

Circle No. 61 on Readers' Reply Card

Asbestos siding shingle, silicone treated, repels water and water-borne dirt. It has high resistance to sunlight, fumes, ice, snow and low temperatures. Available in green, brown, gray and white, with wood-grain pattern. Keasbey & Mattison Co., Dept. AB, Attn. Advertising Dept., Asbury Park, N.J.

Circle No. 62 on Readers' Reply Card


Circle No. 63 on Readers' Reply Card

Concrete cutter has four-wheel suspension, hydraulic jack raising mechanism, foot operated. Cutting depth is 2 1/2 or 3 1/2 inches with nominal wheel diameters. Felker Mfg. Co., Dept. AB, 1128 Border Ave., Torrance, Calif.

Circle No. 64 on Readers' Reply Card

Plastic and asphalt tile flooring in 23 new product designs include new linoleum patterns featuring wide color range; 48 additions to existing lines have also been added. Armstrong Cork Co., Dept. AB, Lancaster, Pa.

Circle No. 65 on Readers' Reply Card

Circuit breaker, Type "R", used with G-E electric load center, eliminates need for fuse boxes. Positive action mechanism breaks contacts instantly. Trumbull Components Dept., General Electric Co., Dept. AB, Attn. J. D. Hopkins, Plainville, Conn.

Circle No. 66 on Readers' Reply Card
All Pella Casements come with inconspicuous Pella Rolscreens—the original inside screens that roll up and down like window shades.

Pella Casement Windows have Dual Glazing that protects against winter cold and summer heat . . . the year-round storm window.

OTHER Pella PRODUCTS
MULTI-PURPOSE WINDOWS
ROLScreens
LITE-PROOF SHADES
WOOD FOLDING DOORS
VENETIAN BLINDS

You can create countless custom window effects by combining stock-size Pella Wood Casement Windows. Pella Windows also save money on the job because they are completely assembled and pre-fitted at the factory. Your clients appreciate Pella beauty and convenience. Only Pella gives you all 3—Rolscreens, Dual Glazing and stainless steel weatherstripping. Available with vertical and horizontal muntins, horizontal muntins or without muntins. Glass openings up to 60” high. Patented hinge design, stronger 1 3/4” wood sash and steel inner frame. Low air infiltration factor permits use of more glass, yet saves more heat. More standard Thermopane sizes available for Pella than any other wood casement window. Investigate Pella Casement units today.

FOR DETAILED INFORMATION MAIL THE COUPON TODAY
ROLScreen CO., Dept. F-80 Pella, Iowa

Gentlemen:
Please send free literature on Pella Casement Windows and name of nearest Pella distributor.

NAME
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ZONE
STATE

OCTOBER 1954
6 revealing pages crammed with Cost-Study facts, figures on insulation

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

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

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

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

Offered to builders for the first time, this 6-page folder is free. To get your copy write the words "Cost Study" on your letterhead today and send it to our Dept. AB-10.

ALFOL BUILDING BLANKET INSULATION

NEW PRODUCTS

Fluorescent fixture only 3\(\frac{1}{2}\) -inches deep is useful for low-ceilinged school rooms and offices. It is designed for two or four lamps in four- and eight-foot housings. Smithcraft Lighting Div., Dept. AB, Chelsea 50, Mass.

Circle No. 67 on Readers' Reply Card

Awning window with aluminum frame features torque bar operation with bar concealed in sill providing smooth appearance. Anchor housings on jambs are eliminated. Ludman Corp., Dept. AB, North Miami, Fla.

Circle No. 68 on Readers' Reply Card

The Rittenhouse Co., Inc., has announced its door chime line for 1955, including the "Lido" model which sounds two notes for front entrance, one for rear door. Write Dept. AB, Attn. Miss Margaret Boehme, Honeyoc Falls, N.Y.

Circle No. 69 on Readers' Reply Card

Steel lintel for window and door openings in cement and cinder block construction is designed to reduce labor and material costs. Brainard Steel Div., Sharon Steel Corp., Dept. AB, Griswold St., Warren, Ohio.

Circle No. 70 on Readers' Reply Card

Cork tile and linoleum in 26 new patterns have been added to floor covering line; cork tile available in five tile sizes, two thicknesses, three shades. Congoleum-Nairn, Inc., Dept. AB, 195 Belgrove Drive, Kearny, N.J.

Circle No. 71 on Readers' Reply Card

Push grille of extruded aluminum is now offered in 21-, 23- and 27-inch widths to fit insert panels on wood or aluminum combination doors. Also made for 32- and 34-inch screen doors. Mucklanburg-Duncan Co., Dept. AB, Attn. Paul Floyd, Box 1197, Oklahoma City, Okla.

Circle No. 72 on Readers' Reply Card

Plywood cabinet door panel, called Welchboard, is surfaced on both sides with a smooth resin-fibre overlay, providing base for lasting high-gloss finish. West Coast Plywood Co., Dept. AB, Attn. E. D. Egge, Aberdeen, Wash.

Circle No. 73 on Readers' Reply Card


Circle No. 74 on Readers' Reply Card


Circle No. 75 on Readers' Reply Card
- **GREEN LABEL**: Users say it's great for Stone and Plastics. For ceramic, clay and stone products. For dense aggregates such as concrete and cinder block, building brick, tile, firebrick, marble, slate, granite, terra cotta, synthetic stone, terrazzo, limestone, porcelain, concrete and mortar.

- **RED LABEL**: Does a whale of a job on Compositions and Non-Ferrous Metals. Cuts Masonite, Transite, Mycoloy, fiber board, asbestos sheets and siding — also aluminum, copper, bronze, zinc, etc., in the form of sheets, bars, piping, siding, roofing, gutters, framing, coping, edging and cable.

- **BLUE LABEL**: Cuts Iron and Steel down to size. To cut, score and grind ferrous metals including alloy steels and cast iron in the form of pipes, angles, bars, sheets and rods.

Don't let the new hard-to-cut building materials stop you cold! Just grab your electric saw — remove the blade — and slip on the right pre-tested Porter-Cable Abrasive Wheel quickly selected from either Green, Red or Blue Label packages. W-h-i-z-z! You're through in a jiffy . . . get a nice clean cut with longest possible wheel life.

These test-selected Abrasive Wheels, while suitable for any make saw, were specifically made to take advantage of Porter-Cable's reserve power. So if you have a lot of tough cutting ahead, see your Porter-Cable dealer and get all the facts on the newest developments in heavy-duty electric saws.

- **On sale at your PORTER-CABLE Dealers**

PORTER-CABLE MACHINE CO.
2210 N. Salina St., Syracuse 8, N. Y.

Please send folder describing new Porter-Cable Abrasive Wheels and name of nearest dealer.

Name

Address

City Zone State

Manufacturers of SPEEDOMATIC and GUILD Electric Tools

In Canada, write: Strongridge, Ltd., London, Ont.
Architects know that maintenance cost is one of the major considerations in specifying a floor covering.

Dense, yet resilient, floors of Wright Rubber Tile bring savings in maintenance that quickly offset the initial savings of a "cheaper" floor. Dirt won't penetrate Wright's non-porous surface. Mopping and occasional waxing will retain its new-look luster indefinitely.

Because of these characteristics, Wright Rubber Tile is particularly appropriate in large, heavy-traffic jobs, where maintenance costs might otherwise become excessive.

Pictured above is Battelstein's fashionable River Oaks Store in Houston. Wright Rubber Tile was used in all principal sales floor areas.

WRIGHT MANUFACTURING CO.
5205 Post Oak Road, Houston, Texas

NEW PRODUCTS


Circle No. 76 on Readers' Reply Card

Line square, a precision device for squaring up lines in construction, determines an accurate squared line in relation to true line in a few seconds. Builders' Line Square Co., Dept. AB, Attn. Albert J. Rupp, 1st St., South Egg Harbor, N.J.

Circle No. 77 on Readers' Reply Card

Fluorescent light fixture adaptable to all types of mounting is designed especially for school use. A 2-light unit, it is made in a choice of all metal or plastic sides panels. Gibson Mfg. Co., Dept. AB, 1919 Piedmont Circle, N.E., Atlanta, Ga.

Circle No. 78 on Readers' Reply Card


Circle No. 79 on Readers' Reply Card

Sink top of one-piece, pre-formed plastic eliminates joints or need for metal molding. Surface is impervious to food stains, grease, etc. Made of laminate bonded to ¾-inch plywood. Fabritex Mfg. Co., Dept. AB, Attn. Howard Koppelman, 415 S. Avenue 17, Los Angeles 31, Calif.

Circle No. 80 on Readers' Reply Card

CATALOGS

FORK TRUCKS shown in 16-page brochure are described with complete construction features through use of schematic drawings. Three separate brakes used on these electric trucks are illustrated. Clark Equipment Co., Dept. AB, Battle Creek, Mich.

Circle No. 81 on Readers' Reply Card

GLASS JALOUSIES in extruded aluminum frames have floating stainless steel weather cushion at jams, glass vanes sealed by balanced leverage. Complete description and installation details given in four-page folder. Ware-tite Jalousies, Dept. AB, 3700 N.W. 25th St., Miami, Fla.

Circle No. 82 on Readers' Reply Card

WRIGHT RUBBER TILE

The 100-Year Floor!

WRIGHTTEX
WRIGHTFLOR
VINYL TILE
ECONOTILE
Kroger supermarket in Glendale, Missouri
Architect: Cay Weinelt, St. Louis, Missouri
Contractor: White Development Corporation, St. Louis, Missouri.

EASY DOES IT
...with lightweight, versatile

LACLEDE STEEL JOISTS
Fast placing and erection . . . combined with modern design and strength make Laclede Steel Joists the answer to today's needs in roof construction.

Specify these LACLEDE Products:
Multi-Rib Reinforcing Bars • Steel Pipe • Welded Wire Fabric • Form and Tie Wire • Spirals • Conduit Corrugated Steel Centering

LACLEDE STEEL COMPANY
St. Louis, Mo

Since 1818
STEEL WINDOWS HAVE THE STRENGTH AND RIGIDITY THAT NO OTHER WINDOW CAN MATCH

ONLY $225.00
...covers the complete cost of HOPE'S STEEL CASEMENTS and screens for this attractive, modern home.

Where the finest construction materials are used, you will find Hope's Steel Windows. They provide value far beyond their cost. Their greater strength and rigidity prevent warping; their narrower frames admit more light and enhance any architectural style; their weather-tightness lasts the life of the building.

For full information, write for Bulletin 102AB.

HOPE'S WINDOWS, INC., Jamestown, N.Y.
THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

Henry DeLongfie Architect and Builder

OCTOBER 1954
Gulfspray shower doors and tub enclosures help prove that if you put more of the better things into a house you'll get more for it. Easy installation and maintenance and beautiful design make Gulfspray enclosures favorites with builders—and home buyers everywhere!

For information or literature write to:

Binswanger & Co.,
of Texas

207 North Main - Houston, Texas

CABINETS & WORKSHOPS

There’s a BIL-JAX FRAME to fit YOUR PICTURE!

Job profits are greater when you choose the Bil-Jax end frame that exactly meets your needs.

- Tubular Scaffolds
- Maintenance Trestles
- Metal Step-Plugs
- Material Hoist Towers
- RENT OR BUY. Distributors in principal cities.

AMERICAN BUILDER
OF ECONOMY

Not Musically Inclined? No matter. Any alert builder can play this tune. The secret's in the sheathing.

More and more builders—with an eye for the beauty of cedar and an ear for the note of economy—are featuring genuine red cedar shingles applied over spaced sheathing. When you space your sheathing, you automatically save as much as 50% on that costly phase of construction!

Because of the great strength and rigidity of CERTIGRADE red cedar shingles, solid sheathing is unnecessary. That's why substitute materials—which rely on solid sheathing for their strength—are seldom the bargains they may appear.

Every space in your sheathing means profit in your pocket. And, as you well know, the sales advantage of real cedar on the roof is a feature buyers recognize, appreciate, prefer.

Add it up. Now you can build better quality, faster, and save money in the bargain. It's worth investigating this nationwide trend to CERTIGRADE shingles applied on spaced sheathing.

We've prepared a simple cost estimating sheet for your use. It's free. It will help you quickly figure the difference in cost (material and labor) between spaced and solid sheathing on the homes you build. Once you compare the two construction methods, using your own local labor and material costs, you'll see what we mean by: When you build with cedar shingles on spaced sheathing, you strike a note of economy!

For your free cost estimating sheet, write:

RED CEDAR SHINGLE BUREAU
5510 WHITE BUILDING, SEATTLE 1, WASHINGTON
OR 425 HOWE STREET, VANCOUVER 1, B. C.
Gold Bond Lath and Plaster, applied by certified craftsmen, combine naturally to produce fine building interiors every time. These related building products are designed to work together to give a house strength, fire-protection and lasting beauty...features that prospective homeowners demand. And the durably smooth, ready-to-decorate plaster walls are pleasant to the touch...a quality that helps turn lookers into buyers!

So, for a natural combination that sells homes, specify Gold Bond Lath and Plaster products on your next job. Rely on the undivided product responsibility of National Gypsum Company. There's a quality difference that your lathing and plastering contractor can demonstrate!

**Gold Bond Gypsum Lath** forms a strong, permanent base for gypsum plaster. Provides extra fire resistance and adds rigidity to the framing.

**Gold Bond Insulating Gypsum Lath** has all the fire-resistant features of standard lath plus an aluminum-foil barrier to reduce heat and vapor transmission.

**Gold Bond Gypsolite** is a "one-package" mill-mixed perlited gypsum basecoat plaster. Cuts weight on walls by 50%, provides added fire resistance plus insulation benefits.

**Gold Bond Finish Lime** — uniform high quality for consistently better finishes, wall after wall...job after job. Normal Type for overnight soaking; E-Z Soak for immediate use.

NATIONAL GYPSUM CO. • BUFFALO 2, N.Y.
WOOD SCREWS, hanger bolts, drive, knob and dowel screws are listed in this 12-page catalog offering complete line of screw heads, materials and finishes, in lengths from \(\frac{3}{16}\) to 6 inches. Southern Screw Co., Dept. AB, Statesville, N.C. Circle No. 91 on Readers' Reply Card

STEEL WALL TILE for kitchens, baths, recreation rooms, etc., are shown in four-page folder. Tile is made in 19 colors in five and 10-inch squares and special shapes. Ohio Can & Crown Co., Dept. AB, Massillon, Ohio. Circle No. 92 on Readers' Reply Card

MOLDED CONCRETE or cinder cavity type building blocks, comprising two separate slabs united by steel ties and provided with dovetailing interlocks are introduced in 12-page catalog. The Mechanabrick Company of America, Dept. AB, 627 Lexington Ave., New York 22, N.Y. Circle No. 93 on Readers' Reply Card

LAMINATED PLASTIC for furniture and surfaces throughout home is shown in various applications in eight-page color folder. Text tells how to veneer, fabricate and apply product. St. Regis Sales Corp., Panelyte Div., Dept. AB, 230 Park Ave., New York 17, N.Y. Circle No. 94 on Readers' Reply Card

BIRCH KITCHEN CABINETS, including wall type, one- and two-door base and wall cabinets, sink cabinets, drawer-type units, styled in natural birch are offered in four-page folder. Del-Mar Cabinet Co., Inc., Dept. AB, 2865 Gordon Road, Atlanta, Ga. Circle No. 95 on Readers' Reply Card

GAS HEATERS, including winter air conditioners, fan-air circulators, three-way, lowboy and enclosed circulators, fireplace models and utility heaters are shown in detail in 28-page illustrated catalog No. 54. The Ohio Foundry & Mfg. Co., Dept. AB, Steubenville, Ohio. Circle No. 96 on Readers' Reply Card

OIL BURNERS featuring big fuel savings are offered in two-color bulletin. Illustrations show compactness and design simplicity of Model "4" Hev-E-Oil burner. Text describes unit's features. Cleaver-Brooks Co., Dept. AB, 326 E. Keefe Ave., Milwaukee 12, Wis. Circle No. 97 on Readers' Reply Card

ALUMINUM WINDOWS, awnings and hardware offered in folder giving complete details on manufacturer's jalousies, aluminum frame window walls, casement windows and "Project-O-Vent" aluminum awning window. Superior Window Co., Dept. AB, 5300 N.W. 37th Ave., Miami, Fla. Circle No. 98 on Readers' Reply Card

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<td>All-Purpose Portable Power Hack Saw</td>
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<td>only $37.50</td>
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<td>makes any cutting job quick...eas...economical</td>
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<td>Zips through wood, sheet metal, lath, plaster, pipe, nails, etc. in seconds! Attaches to any heavy duty (\frac{3}{4}) or 5/16&quot; drill.</td>
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<td>Use this sensational time and work-saving tool. You'll say it is the best portable, all-purpose hack saw on the market.</td>
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<td>See Tri-Saw at your jobber or write us for descriptive literature.</td>
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<th>CONTRACTORS! Finish Your Cold-Weather Jobs ON TIME...with Handy SIMPLEX PORTABLE</th>
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<td>HOT BLAST HEATERS</td>
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<td>You'll save the price of a SIMPLEX the first year...Speeding up drying of plaster, paint and varnish, keeping workers more comfortable, preventing freeze-ups—keeping work moving in coldest weather. Smokeless, sootless, the HOT BLAST generates an intense blue flame on a mixture of kerosene and compressed air like a blow torch. Highly efficient, lightweight, sturdy, easy portable, it is also available with wheels. Completely safe. Automatic Shut-Off on roll stops fuel supply if flame goes out. See your Builder's Supply Dealer, or write for details and prices.</td>
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<th>WESTERN METAL SPECIALTY CO.</th>
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<td>Dept. A, 1211 N. 62nd St., Milwaukee 13, Wis.</td>
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</table>
World's most powerful pick-ups, panels and stakes!

Now... new 145-hp. POWER-DOME V-8! More power than any other low-tonnage truck engine!

Test for yourself the flashing acceleration, the big power reserve of this new 145-hp. Power-Dome V-8... the ultra-modern truck engine that gives Dodge pick-ups and stakes more power than any low-tonnage truck! Ask your dependable Dodge truck dealer to show you a new Power-Dome V-8 or a 110-hp. thrifty six!

UP TO 39.4% MORE POWER than other ½-, ¾-, and 1-ton trucks. It's low-cost power, too! Dodge V-8 pick-ups offer most horsepower for your truck dollar.

OFFERS MORE MILES PER GALLON on regular gas—most hp. per cu. in. displacement of any popular truck engine—prove new Power-Dome V-8's economy.

"NEW-TRUCK" POWER LASTS LONGER: Power-Dome design... proved in higher tonnage models... means fewer power-stealing "hot spots" in combustion chambers.

More proof that Dodge trucks offer a better deal for the man at the wheel!
G.E. Proves Low Operating Costs of Home-Cooling

Texas tests give dollars-and-cents facts

Dallas Test... made during record-breaking summer... 34 days over 100 degrees... proved that operating costs with G-E home-cooling are far less than even the experts predicted! Here are the facts: 33 homes like the one shown above equipped with 2-ton G-E units averaged only $13.00 a month for 5 months' cooling! Here is proof-positive that G.E. delivers the economical performance that homeowners want.

Austin Today is the site of the most important industry-wide test ever made of home-cooling! Here, in 22 houses, air-conditioning equipment and all related factors will be carefully and completely studied and analyzed. As in Dallas, G.E. will prove that home-cooling is within reach of modest building or modernizing budgets... a necessary part of your residential specifications!

These Texas tests prove home-cooling in every room is here for the mass market. Today, no home is modern without the freedom from weather of year-round air-conditioning.

Your clients want the comfort and healthful advantages of a complete Home Heating and Cooling system. And, because of General Electric's continuing program of research and product development, more and more of them can afford it. Specify G.E.... give every homeowner the satisfaction of knowing his house is truly up-to-date... will still be modern years later if he wants to sell... equipped for comfort no matter what the season or weather.

G-E AIR-WALL System offers these EXCLUSIVE features

- G-E Air-Wall—the best system for distributing conditioned air the year 'round. Same ducts for both cooling and heating.
- Eliminates "layer-cake" heating and cooling. Provides uniform temperature from floor to ceiling.

For complete information on Dallas Study, "Operating Costs Are Lower Than You Think," write Home Heating and Cooling Department, General Electric Company, 5 Lawrence Street, Bloomfield, New Jersey.

Progress Is Our Most Important Product

G E N E R A L  E L E C T R I C

OCTOBER 1954

281
Whenever You're Looking for BUILDING SUPPLIES...
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ALWAYS-LOOK TO...
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Supply Co. St. Louis 20, Mo.

annular-threaded linoleum underlay drive screws

To make your linoleum underlays hold tightly and lie flat permanently, secure them with Hassall annular-threaded linoleum underlay drive screws. They are cement-coated for maximum gripping power. Heads are flat countersunk type. Size: 1/4" x #3 gauge. State quantity when writing for prices to:

JOHN HASSALL, INC.
P.O. Box 2150
Westbury, New York
Established 1850

Ready-mixed gypsum plaster weighs less than half similar amount of wet sanded plaster

lightweight plaster needs no aggregate

Ready-mixed lightweight gypsum basecoat plaster has recently been made available on a nationwide basis. The Gypsum Association, Chicago, has announced. This new packaged plaster requires only the addition of water at the job site. It is stated to offer the following advantages:

1. The material, which has a mortar weight less than half that of wet sanded plaster, is easier for the journeyman and laborer to handle, and affords less weight for the joists to carry.
2. It eliminates the necessity of mixing aggregate with the plaster.
3. The hazard of bad sand and of over-sanding is avoided, at the same time assuring a strong plaster.
4. It offers greater fire resistance than sanded plaster.

CATALOGS
(Continued from page 279)

PLASTIC TILE shown in 16-page booklet, covers decorators' preferences in various rooms of the home. Various room scenes in full color show many applications of Miraplas tile. S & W Moulding Co., Dept. AB, 990 Parsons Ave., Columbus, Ohio.
Circle No. 99 on Readers' Reply Card

DRYWALL TRIM described in informative four-page brochure. All-metal trim and its methods of application, with "Edge Guard" for door and window casings, "Corner Guard" for external wall board corners. Drywall Trim, Inc., Dept. AB, 2408 N. Farwell Ave., Milwaukee 11, Wis.
Circle No. 100 on Readers' Reply Card

AMERICAN BUILDER
BUILDERS AND BUYERS

See EYE to EYE on HPI Hardwood Plywood

HPI Hardwood Plywood assures you of the uniform quality and varied beauty that will catch the eyes of prospective buyers, whether you use it in the form of built-ins, flush doors, wall paneling, plywood floor tiles, or kitchen cabinets.

HPI Hardwood Plywood is an easy-to-work material that cuts costs of construction and finishing...adds real sales appeal.

To the prospective home buyer HPI hardwood plywood offers the beauty that comes only with genuine wood in its endless variety of grain and color plus permanence of construction and a minimum of maintenance.

Your house will sell faster at a better price when you make full use of HPI hardwood plywood.

Walls paneled in Walnut-Birch Table

- To get the full selling value of hardwood plywood insist on the HPI seal. Only hardwood plywood manufactured under the most rigid quality control carries the HPI seal. An 8 point quality control program covering log selection, cutting, drying, bonding, and grading assures unvarying uniform quality.

- Pre-sold With Powerful National Advertising. HPI hardwood plywood gives maximum sales appeal for your houses, because your prospects are being pre-sold with national magazine advertising. HPI advertising is appearing in an impressive list of national magazines...magazines that whet the desire for homes beautified with HPI hardwood plywood. These ads will appear in such big circulation publications as Living, House Beautiful, House & Garden, Popular Mechanics and others.

HARDWOOD PLYWOOD INSTITUTE
600 South Michigan Avenue • Chicago 5, Illinois
some municipal restrictions on new subdivisions go too far

By John F. McCarthy
Attorney at Law

Builders have always had the problem of acquiring land and offering homes in locations providing some of the advantages of a present day urban community. This problem is becoming more acute as the supply of advantageously located subdivision land dwindles in the face of the sustained high rate of home production.

The amenities of living in a present day urban community are not limited to safe water, adequate sewers and hard-top streets. They include, in addition and at least, adequate transportation, good shopping, schools, parks, churches, and fire and police protection. It is a fact that residential properties and developments normally do not pay their own way. In other words, it costs a city more to supply the customary municipal services to a home and family than the city collects by way of its various taxes. Thus, as all builders are aware, many communities, particularly those in weak financial positions, have attempted to restrict new subdivisions and the development of extensive residential areas.

These restrictions have assumed various forms. They include requirements for oversized water mains and sewer pipes, thicker paving, larger lots, fewer homes to the acre and larger square foot areas for homes. Many of the restrictions go too far and are illegal. Nevertheless a builder often must disregard the legal aspects and be practical, as the saying goes, because he must avoid the consequences of failing to get along with the authorities of the community where he intends to build. One district school superintendent recently warned a Chicago builder that if he persisted in putting up homes in an area where the district was unable financially to supply adequate school facilities, he (the superintendent) would cause signs to be erected in the vicinity warning prospective customers of that fact. The effect on the builders' sales would be obvious.

The Supreme Court of Errors of the State of Connecticut, the highest tribunal in that State, in the case of Ralph R. Beach v. The Planning and Zoning Commission of the Town of Milford, recently handed down a decision concerning the problems under discussion. (See 113 Atl. 2d. 514.) In that case Beach had applied to the Commission for approval of a subdivision plat. The Commission rejected Beach's application and assigned as reasons that the proposed subdivision was adjacent to another new development which would contain 79 homes, that a new school in the area would be inadequate to provide for the children already living there and that the financial situation of the town was such that an additional school and additional fire and police protection could not be provided. The Supreme Court reversed the Commission's decision and directed the Commission to approve Beach's plat. The Court observed that no statute or ordinance authorized the Commission to reject a plat for the reasons assigned. Further, no statute or ordinance could confer such authority. City planning and zoning must proceed on sound considerations of the general welfare, public health, morals and safety. A builder may not be prevented from developing his property on a basis otherwise sound merely because of the financial condition of the community.
Increase your know-how 
with these practical books covering 
all phases LIGHT CONSTRUCTION

1. RICHEY'S REFERENCE HANDBOOK*
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   For construction engineers, architects and builders. Here, in one handy volume, is a whole library of information covering all the building trades. Twenty-three chapters, over 400 tables, 544 drawings and a 20-page index. A completely new kind of handbook covering actual building practice and what-to-use and how-to-do-it instructions. An American Builder publication said on a ten-day inspection privilege (see coupon).
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    Guide for planning wiring of moderate-priced homes. With emphasis on safety, effectiveness and efficiency. $1.00

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Colorbestos sets a new style in modern construction . . . combines beautiful 
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a major step forward in the design and 
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to distinguish the vertical joints. No batten 
strips are needed. Used in combination 
with stone, glass, or wood, Colorbestos 
creates a beautiful balance of texture and 
color—inside and out.
CUTS COSTS

CHASE copper drainage tube fits within standard partitions!

For a neater, more compact drainage installation, insist on Chase Copper Tube for soil, waste and vent lines.

Chase 3" Copper Drainage Tube fits within standard partitions, eliminates the need for costly and unsightly furring-out construction that's required with ordinary drainage materials.

The smooth inside surfaces of Chase Copper Drainage Tube and Solder-Joint Fittings permit fast, even drainage...there are no internal projections to form waste-trapping pockets. And, of course, copper can never clog with rust!

What's more, because installation costs are lower, the total cost of a quality Chase Copper Drainage System is little or no more than the cost of an ordinary system.

Your Chase Wholesaler can give you more information about Chase Copper Drainage Tube and Fittings. Contact him when you plan your next job.

Chase Copper adds extra value to any home!

The Nation's Headquarters for Brass & Copper

Chase Brass & Copper Co.

WATERBURY 20, CONNECTICUT - SUBSIDIARY OF KENNECOTT COPPER CORPORATION

October 1954
With this Jaeger 3½S Auto-Loader you load while you mix and measure as you load. The power shaker action of its hopper charges the drum in a flash the instant you open the gate. Dual-mix drum, with extra big bucket and flight blades, insures thorough mixing and discharges faster. Machined steel drum tracks and rugged construction throughout for long service.

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with
WACO Scaffold Jacks

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Used by every trade to reach work faster, finish up faster. Write for Bulletin SJ-1 for complete information.

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letters

"Buck of the Yards" plan impresses Fritz B. Burns

Sir: Several months ago you spoke of the "Back of the Yards" area in such a... manner that I have since visited it on two occasions and I am convinced that it is one of the best examples of a practical approach to rehabilitating and conserving a neighborhood without recourse to subsidy or long drawn out, slow moving... plans and... devoid of the frustrating problems of displacing people, recapturing and relocating them.

Has it been publicized? Has your magazine ever published anything regarding it? Or, is it too practical and too unglamorous and too much on the simple "bread and butter" side to make a good story?

Fritz B. Burns, Builder
Los Angeles 5, Calif.

We certainly have every intention of discussing the "Back of the Yards" plan in the American Builder and will try to give it a slant that may inspire the builders in some other metropolitan centers to initiate something conforming to the same general pattern.

—The Editor

Lu-Re-Co panel building conference stories ring bell

Sir: I have heard (much) about the fine demonstration that was held in Fred Dill's yard in Carmel, New York. Your article in the July issue of American Builder was a superb job of reporting.

I think Fred Dill and Paul Collier (Executive Vice President of Northeastern Retail Lumbermen's Association) are also to be congratulated for an excellent job of carrying this message to the dealer. They are doing a grand service for the industry and also for the dealer.

I wish also to comment on the story in the July issue about the Building Components Conference. I think you have done an excellent job of presenting this to your readers and I am hopeful that it will

(Continued on page 290)
Architects look upon the How-ell-dor in terms of a quality standard of performance. To builders and suppliers it means ease of installation, fast turnover. To the homeowner it is an attractively priced door, built for lasting beauty.

When specifying How-ell-dor, look for fast, dependable service. There are now 54 stock sizes and styles of residential and commercial doors to satisfy every requirement.

Write for FREE '54 literature.

THE HOWELL MANUFACTURING CO. 7201 Charleston Ave., Philadelphia 11, Pennsylvania

YOU CAN START A $40 A DAY BUSINESS IN YOUR SPARE TIME!

Andy Phillips says: “My Belsaw Sharp Smith gives me big profits at low expenses—I can cut $3 to $8 per hour—I get big extra profits—up to $4 per hour—on jobs for contractors and joiners—always in demand for this kind of work.

You can start this REPEAT CALL business in your own home or garage while you are working at your regular job. Keep in order—no experience needed. My BELSAW paid for itself the first month.”

For as little as $15 down payment, you can get your Belsaw Sharp Smith right now.

FREE Book TELLS HOW

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EASY TO USE! Butt Weld EASY TO SELL!

DUR-O-WAL

WITH TRUSSED DESIGN

The Backbone of Steel for EVERY masonry wall. Dur-O-Wal is the electrically-welded, custom-designed reinforcing member that has first on the mortar joint. Saves you time and money, protects against cracks. Easy to sell because it's easy to use.

Why Lucke Leakproof Tub Hangers EXCEL

Build Tub into wall construction—so tub cannot settle. Sealed with plastic compound so it cannot leak. Has suitability to every tub—durability—permanence. Guards against spoiled ceilings, ruined draperies, walls. Maintains proper pitch of tub—always drains properly.

LUCKE Leakproof Tub Hangers

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Dur-O-Wal Products, Inc. P. O. Box 1628
Syracuse 1, New York

Cedar Rapids Block Company P. O. Box 5446
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LUCKE Leakproof Tub Hangers
NEW TRESTLES WITH 9 HEIGHT ADJUSTMENTS

FOR FAST MASONRY CONSTRUCTION, mason contractor L. Hubbard of Euclid, Ohio, uses new “Trouble Saver” Putlog Trestles on a project for Joe Miller Homes Co. The new Putlog Trestles are 5'-long and provide nine height adjustments, ranging from 4' to 6'. Masons set each Putlog on the top course, then brick is laid over them. Putlogs are pulled out of the wall and adjusted to new height as the job progresses. When a pin is removed, the new Putlog Trestle swings down flat for easy storage or shipping.

THE STEEL SCAFFOLDING COMPANY
Telephone EVergreen 3-5510 Dept. AB 856 Humboldt Street, Brooklyn 22, New York

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The nation wide acceptance of KOTA HORIZONTAL SLIDE WINDOWS can mean just one thing — QUALITY. And KOTA quality is the result of over a quarter century experience in the metal window business. KOTA quality, workmanship and dependability are bywords in the building industry. Do you have a prime window problem? KOTA has the answers.

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LETTERS

(Continued from page 288)
stimulate a lot of thinking and also some action.
Clarence A. Thompson, Chairman,
Lumber Dealer’s Research Council,
Champaign, III.

Sir: You did a splendid job of reporting on the demonstration which was held at Fred Dill’s yard at Carmel, New York. I have been looking forward to this article and think it is tops. Your photographer certainly knew how to take pictures and to get the essential features. We could use additional copies of the article.

I also like your article on “Building Components Conference.” This is constructive work. We are indebted to you.
Paul S. Collier, Exec. Vice Pres.,
Northeastern Retail Lumbermen’s Association,
Rochester 4, N.Y.

A ‘thank you’ note from NAHB’s president

Sir: I have just been looking over the ad “Are You Building in the Dark?” (pages 16-17, June 1954, American Builder) It is my opinion that it should be of great benefit to us in our membership campaign this Fall and I want to thank you personally for this and the many other ways in which you have helped NAHB.

Richard G. Hughes, President,
Nat’l Assn. of Home Builders,
Pampa, Texas

PASS-ALONG READER IS SOLD

Sir: Attached is my check for one year’s subscription to American Builder. I have been reading your magazine for quite a long time, but always secondhand. I find its contents so very helpful that I do not feel that I can afford any longer to miss having it promptly upon publication each month.

I shall appreciate being added to your subscription list promptly.
L. B. Rockwell, Builder,
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Gracious Living
with BENDIX mouldings
At small cost, builders can add great sales appeal through the use of BENDIX embossed and deeply carved mouldings. Learn how BENDIX mouldings actually help clinch sales. Write for details.
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Shelf supports made of heavy cast aluminum. Top and bottom assembly of precision machined cadmium plated steel. Kits packed in 2 and 3-shelf sets. Extra supports available. DEALERS WANTED: Write for full information and prices.

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OCTOBER 1954

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Sell the features and you sell the door! The reason why Frantz dealers sell more doors is because Frantz doors have more features! Such as the "Glide-O-Matic" self-opening action . . . so smooth and effortless, you almost think it is motor driven. There are many features in all models that sell for you—easy closing action, friction brakes which prevent rebound, weather-tight construction, ball bearing rollers, easy installation—needs only 13½” headroom . . . and many others. For a “best seller” in garage doors investigate the Frantz line. Write for a copy of Catalog No. 302 today!

SELL FRANTZ - AMERICA'S BEST ENGINEERED OVERHEAD DOOR

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Adds beauty, cheer and comfort to any home, old or new.

The modern fireplace that fulfills all modern day requirements—used with gas or electricity.

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Furnished complete—ready to be installed by a handy man—shipped anywhere.

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Department B

Step No. 1. Setting stud locators for rigid location of studs is quick, fast and easy

New Jig Speeds Wall Construction

The trend in house building is toward a pre-assembly system; that is, the major component parts of the house manufactured in factory or shop and then assembled together into the complete product at the site.

A timely new device which enables the builder to construct wall sections in panels is this mechanical jig developed by Alex P. LeVay, owner of the Acacia Lumber Company of Dayton, Ohio. Called "Module Erector," this machine is a quick, accurate layout jig which panelizes to conventional framing standards, and has a mechanical arrangement for handling the frame.

(Continued on page 294)

Step No. 2. Setting studs in stud locators. Change over from one side of house to another is simple

Step No. 3. Nailing up the frame assembly. Several panels are nailed up as one side of the house
add more Value with Lupton Windows

More of today's home buyers are looking for more value. More of today's home builders are putting that extra value into more of their homes with Lupton Metal Windows. Here's how — Lupton Metal Windows feature rugged strength, with trim and slim lines for beauty inside and out...easy operation...smartly designed hardware...precision construction.

Tops in the value parade are homes with Lupton Aluminum Windows...for these windows will never need paint — a strong sales point. Easy, quick, one-man installation...is another feature in your favor.

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AND SELL YOUR HOUSES FASTER

A proven fact! Ask any builder who installs BILCO Doors. He'll tell you it's the best selling feature he ever used. Home buyers sign up fast when basements are useful, livable and safe. Don't "date" your homes — investigate America's fastest growing building product . . . the BILCO all-metal permanent door.

Direct access to the basement eliminates tracking mud and dirt through the upstairs rooms. Countless steps are saved by repairmen, servicemen and the home owner. It's the only means of installing big equipment necessary for a work shop, recreation room or extra living room.

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**new jig speeds wall construction**

**Step No. 4.** Siding the frame assures staggered siding joints conceal the panel join-up

**Step No. 5.** It takes 5 to 8 seconds to raise the frame assembly to roll it down the line for further processing or removing from Erector

(Continued from page 292)

assembly after it has been fabricated. A whole side of a house may be panelized into two or three dovetailed sections in one operation, and it makes no difference whether the house is to be sub-sided, single sided, or double sided. Outward appearance gives no indication of where the panels join up.

LeVay claims that use of the Module Erector will save $200 in labor costs per house. Price of the machine is $4,950 f.o.b. from The Module Erector Company, 1522 N. Dixie Drive, Dayton 4, Ohio. Included in the price is a manual, "The Art of Prefabrication."

**Size of the Module Erector is 8 feet by 50 feet**

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**Economical!** You can’t buy a lower-cost root-proof sewer pipe installed.

**Easy to install!** 8-foot lengths install faster, easier. Few hammer taps seal joints permanently.

**Permanent!** Lasts a lifetime because it’s made of tough wood fibre impregnated with pitch.

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**Corrosion-Proof!** Not affected by acids and alkalis usually found in soils.

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I plan to show this film on the following dates:
How a Sherman Power Digger Does More Work in Less Time with No Standby Equipment

Nearly every department in the city of Hopkins, Minnesota, finds a use for this versatile Sherman Power Digger.

The Water Department uses the machine when cutting off discontinued service lines at the main. They dig a hole in the street (usually blacktop) 3' wide by 6' long by 8' deep. The hole must be plumbwalled for minimum replacement of paving. This operation used to tie up a truck all day, an air compressor half a day, and two men with hand tools, a full day.

Using a Sherman Power Digger, they now do three such jobs in one day, with only one man on the digger, no truck, and no compressor, — for concrete pavement. The job goes faster because they can dig the hole, shut off the line, and backfill before the walls begin to cave. Local soil conditions formerly required cribbing many of these excavations.

If your work involves the construction or maintenance of underground facilities, you will profit with a Sherman Power Digger. It's compact, fast, and flexible, with low initial cost and amazing economy of operation. Write today for full details, without obligation. Ask for Bulletin No. T57R

cedar closet can add sales appeal in today's market

Home builders are placing increasing emphasis on quality items which help sell houses faster. There is also a growing demand among home buyers for additional “built-in” features which make up the over-all package. Among these can be cedar closets, long recognized as a sales feature.

Red cedar’s best known selling point is probably its ability to repel moths. The fumes of the cedarwood oil paralyze moth larvae and starve them to death before they can damage stored woolens.

A recent statement by The Aromatic Red Cedar Closet Lining manufacturers, Chicago, discloses that: “Creating greater demand for aromatic red cedar closet lining is simply a matter of focusing customer attention on the product and acquainting prospects with its . . . qualities and characteristics.”

Red cedar closet lining is packaged in bundles, usually eight feet long. Tongued and grooved for snug jointing, the material is produced in several face widths ranging from two to four inches.

installing oak flooring

(Continued from page 56)

screed courses no further apart than 12 inches on centers.

When mastic installation of the screeds is used, the mastic is applied directly over the water-proofing membrane. It need only be applied where the screeds are to be laid. However, sufficient mastic should be used to securely fasten the screeds. Spread the mastic to a depth of about ¼ of an inch. As a rule, allow mastic to harden at least 24 hours before you begin to apply the surface flooring.

Blind nail oak strip flooring over the screeds in the usual way. Flooring should be no less than 7/8 of an inch thick and should be tongued and grooved on sides and ends. Be sure that each strip is securely nailed at each bearing point. Of course, this will result in nail spacing of no more than 12 inches. Most satisfactory results can be obtained by using 7d cut steel flooring nails or 8d casing nails or screw-type nails.
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Model 50-C Powernailer fitted for either % or % T & G Flooring

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