1960 Buyers Guide
At least twice a day,

Berry's anti-sway feature

protects your reputation as a quality builder

Along with features like climate-proof weather seal • adjustable track hangers • diamond grid construction • safety lock tracks • rugged lifting arm • Paintlok-steel that won't swell, shrink, check, peel, rust

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What's more, the world's largest manufacturer of residential garage doors makes the price right and installation easy. Choose from one-piece and sectional models. Window lites optional. See your distributor or write: Berry Door Corp., 2400 E. Lincoln, Birmingham, Michigan. In Canada: Berry Door Co., Limited, Wingham, Ontario.
A "SOUND IDEA" for YOUR HOMES . . .

**NuTone Door Chimes**

A "CHEERFUL EARFUL" AT THE DOOR

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Protection for the home! No need to open the door when strangers call. The optical lens gives a "wide angle" view of entire door area. Sounds two chime notes. No wiring is needed. Easy to install in doors ¾" to 2" thick.

See Next Page ———

23 HANDSOME STYLES . . . BUILT-IN or SURFACE MOUNTED

FREE COLOR CATALOGS . . . write NUTONE, Inc., Dept. AB-5, CINCINNATI 27, OHIO
A “SOUND IDEA” for YOUR HOMES!

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A Step-Saver for Busy Homemakers!

ROOM-TO-ROOM INTERCOM . . ALSO AM-FM RADIO IN EVERY ROOM

No extra walking . . no loud shouting . . just speak softly into any speaker to be heard in every room . . or patio.

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- Keeps an ear on children’s activities either in the nursery or in the playroom.

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NuTone Intercom leaves both hands free for installation. Boxes adjustable to the wall line.

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Nothing sells your homes like built-in music in every room.

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THE PHILIP CAREY MFG. COMPANY • GENERAL OFFICES: CINCINNATI 15, OHIO

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AMERICAN BUILDER
What? How? Who? Those are the three big questions you have on your mind all year long: (1) What to build? (2) How to build it? (3) Who makes what it takes to do the job?

Every month it's our main aim in life to bring you the changing answers to all three questions. But once a year—in April—the emphasis is shifted to question 3: Who makes what it takes? (Plus a hefty section of technical pages to answer question 2.)

The answer is long and complicated. In the past year, roughly 39,000 IBM cards were processed to bring you the answers you find up front in the yellow pages. Almost 2,800 manufacturers were queried and their information included. Two editors worked all year long to answer the Who? And the question was never far off the mind of a third.

This year, they've outdone themselves. For example, there are now two reply cards to help you get answers (last year you sent us nearly 200,000 inquiries based on the catalog section alone).

And the 1960 Technical Data pages deserve a careful survey at your first opportunity. You'll find many new subjects, such as: Curtain Walls, Site Planning, How to Sound Condition a House.

This is an issue to use all year long. For a good start, please see our editors' suggestions under the index on page 8.

Arthur J. McGinnis
Publisher
NEW TRADE-WIND TRIO!

* Light – Ventilation – Heat
* 3-way convenience for bathrooms – in one unit
* Trade-Wind Model 1101

This new Trade-Wind unit provides any combination of light, ventilation and heat for complete bathroom convenience. The beautifully designed chrome and glass grille is flush mounted. The lights provide brilliant diffused illumination through Alba-lite glass panels and the louvers direct an even flow of concentrated fan-forced heat.

Five combinations can be selected with a remote wall switch, (included with unit): Heater only – Lights only – Ventilation only – Lights and Heater – Lights and Ventilation.

An exclusive electrically reversible Axial Flow Fan distributes a full 1450 watts of heat throughout the entire bathroom instantly.

Trade-Wind

DIVISION OF ROBBINS & MEYERS, INC.
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1. Use the handy hole in the upper left hand corner. Loop a piece of cord through it, then hang the Issue close to your desk. It makes a year 'round reference book.

2. On page 20 you'll find a set of tabs to match the numbered sections of the magazine. Cut them out. Paste the left half of each tab on the first page of the section it matches. Reference-thumbing will go faster this way.

3. Page seven (general index) will give you a good, complete look at everything we have to offer. For specific items use the alphabetical subject index above.

4. Key to the five Directory Sections is the Directory of Manufacturers. Use it whenever you want the complete name and address of a firm. Every building product manufacturer in this Issue is included there. It starts on page 39.

5. Take a leisurely trip through the Technical Data Sections. They start on page 123, cover everything from site selection to light-planning.

6. You'll find not one, but two reply cards on page 19. There are 459 catalogs in this Issue. To get them use one card now, the second later in the year.

Drawings: Sigman-Ward Inc., NYC
6 B&D PORTABLE ELECTRIC SAWS give you a choice of power, price and capacity—from the new 6½" Utility Saw for the buyer who wants economy, to the 9¼" Heavy-Duty Saw for toughest service.


NEW U-410 UTILITY JIG SAW has performance-engineered handle, 25% faster-cutting blades, low price, 3 blades included.

FOR DRILLING


UNIQUE B&D SCRU-DRILL (U-9) adjusting collar instantly changes unit from ½" drill to screw driver.

3 B&D FINISHING SANDERS feature unique Dust-Less (U-43) model which attaches to vacuum cleaner for healthier, dustless operation. U-440 Utility Finishing Sander and U-44 Deluxe Finishing Sander are 10 times faster than hand sanding.

**READER'S GUIDE TO**

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AUTY BUT IT'S NO BUILDING—no investment in real estate is more secure than the title to the land.

Apparent blemishes and hidden flaws in real estate titles can DELAY CONSTRUCTION ENCUMBER THE SECURITY BEHIND MORTGAGES HOLD UP SALES REDUCE THE SALEABILITY OF MORTGAGES CAUSE SEVERE FINANCIAL LOSS

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cutting corners without cutting corners!

Every builder wants to save money. And every builder wants perfection in every detail...right down to the baseboards. The answer to that one, of course, is KenCove® Wall Base...the flexible vinyl wall base that fits every corner perfectly. Your flooring contractor can form corners right on the job in less time and at less cost to you. No cutting needed...you get an attractive installation that will stand up to the heaviest use...won't become brittle, crack or warp ever. Comes in standard heights of 4” and 6” plus the new 2½” height that adds the illusion of greater height to low-ceilinged rooms. Ask your flooring contractor for KenCove Wall Base...most fitting companion to famous Kentile® Floors.

Kentile advertising like this appears in LIFE, LOOK, SATURDAY EVENING POST, 17 other leading National magazines and 51 Sunday Magazine Sections.

It's easy to give your homes a custom-flooring look. Over 200 colors, thousands of designs to choose from in Solid Vinyl, Vinyl Asbestos, Rubber, Cork and Asphalt Tile. Kentile, Inc., Brooklyn 15, N.Y.

KENTILE FLOORS

58 Second Ave., Brooklyn 15, N.Y. • 350 Fifth Ave., New York 1, N.Y. • 3 Penn Center Plaza, Philadelphia 2, Penn. • 55 Public Square, Cleveland 13, Ohio 900 Peachtree St., N. E., Atlanta 9, Ga. • 1016 Central St., Kansas City 5, Mo. • 4532 So. Kolin Ave., Chicago 32, Ill. • 2834 Supply Ave., Los Angeles 22, Calif.

14 AMERICAN BUILDER
Construction runs ahead of last year

Builders and contractors are continuing 1960 work at near-record levels. Latest U.S. census reports show private construction expenditures in the first two months were $5.4 billion, or 7 per cent ahead of 1959. Private residential work, including apartments, was up 2 per cent over 1959. House additions and alteration work was running 20 per cent ahead. The figures represent the Census Bureau’s estimates of the value of work put in place. In contrast, housing starts fell off the first two months from a total of 181,500 to 152,500. The drop was 16 per cent.

Big business on scattered lots

Building houses on scattered lots is a bigger business than is generally realized: it’s opportunity for both large and small builders. A notable example is Harmony Homes of Los Angeles, who sold 3,400 units on scattered lots last year—a remarkable increase from the 34 built in their first year—1954.

Harmony Homes specializes in “back yard” sites: areas that have been rezoned to permit another house on a lot. Many of their houses are sold as rental investments. The organization is made up of 19 building companies under the management direction of Charles Criswell. Through his efficient system of planning, scheduling, buying and co-operative advertising he is delivering small homes at a cost of only $5.70 per sq. ft.

 Builders fight secondary boycotts

Builders are voicing strong opposition to any change in the Taft-Hartley act to legalize secondary boycotts at construction sites. Rodney M. Lockwood of NAHB told the House Labor Subcommittee “it would cause a setback of many years” in progress of new building methods and techniques. Frank J. Rooney of Associated General Contractors said it “would be like turning the clock back to 1947” and would cause labor unrest—actually encourage strikes and picketing in construction. Others say legalizing secondary boycotts would let a single union halt a job for almost any reason, causing chaos.

4 months more for GI loans

Under present law, the cutoff date for home loans for World War II veterans is July 25. Veterans who submit applications on or before that date will be allowed an additional 12 months in which to have the loan processed or actually closed. But Korean veterans have until January 31, 1965 to make applications.

Data released by VA show that only one-third of eligible World War II veterans and one-eighth of Korean veterans have taken advantage of the loan program.

Pressure for an extension of the GI home loan period is sure to increase as the cutoff date approaches. Many builders feel that veterans have been unjustly thwarted in their right to a GI home loan by the tight money policies that have strangled VA building.

If you are still able to obtain VA financing, try advertising the July 25 cutoff date as a reason for buying a home before it’s too late to qualify.

Multiple setup gets tax setback

The first U.S. court ruling on multiple corporation setups in the building field has caused widespread concern among builders. The U.S. Tax Court upheld a deficiency finding of the Internal Revenue Service of $102,700 against Aldon Homes, Inc., of California. The court upheld the contention of IRS that the 16 corporations set up to build and sell Aldon’s Briarcliff project were not business entities worthy of recognition for tax purposes.

Tax experts say the Aldon case is not necessarily a valid precedent for disallowing tax savings on all other types of multiple setups. But it will undoubtedly be used to strengthen the case against many.

Slow-moving housing bill

The slow and much debated progress of the 1960 housing bill in Congress has put the spotlight on the controversial position of this industry in (Continued on page 343)
PROVED WHEREVER BUSINESS BANKS ON GOOD TIRES

FIRESTONE PERFORMANCE PAYS OFF WITH LOW-COST-PER-MILE BUILDING MATERIAL DELIVERIES!

Firestone tires' low-cost-per-mile is reflected in performance records of thousands of trucks across the country. That's because 425,000,000 tire miles a year in Firestone's own tire testing program prove Firestone truck tires are your best buy! This vast tire testing program resulted in Firestone Rubber-X, the longest-wearing rubber ever used in Firestone truck tires. It also resulted in Firestone Shock-Fortified cord which means extra miles of service out of every tire. Get performance proved Firestone truck tires, on convenient terms if you wish, at your nearby Firestone Dealer or Store.

Firestone

BETTER RUBBER FROM START TO FINISH

Copyright 1969, The Firestone Tire & Rubber Company
Handsplit cedar shakes have a texture and a thickness all their own. Virtually any home design—topped with the texture of handsplit cedar—takes on the dimension and stature of a custom property. The hand-hewn character of this extraordinary roofing puts quality up where it is obvious, apparent, unmistakable.

Too, a roof of thick cedar shakes provides extremely effective insulation . . . is unaffected by hail, wind or blistering heat . . . and will outlast the very sheathing it protects. In every respect, handsplit cedar shakes reflect quality.

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YOUR best way to better building contracts is to find more new jobs to pick from ... then concentrate on those you want to handle ... when and where you want them. How? With daily Dodge Reports !!

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Send me the book: “How General Contractors Get More Business in New Construction” and let me see some typical Dodge Reports for my area. I am interested in the general markets checked below.

- House Construction
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- Engineering Projects (Heavy Construction)

Area
Name
Company
Address
City __________ Zone __________ State

American Builder
"repaper, repaint...repaper, repaint"...this is a tenant's consistent complaint...that's why the financier specifies "TILE...GLAZED CERAMIC HERMOSA-style!" for bathrooms or ballrooms, for tallrooms or smallrooms, for lunchrooms or hallways...remember now...ALWAYS...abolish the costs of The Renter's Refrain...line-it-with-tile* it's a cinch to maintain!

HERMOSA GLAZED CERAMIC TILE BY GLADDING, McBEAN & CO.

hey...send 10¢ to us at THE GLADDING, McBEAN TILE*THINK CENTER, 2901 Los Feliz, Los Angeles 39 for more good news for those of youse who are tile*thinkers*at*heart.
COMMUNITY POOL in interior court is a feature in many of McNutt's apartment buildings. Stairs are near parking area.

Why build apartments?

1 Land-short areas often have isolated lots suitable for and zoned for apartments.
2 By holding buildings for several years, added profits can be made on original investments.
3 Tax savings are possible through depreciation and on a long-term capital gains basis.
4 In tight-money periods, financing is easier to come by because of investment opportunities.

P. L. McNutt

P. L. McNutt is a 200-unit-per-year builder. The 200 units used to be houses. Now they're apartments. The changeover came about because the Californian was faced with a problem common to many volume builders—a shortage of land at a reasonable price. McNutt found that building apartments would answer the land-shortage problem and give him some additional advantages. Result: he now has a profitable building operation and a money-making investment.

FRONT ELEVATION shows parking area (L) which has enough space to accommodate all tenants. Site for this building (as well as others built by McNutt) was formerly improved with large house. The builder finds it cheaper to raze old homes than to buy vacant land for his apartment buildings.
Here are 4 good reasons

Early in 1959, after several years' retirement, P. L. McNutt decided to get back into the building business. But, when he looked over the land situation in the San Gabriel (Cal.) Valley where he had built his houses, he discovered a big change. There was no more land available for volume operation at a price suitable for the homes he could sell. So, he examined the possibility of building apartments.

Vacant land for apartments also was in short supply or over-priced. However, he did locate some lots with old houses which could be purchased for the right price. He found he could afford to have a house wrecked and moved away (usually for $1,000 to $2,000) and still come out better than if he purchased vacant property. These old homes were in the City of Arcadia which had rezoned a large area for multiples.

McNutt says he can afford to pay about $1,500 per apartment unit for land. Thus, for a 20-unit structure (the smallest he builds) he can pay $30,000 for the land. Because he needs a lot at least 85' wide by 200' to 250' deep for a 20-unit building, he sometimes puts two or three lots together. Construction cost for such a building (including a normal profit) is about $135,000, or a total with land of $165,000.

McNutt can borrow 70 per cent of the cost from a savings and loan association. The balance is his own capital or comes from "investors." These "investors" are generally private individuals.

(Continued on page 18-L)
Never underestimate the power of a woman—or, in this case, women.

About a year ago, some 221 members of women's clubs in the Ventura, Calif., area attended a forum, "It's time the ladies design America's homes." The session, at which the women filled out a voluminous questionnaire, was sponsored by the Ray C. Skinner Construction Co.

Recalling the promotional value of McCall's Congress on Better Living, Skinner's marketing manager decided that a similar meeting on a local level could lead to valuable publicity for Skinner's homes. In addition, the builder was anxious to find out exactly what the women in the area thought should go into the homes they wanted to buy.

Results of the promotion, which cost the builder only $222.71, were incorporated into the house pictured above. It is one of the models built by Skinner in his Daly Ranch Estates Development at Ojai and has been a popular seller.

The floor plan is based on the women's preferences. For example, no formal dining room was included, because a heavy majority said they would only use such space on special occasions; but they did want a place to eat in the kitchen. Laundry facilities were placed in the utility room off a service porch on the basis of over 50 per cent of the replies favoring that location.

BLENDING copper, wood, and stone in living room stresses indoor-outdoor living pattern. At left of photo is built-in divider. Home is engineered for A/C.
HOME FORUM MODEL was based on women's suggestions. Priced at $26,750 (with lot), the house features such custom touches as copper tips on all beams and 1" copper strips between 2x8s that form living room ceiling.

this well-planned house

And, to meet the demand for indoor-outdoor living, sliding glass doors open the patio to the master bedroom, the living room, and the family room. In addition, the master bathroom also opens to the patio area.

Skinner is now planning lower-price developments in San Luis Obispo, in Los Angeles, and in Santa Barbara. The Ventura promotion was so successful that the builders have conducted similar market surveys in their new locations.

OPTIONAL FEATURE: a 15x30' swimming pool with filter, lighter, gas heater, and diving board, costs $2,984. To meet requests for bathroom access to pool area, Skinner included door to master bath, screened it for privacy.

APRIL 1960
Pabcowall tames the
No more construction scars!
Pabcowall, the new studless gypsum
drywall system, projects a
beautifully smooth surface that
minimizes beading and ridging...
and **eliminates** nail popping.
You see, there are no nails in the
field with Pabcowall!

A strong, permanent, fire-resistant,
non-load-bearing gypsum partition,
Pabcowall is a superior wall. Proof?
Certified Laboratory Tests of
compression, load-bearing, racking-shear
and sound transmission qualities.

And Pabcowall, using ½" flame curb
gypsum wallboard, has also passed
the one-hour fire test in accordance
with ASTM standards.

Pabcowall also saves considerable
construction time and space . . .
and only Pabcowall gives
you a better wall at lower cost than
conventional drywall construction!

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Established in the West for over 75 years,
Pabco makes products specifically for Western
building and decorating. Produced in the
West, Pabco products are available throughout
the 13 Western States. To ensure the durability
and long life of its products, Pabco maintains
a rigorous pre-testing program in Western areas
noted for their punishing climatic extremes.

**THE WEST WAS MADE FOR PABCO**
(AND PABCOWALL IS MADE FOR THE WEST)!

PABCO
Extra money in the bank

Small savings institutions offer plus opportunities for contractors with home-building know-how

The day of the formal, austere savings institution is on the wane. This is true in large cities, and, even more so, in suburban communities. Banking officials have found it pays to have offices which complement surrounding properties. This trend is money in the bank for the average home builder. It offers him the opportunity to enter a field formerly in the heavy contractor's domain. Many of these new banks are built (Continued on page 18P)

APPROXIMATELY 3,780 sq. ft. of usable space is well planned so that each department of the bank is separate, yet easily accessible to the others.

SECTION of main banking room illustrates use of glue-lam Douglas Fir beams and Western red cedar deck. A combination of fluorescent and incandescent lighting is used.

EMPLOYEES' LOUNGE features dining space and cooking facilities (not shown). Walls of two restrooms are finished with enameled wallboard. Floors are mosaic tile.

Better Detail Plate on p. 18J
Before you buy identify the leader Wedgewood-Holly
KING AND QUEEN OF THE WESTERN RANGES

Built-in beauty to last a house time...

Exciting new models, brilliantly styled to beautify any kitchen decor... Built in ovens with King size barbecue broyl oven, motorized rotisserie, oversized expandable oven and super-size visu-clear windows. Easy-to-install, 4 burner, drop in cook top with Automatic Top Burner Heat Control.

GO MODERN...GO GAS

Wedgewood-Holly
APPLIANCE COMPANY
CULVER CITY, CALIFORNIA

APRIL 1960
Better Detail Plate: Eugene savings bank, page 16H
Each design you get from us has been tested on the public, because they are the people who make the final buying decisions. We work with patterns and colors until we have what people like best. Then we offer you consumer-tested designs, with the "buy" built in. This is Pink Gold Fleck #714 (available in both gloss and satin finish), one design in the complete line of consumer-tested Solid Colors, Woodgrains, Linens, Balboa, La Jolla, and other exclusive patterns. Ask us about them!
APARTMENTS

(Continued from page 18C)

...induals. In one case he located a doctor who was happy to put his money into a profitable enterprise. A lawyer was an "investor" in another building.

Because McNutt has an excellent reputation and A-1 references, his "investors" feel their money is in good hands.

The builder has found it pays to hold onto the buildings for three or four years before selling them. Here's why:
- Each is set up as a separate corporation and by holding them he gets the long-term capital gains tax.
- Because we are in an inflationary period, it is probable that their value will increase.
- He minimizes his taxes because the depreciation on an apartment usually offsets the income to be reported.
- By keeping them, he nets about 15% (over and above his interest payments, etc.) on the amount he has invested in each building.
- At the end of the three- or four-year period, he will have most of his original investment back and will have made a good return on it in the interim.

Below normal rentals

McNutt does not follow the usual pattern when he rents his apartments. Instead of charging the highest possible rentals—based on a vacancy factor—he pegs his rents at about $15 lower than those in surrounding buildings. This tends to keep his units 100 per cent rented—an unusual situation in the Los Angeles area where the vacancy rate is high.

In the case of the suites shown on pages 18B and 18C, the bachelors rent for $106 per month furnished. The one-bedroom units rent for the same figure unfurnished. The large apartment was originally occupied by McNutt, but is now rented out for $190.

All apartments are air conditioned with Frigidaire heat pumps—a separate one for each apartment. Actually, the a/c cost him practically nothing. Southern California Edison Co. makes an allowance when the builder installs a/c. This allowance, together with the amount separate gas heaters would have cost, paid for the heat pumps.

In addition to being air conditioned, all of McNutt's apartments are carpeted; all have natural wood cabinets and built-ins in the kitchens. Most of the buildings have swimming pools. Some of the apartments come without ranges and refrigerators to accommodate families who own appliances. On furnished units the lessee signs an agreement to pay for any damage and also signs an inventory of the furnishings.

McNutt accepts children in some buildings; in others he does not. He says a building must have at least 20 units to support a manager. The manager gets his rent free or $100 per month. His duties: collect rent, take care of water, mail, handle complaints, and show vacant apartments.

What's the future for apartment building? All signs indicate a growing percentage of starts will be apartments. This is particularly true in retirement areas where many persons prefer not to be involved with maintaining houses.

---

Fashionettes

WALL-HUNG VANITIES

give bathrooms that custom-home appeal!

Sani-Top's popular Fashionettes sink and pullman fixture makes the bathroom a glittering showcase for the entire home. Fully formed one-piece laminated plastic counter in stunning decorator patterns. Cabinet sides and drawer facings in laminated plastic woodgrains or decorator colors. Sliding doors of decorative Fiberglas. Engineered for quick, simple installation. Sizes and models to suit all needs (from 30” to 72” wide).

PRICED FOR VOLUME-BUILDER ECONOMY

SANI-TOP INC.

4610 S. Main Street, Los Angeles 37, Calif.
ADams 3-5116

18-L

AMERICAN BUILDER
"A Bevy of Beauties"

From central forced air heating, through air conditioning in new dwellings to supplemental heating in established dwellings, Pioneer has a complete line of practically priced, high quality heating equipment that is a boon to builder and dealer alike. Regardless of heating area, there's a Pioneer unit to efficiently do the job at a price and a profit you'll enjoy. For surging sales in the soaring sixties, line yourself up with this "Bevy of Beauties" from Pioneer.
He and his wife are about to buy their second or third house. Maybe the kind they were aiming for, the first time out. They've had the headaches. And heartaches. They've learned choosiness the hard way. And they'll pull your house apart, bit by bit, looking for a flaw. What's a flaw? Sometimes it's an off-brand or a "low-price" name on a product you're using. Kills a deal before you can call out the lot size. That's exactly why the smartest builders you know put in products with "quality" names. They can't afford to take chances, either. Their reputations can't afford service call-backs. And they feature, publicize, advertise the "Quality" names to draw customers, help close the sale. Before you put a product in, ask yourself—does this product name match your own for quality and reputation? Certainly it does if it's Day & Night—a name with magic-appeal... built-in approval in Heating & Air Conditioning.

Send today for the complete builder file in heating, air conditioning and water heaters to DAY & NIGHT Manufacturing Co., 855 Anaheim-Puente Road, La Puente, Calif.
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BUILDERS PUBLICATIONS, INC., Dept P
1135 W. Huntington Drive, Arcadia, Calif.

(Continued from page 18H)
like new homes. Others are simple one- or two-story light commercial structures well within the home builder's province.

A typical example is the Eugene, Ore., River Road branch of the United States National Bank of Portland. In both appearance and construction methods, the savings institution could be a typical new "home."

Structurally, the bank features a bowed roof line supported on concave arched glue-lam Douglas Fir beams. The roof is Western red cedar deck, visible from inside the bank.

The employees' lounge could well be the family room of many of today's new homes. Walls are surfaced with walnut paneling and there are cooking facilities.

Heating and cooling is accomplished with a reverse cycle air-to-air heat pump. Copper coils throughout the floor slab provide auxiliary heat.

Yovel & Huffman of Eugene was the contractor; Wilsen and Endicott, A.I.A., Eugene, were the architects.
You are now entering
American Builder's Supermarket

Help yourself... to the latest in new products and new catalogs shown on the pages ahead. You don't have to write, just circle the numbers on one of the cards below. Then drop the card in the mail (no stamp needed). AMERICAN BUILDER will forward your request to each manufacturer and he'll send you complete data, free of charge. So... get your pencil and help yourself.

### American Builder Reader Service

#### April 1960

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#### SERVICE

**NAME (Please print)**

**STREET**

- Builder, Contractor
- Sub-contractor
- Building own home
- Architect
- Engineer

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#### SERVICE

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**STREET**

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- Sub-contractor
- Building own home
- Architect
- Engineer
For your extra convenience . . . use the tabs below. Cut them out and glue to opening page of each major section.
Every product, every piece of equipment covered in more than 450 new 1960 catalogs. Get them, free, by using reply card opposite. You'll find them grouped into these 14 sections:

**SITE PREPARATION, PLANNING**

- Plans, systems, office equipment
- BUSINESS COMPUTATIONS are simplified by use of many types of slide rules described in booklet. Rapid figuring of pricing, operating ratios, installment accounts and investments is explained. Plenty of planning details.—W. H. Pusch Co.
  Circle No. A1 on reply card, p. 19

- TRANSISTORIZED POWER for two-way radio is explained here. Booklet and brochures emphasize absence of vibrator nuisance and electrical interference. Lists base station equipment.—Motorola, Inc.
  Circle No. A2 on reply card, p. 19

**Transits, levels**

- FIELD EQUIPMENT for builders ranging from transits to marking rods is covered here. All are described and illustrated in detail in the 26 pages. Drawings, charts, how-to-use details included.—Warren-Knight Co.
  Circle No. A3 on reply card, p. 19

- LEVELING INSTRUMENTS brochure has ordering information with complete list of parts and price of each. Listed are the contractors' level and two models of the convertible.—Bostrom-Brady Mfg. Co.
  Circle No. A4 on reply card, p. 19

- LEVELS CATALOG features two levels new to the trade. Gives ordering information, with illustrations of complete range of leveling tools.—Empire Level Mfg. Co.
  Circle No. A5 on reply card, p. 19

- SURVEYING INSTRUMENTS, from level-transits to alidades, pictured in excellently-illustrated booklet. Cutaways show optical systems. Specifications, how-to-use details, retail price list.—David White Instrument Co.
  Circle No. A6 on reply card, p. 19

**Site planning**

- Concrete, masonry, tile, brick
- Framing
- Roofing, siding, insulation, sheathing
- Doors and windows
- Plumbing, water supply
- Heating, cooling, ventilation
- Electrical, wiring
- Floor, wall, ceiling material
- Millwork, cabinets
- Hardware, building specialties
- Appliances, kitchen equipment
- Paints, finishes, waterproofing
- Tools, equipment

Ahead, 17 more pages of catalogs >
BACKHOES, tractor shovels, and hydraulic hammers are among products described in this series of catalog sheets. List specifications, attachments, etc.—Henry Mfg. Co., Inc.

Circle No. A12 on reply card, p. 19

CRAWLER TRACTOR is described in colorful 15-page booklet. Contains technical information and lists accessories. Versatility of machine is fully illustrated.—The Oliver Corp.

Circle No. A13 on reply card, p. 19

BACKHOES and loaders plus rear blades and brooms are featured in this folder. Complete specifications and list of attachments for each of the units is included.—Shawnee Mfg. Co., Inc.

Circle No. A14 on reply card, p. 19

Trucks and parts

TRUCK EQUIPMENT is described fully in thick catalog. Complete line ranges from power gates and hoists to dump bodies and power loaders.—Daybrook Div., Young Spring & Wire Corp.

Circle No. A15 on reply card, p. 19

MATERIAL HANDLING trucks outlined in punched brochure. Lift trucks with cushion or pneumatic tires are pictured. Tables of performance, dimensions, equipment. Lists all attachments.—Hyster Co.

Circle No. A16 on reply card, p. 19

TRUCKS FOR LIGHT HAULING are illustrated in colorful 20-page booklet. Cutaway drawings show construction, loading capacity. Specifications included.—Volkswagen of America, Inc.

Circle No. A17 on reply card, p. 19

Earth-moving equipment

SELF-PROPULSED TRENCHERS are shown and described in handy folder. Gives technical details and specifications on trencher which has many functions.—Charles Machine Works.

Circle No. A18 on reply card, p. 19

HEAVY CRANE with 11-ton lifting capacity is described here. Illustrated catalog covers complete line of accessories and attachments. Also shows how crane does wide variety of jobs.—Schield Bantam Co.

Circle No. A19 on reply card, p. 19

HYDRAULIC EXCAVATOR catalog describes and illustrates versatile line. Detailed catalog gives complete specifications and other technical data.—Construction Equipment Div., Warner & Swasey Co.

Circle No. A20 on reply card, p. 19

LAND PLANNING equipment brochures illustrate shredders and brush cutters. Shows new four-row shredder, other types. Includes clippers, mowers, terrace rakers, blades.—Servis Equipment Co.

Circle No. A21 on reply card, p. 19

DITCHERS, CONVEYORS are described in various catalogs and brochures. Feature Runabout ditcher, and the 702A for small building foundations, underground installation.—Barber-Greene Co.

Circle No. A22 on reply card, p. 19


Circle No. A23 on reply card, p. 19

MOVING EQUIPMENT for lawns and larger areas are described in catalog and brochures. Various motorized models include wind-tunnels, riders, edge trimmers, gang-mowers, etc.—Toro Mfg. Co.

Circle No. A24 on reply card, p. 19

LOADERS, BULLDOZERS, tilt-trailers, angling dozers are covered in fold-out brochure. Detailed drawings of tractor accessories and specifications list.—J. I. Case Co.

Circle No. A25 on reply card, p. 19

NEW LINE of tractors, crawler-loaders, and other earth-moving machines are described in a new folder. Brochure pictures, gives complete specs on all models; also tells how to buy the machines on credit.—John Deere Industrial Div.

Circle No. A26 on reply card, p. 19

EARTH-MOVING EQUIPMENT line is listed in colorful, extensive catalog.

CONCRETE, MASONRY, TILE AND BRICK

Concrete, concrete masonry

PERLITE'S USES are covered thoroughly in three brochures. Functions as a lightweight fireproofing material, and as an aggregate with plaster and concrete. Fact-packed with helpful data.—Perlite Institute, Inc.

Circle No. A24 on reply card, p. 19

INSULATING CONCRETE which uses Permalite as an aggregate instead of sand or gravel is the subject of this catalog. Special attention is given to the details of roof deck and floor fill uses.—Great Lakes Carbon Corp.

Circle No. A25 on reply card, p. 19

Gives specifications, data on machines and accessories.—Ottawa Steel Div., Young Spring & Wire Corp.

Circle No. A27 on reply card, p. 19

INFORMATION KIT on gasoline-driven trencher contains illustrations, complete technical data. Outlines advantages of machine which digs 3'-wide trench.—Stampings, Inc.

Circle No. A28 on reply card, p. 19

ECONOMICS of transforming low-cost land into valuable real estate with dredges is the subject of this bulletin. Describes two actual case histories.—Ellicott Machine Corp.

Circle No. A29 on reply card, p. 19

TRENCHERS, both light- and heavy-duty, are described in separate catalogs. Both discuss and illustrate wide range of speeds, head widths, and cutter-arm lengths. Details, how-to-use information.—Arps Corp.

Circle No. A30 on reply card, p. 19

POWER ROLLERS, portable pumps, space heaters for construction, bar bending and shaping machines are subjects of a series of folders. Complete specifications, photos, models given.—Midland Products Co.

Circle No. A31 on reply card, p. 19

LAND CLEARING equipment illustrated in four-page brochure. Shows pull-stumpers, tree dozers, root plows and rolling choppers. Root, brush and rock rakes in action photos.—Fleco Corporation.

Circle No. A32 on reply card, p. 19

EARTH-MOVING EQUIPMENT illustrated in new 20-page catalog. Contains medallion views and brief specifications on graders, track-type tractors, bulldozers, rippers, and many others.—Caterpillar Tractor Co.

Circle No. A33 on reply card, p. 19

SELECTED AGGREGATES for construction of curtain wall panels and facings are illustrated in 15-page booklet. Emphasizes advantages of precast panels. How-to information is detailed with photos, technical drawings and other details and specs.—General Portland Cement Co.

Circle No. A37 on reply card, p. 19

RUBBER CONTROL JOINTS, both wide flange and regular, for use in masonry wall is discussed in leaflet. Includes specification charts and illustrations of installation methods. Plenty of helpful how-to information.—Cedar Rapids Block Co.

Circle No. A38 on reply card, p. 19

AMERICAN BUILDER
**Brick, stone, tile, masonry**

**STRUCTURAL CLAY PRODUCTS** are subject of colorful 23-page technical booklet. Shows tile and brick for interior and exterior construction, other products for conduit, sewer.—Natco Corp.

Circle No. A28 on reply card, p. 19

**HAND-MADE** terra-cotta tiles are illustrated in a variety of designs in this booklet. The imported tiles are shown along with ideas for installation.—Three Centuries.

Circle No. A29 on reply card, p. 19

**TILE FOLDER** gives sizes and patterns in color. Roof tile, quarry tile, and facing brick are covered, along with suggested installation procedures. Good technical information included.—Ludowici-Celadon Co.

Circle No. A40 on reply card, p. 19

**ADVANTAGES** of Tennquartz as a building stone are discussed in four-page folder. Illustrates various uses of stone, along with full specifications.—Tennessee Stone Co.

Circle No. A41 on reply card, p. 19

**SANDSTONE** portfolio has brochures covering preparation, wall and flagstone patterns, wall sections, setting techniques, uses. Illustrated with photos and detailed drawings. Packed with good technical data.—The Briar Hill Stone Co.

Circle No. A42 on reply card, p. 19

**FRAMING**

**Framing, structural lumber**

**DATA ON GRADING** and specifications of various types of West Coast lumber are given in 18-page booklet. Contains technical data, charts, and conversion tables, along with photos.—West Coast Lumbermen’s Assn.

Circle No. A45 on reply card, p. 19

**DESIGN MANUAL** is offered to builders interested in working with laminated wood structures. Includes not only ideas, but information on the capabilities of laminated wood.—Unit Structures, Inc.

Circle No. A46 on reply card, p. 19

**FIRE-RETARDANT LUMBER** is described in one booklet, pressure-treated Douglas fir poles in another. Both discuss processing, testing, advantages, uses.—J. W. Baxter & Co.

Circle No. A47 on reply card, p. 19

**WOOD PRODUCTS** from forest to finished lumber illustrated in catalog. Economy of mixed car-loading of sheathing, siding, shingles, panels is shown.—Summit Timber Co.

Circle No. A48 on reply card, p. 19

**LUMBER GUIDE** of the SPA lists lumber companies and the products they handle. Information is classified according to species, equipment, items manufactured.—Southern Pine Association.

Circle No. A49 on reply card, p. 19

**Structural steel**

**OPEN-WEB STEEL JOISTS**, designed for commercial structures, are described and specified. Spans from 25 ft. to 152 ft., along with charts, are covered.—Haven-Busch Co.

Circle No. A50 on reply card, p. 19

**JOIST HANGERS** and beam hangers are described in handy five-page booklet. Gives technical data, construction details, and tells how to figure sizes. Includes a list of distributors.—Timber Engineering Co.

Circle No. A56 on reply card, p. 19

**NATURAL STONE** illustrated in 1960 catalog. Gives chemical composition and specifications for rock- and strata-face veneer, and flagstone. Details also on curtain wall panels, mantels, hearths, etc. Information shown in photos, charts and spec lists.—Tennessee Stone Co., Inc.

Circle No. A43 on reply card, p. 19

**Reinforcing steel**

**WELDED WIRE FABRIC** has its role as a concrete reinforcement outlined in this 16-page illustrated manual. Uses detailed: basement floors, drives, patios, slabs, and steps. Catalog is filled with illustrating photos, detail studies, technical information.—Wire Reinforcement Institute, Inc.

Circle No. A44 on reply card, p. 19

**PLYWOOD CLIPS** and many other types of connectors, such as timber rings, wall ties and door lock anchors, are featured in this eight-page catalog. Prices quoted.—Cleveland Steel Specialty Co., Inc.

Circle No. A57 on reply card, p. 19

**Metal lath and accessories**

**METAL LATH** and accessories are covered in the 30 pages of this reference catalog. Plenty of easy-to-read detail drawings are included with specifications.—Inland Steel Co.

Circle No. A58 on reply card, p. 19

**ANGLE-RITE ELIMINATES** plaster cracks by locking gypsum lath in corners and ceiling angles. Brochure shows setting methods, special problems, quantities needed.—Butcher & Hart Mfg. Co.

Circle No. A59 on reply card, p. 19

**METAL LATH** and plaster used in new work or remodeling is covered in quarterly brochure. Close-up photos of lathing installation, plastering methods. Industrial and commercial advantages, fire safety, versatility shown.—Metal Lath Mfrs. Assn.

Circle No. A60 on reply card, p. 19

**Curtain walls**

**CURTAIN WALL SYSTEMS** of aluminum or steel are subject of 20-page catalog. Specifications and maintenance features are clearly presented. Includes many details.—William Bayley Co.

Circle No. A61 on reply card, p. 19

**ALUMINUM WALL SYSTEMS** completely illustrated in 19-page catalog. Covers architectural and engineering aspects of curtain-wall construction, gives drawings, diagrams, suggested specifications.—Kawneer Co.

Circle No. A62 on reply card, p. 19
ALUMINUM CURTAIN WALLS for institutional and commercial buildings described in 11-page catalog. Gives complete information, drawings of all types and sizes.—Valley Metal Products Co.

Circle No. A64 on reply card, p. 19

CURTAIN WALLS of aluminum and steel are described in series of booklets. Fold-outs show details of construction and installation. Spec sheets, suggested uses, etc.—Ceco Steel Products Corp.

Circle No. A65 on reply card, p. 19

ROOFING, SIDING, INSULATION, SHEATHING

Roof structure

SEAMLESS TINNE ROOFING is the subject of this 12-page. A wealth of detail drawings are included. Contains several pages of notes and facts on roofing.—Follansbee Steel Corp.

Circle No. A66 on reply card, p. 19

Shingles, shakes

CEDAR SHAKE SIDING story is told in a full-color folder which gives merits of prefinishing. Comes with single sheet containing technical data. —Shake-A-Fly Co.

Circle No. A67 on reply card, p. 19

ROOFING AND SIDING are the main types of products covered in this comprehensive catalog of building products. Full-color lines of both materials are shown.—The Rubberoid Co.

Circle No. A68 on reply card, p. 19

CEDAR SHINGLES and shakes... detailed in 16-page catalog. Offers house-plan ideas and cutaways of application methods. Explains shingling material, gives shipping sizes.—Red Cedar Shingle Bureau.

Circle No. A69 on reply card, p. 19

COLORFUL SHINGLE brochures and catalogs discuss construction and features of Master-Elit shingles. Also contain color scheme charts, emphasize extra tab width, triple coverage, etc.—Bird Shingles.

Circle No. A70 on reply card, p. 19

SANDING and shingles, made of asbestos plus cement with baked-ceramic finish, are described in series of colorful booklets. Includes technical data.—The Philip Carey Mfg. Co.

Circle No. A71 on reply card, p. 19

RED CEDAR SHAKE colorfully described in booklet and brochure. Illustrates variety of applications in both new-home construction and remodeling.—Shakertown Corp.

Circle No. A72 on reply card, p. 19

COMPLETE DATA on red cedar shingles and shakes. Courting, coating, nailing discussed along with an optional color plan. You'll find these in a 42-page, four-color booklet.—Ceco-Dipt Company.

Circle No. A73 on reply card, p. 19

ALUMINUM CURTAIN WALLS for institutional and commercial building described in 11-page catalog. Gives complete information, drawings of all types and sizes.—Valley Metal Products Co.

Circle No. A64 on reply card, p. 19

Siding

PLYWOOD PANELING, hardboards, siding and sheathing... colorfully illustrated in booklet. Photos give installation ideas. Lists all specifications, prices.—Georgia-Pacific Corp.

Circle No. A74 on reply card, p. 19

HARDWOOD FLYWOOD catalog has 33 pages with index. Discusses every aspect of this building material. Gives recommended specifications, dimensions, construction, various patterns.—U. S. Plywood Corp.

Circle No. A75 on reply card, p. 19

FIR FLYWOOD'S physical properties, types, grades, uses, sizes, and special products are discussed in 16-page booklet. Specification charts and illustrations included.—Douglas Fir Plywood Assn.

Circle No. A76 on reply card, p. 19

BUILDERS FILE on California Redwood contains technical information on use in home construction. Data sheets cover yard grades, siding patterns, application helps. Profusely illustrated.—California Redwood Assn.

Circle No. A77 on reply card, p. 19

PUBLICATION FOLDER lists variety of catalogs dealing with all types of western pine. Tells you how to get plans, ideas, booklets, technical aids, sales aids, etc.—Western Pine Assn.

Circle No. A78 on reply card, p. 19

INSULATING SIDING is covered in pocket-sized handbook. Ceramic siding is illustrated in various colors, with accessories required for installation.—Edco Products Inc.

Circle No. A79 on reply card, p. 19

INSULATION GUIDE prepared for home owners is of interest to builders. Brochure contains easy-to-understand information on residential insulation of different types.—Zonolite Co.

Circle No. A80 on reply card, p. 19

INSULATING BOARDS are itemized in pocket-sized handbook. Describes advantages and uses of the weather-proof boards. Lists wide variety of forms and thicknesses.—Hemastone Co.

Circle No. A81 on reply card, p. 19

TWO FOLDERS are available—one on insulating board and the other on batt or blanket-type insulation. Both outline application and performance for small commercial buildings and houses.—Wood Conversion Co.

Circle No. A82 on reply card, p. 19

INSULATION WOOL is designed to provide all-weather protection. Brochure describes features and advantages of glass fibre product, emphasizes heating economy.—Sealite Insulation Mfg. Corp.

Circle No. A83 on reply card, p. 19

WOOL INSULATION described in series of booklets. Block, blanket, spun-felt and pipe insulation as well as insulating cement detailed. Application techniques, thermal conductivity graphs.—Baldwin-Ehret-Hill, Inc.

Circle No. A84 on reply card, p. 19

FOAMED PRODUCTS used in insulation and sandwich panels are discussed here. Many different building materials are analyzed in terms of properties and uses in this brochure.—Dow Chemical Co.

Circle No. A85 on reply card, p. 19

BUILDING INSULATION—how it works, why and where it should be used—is covered in thick booklet. It is designed to keep readers up with latest data.—Insulation Board Institute.

Circle No. A86 on reply card, p. 19

Vapor barriers


Circle No. A87 on reply card, p. 19

PERMANENT BARRIER FILM of polyethylene described here. Brochure lists three types: clear, sun-resistant and opaque, and gives uses, advantages and applications of each.—Gerling Plastics.

Circle No. A88 on reply card, p. 19

AMERICAN BUILDER
DOORS AND WINDOWS

Flush doors

WIDE VARIETY of decorative exterior flush doors are shown in well-illustrated, extensive catalog. Many design features are also covered.—Visador Co.
Circle No. A98 on reply card, p. 19

STEEL DOORS and frames are fully illustrated with diagrams and specifications in 23-page booklet. Stresses louvered panels, folding steel closet units.—Amwed Building Products.
Circle No. A90 on reply card, p. 19

STEEL DOORS and accessories are described in 17-page catalog. Numerous illustrations and charts give technical details on construction and installation.—Steelcraft Mfg. Co.
Circle No. A91 on reply card, p. 19

PREHUNG DOORS are featured in two folders, one for exterior and the other for interior doors. Both folders contain many details and data on installation.—Ready Hung Door Corp.
Circle No. A92 on reply card, p. 19

Circle No. A93 on reply card, p. 19

PRE-HUNG WOOD DOOR unit with expandable door jamb shown in this brochure. Also described is pre-hung louver door unit. Installation details, drawings, other specifications given.—Champion Door Co.
Circle No. A94 on reply card, p. 19

DOOR UNITS of hollow metal, with all accessories, are described in comprehensive catalog. Information includes detailed cross-section drawings, charts, engineering data, specifications.—Panelfold Doors, Inc.
Circle No. A95 on reply card, p. 19

FOLDING DOORS in two types to fit any need are subject of four-page brochure. Gives specifications, describes such features as the narrow profile, decorative corner.—Holcomb & Hoke Mfg. Co.
Circle No. A98 on reply card, p. 19

FOLDING DOORS for residential and commercial installations are illustrated in 15-page catalog. Drawings show installation of various types, accessories, hardware, and details.—American Accordian-Fold Doors, Inc.
Circle No. A99 on reply card, p. 19

WOOD FOLDING DOORS, designed to never fade, control space and sound, are reviewed in colorful booklet. Gives specifications, dimensions, describes all features.—Panelfold Doors, Inc.
Circle No. A100 on reply card, p. 19

ROLLING DOORS, steel or aluminum for industrial installations, are given complete coverage in 35-page catalog. Information includes photos, drawings, charts, construction features.—The Kinneear Mfg. Co.
Circle No. A101 on reply card, p. 19

FOLDING DOORS are illustrated in 11-page catalog. Covers acoustical properties, accessories, hardware, installation, specifications, colors. Brochures show baswood and mahogany types.—Hough Mfg. Corp.
Circle No. A102 on reply card, p. 19

Sliding glass doors

COMPLETE LINE of aluminum sliding glass doors are described in 18-page pamphlet. Includes types and sizes of doors, glass sizes and details of construction.—Ador Corp.
Circle No. A103 on reply card, p. 19

ALUMINUM WINDOWS and sliding glass doors are described in two colorful folders. Good detail diagrams & specifications.—Hollyview Aluminum Sliding Glass Doors, Windows.
Circle No. A104 on reply card, p. 19

ALUMINUM WINDOWS and sliding glass doors are described in 12-page booklet. Complete details, in drawings and tables, construction and installation. All sizes and specifications are given.—Nudor Mfg. Co.
Circle No. A105 on reply card, p. 19

Glass doors

OVERHEAD DOORS for residential garages are illustrated in three brochures. They emphasize quality and appearance, give specifications, various styles.—Overhead Door Corp.
Circle No. A106 on reply card, p. 19

Circle No. A113 on reply card, p. 19

RESIDENTIAL GARAGE DOORS in many styles and designs. Illustrated in an eight-page booklet. Shows construction, parts, jamb details, clearances required. Specifications and stock sizes of each.—The Howell Mfg. Company.
Circle No. A114 on reply card, p. 19

STEEL SECTIONAL DOORS catalog includes residential garage doors. Drawings show framing details and complete specifications for two models.—Imperial and Regent.—Morrison Steel Products, Inc.
Circle No. A115 on reply card, p. 19

Garage doors

GARAGE DOORS catalog is designed to aid builder in blending attached garage into front elevation. More than 180 designs, in styles from early American to contemporary, are described.—Graham Industries, Inc.
Circle No. A107 on reply card, p. 19

COMPLETE LINE of overhead garage doors and door hardware is described in four colorful brochures. All doors are available with wide or narrow panels.—Franz Manufacturing Co.
Circle No. A108 on reply card, p. 19

VARIETY OF GARAGE doors and electric operators, radio controlled, are subject of folder. Gives specifications of all stock sizes, describes outstanding features, shows various designs.—Calder Mfg. Co.
Circle No. A109 on reply card, p. 19

UPWARD-ACTING DOORS are covered in 28-page catalog. Index for residential section includes customized designs, torsion spring, extension spring, operators, etc.—Crawford Door Co.
Circle No. A110 on reply card, p. 19

ONE-PIECE GARAGE DOORS for residential and other uses are illustrated in brochure covering all types. Gives specifications, describes features, installations.—Berry Door Corp.
Circle No. A111 on reply card, p. 19

April 1960
Windows

WOOD WINDOWS in double-hung, awning, and horizontal types are subject of brochure. Combinations of windows for special purposes are shown in plan form.—The Malta Manufacturing Co.

Circle No. A116 on reply card, p. 19

WINDOW WALLS for all types of buildings are fully illustrated in 44-page catalog. Information is indexed with description, sizes, details of all types. Includes drawings, diagrams.—Andersen Corporation.

Circle No. A126 on reply card, p. 19

ALUMINUM WINDOWS listed in 38-page catalog, sliding glass doors in 11-page catalog. Drawings and cross-section illustrations, charts, give complete data on all styles.—Alwintite Div., General Bronze Corp.

Circle No. A127 on reply card, p. 19

ALUMINUM WINDOWS and hollow metal doors are subject of 11-page catalog. Information includes cutaway illustrations of all types—double and single hung, casement, awning, etc.—Republic Steel Corp.

Circle No. A128 on reply card, p. 19

ARCHITECTURAL SPECIFICATIONS for industrial use of Alsynite’s fiber-glass-reinforced window panes. Details listed in full in a four-page, two-color catalog.—The Alsynite Company of America.

Circle No. A132 on reply card, p. 19

ALUMINUM WINDOWS and doors in all styles are shown in 26-page catalog. Construction details are shown in cross-section drawings.—Capitol Products Corp.

Circle No. A123 on reply card, p. 19

ARCHITECTURAL SPECIFICATIONS for industrial use of Alsynite’s fiber-glass-reinforced window panes. Details listed in full in a four-page, two-color catalog.—The Alsynite Company of America.

Circle No. A132 on reply card, p. 19

ALUMINUM, GALVANITE, and steel windows are illustrated in 16-page booklet. Gives construction details of projected, casement, and ribbon and glass block windows.—Wilke Metal Products.

Circle No. A124 on reply card, p. 19

ALL TYPES OF FLAT GLASS for construction purposes are covered in 27-page catalog. Discusses uses, features, installation. Illustrations included.—Libbey-Owens-Ford Glass Co.

Circle No. A134 on reply card, p. 19

SUNSCREEN BLINDS, pleated, cellular, vertical, and roller are fully illustrated in 13-page catalog. Includes details of all types.—Schlegel Mfg. Co.

Circle No. A135 on reply card, p. 19

PK. PLASTIC BLINDS are described in illustrated five-page folder. Shows features, installation instructions, stock sizes, etc.—The Columbia Mills.

Circle No. A136 on reply card, p. 19

STORM SCREENS are illustrated in 16-page catalog. Gives specifications for installation.—Virginia Glass Products, Inc.

Circle No. A137 on reply card, p. 19

STORM SCREENS and doors are fully illustrated in 16-page catalog. Includes details of all types.—Reed Mfg. Co.

Circle No. A138 on reply card, p. 19

STORM SCREENS, metal, plastic, wood, are illustrated in 12-page catalog. Gives specifications for installation.—N. Y. Mfg. Co.

Circle No. A139 on reply card, p. 19

STORM SCREENS, sliding, telescopic, are illustrated in 12-page catalog. Gives specifications for installation.—N. Y. Mfg. Co.

Circle No. A140 on reply card, p. 19

STORM SCREENS, sliding, metal frame, are illustrated in 12-page catalog. Gives specifications for installation.—N. Y. Mfg. Co.

Circle No. A141 on reply card, p. 19

STORM SCREENS, sliding, wood frame, are illustrated in 12-page catalog. Gives specifications for installation.—N. Y. Mfg. Co.

Circle No. A142 on reply card, p. 19

STORM SCREENS, sliding, metal frame, are illustrated in 12-page catalog. Gives specifications for installation.—N. Y. Mfg. Co.

Circle No. A143 on reply card, p. 19


Circle No. A144 on reply card, p. 19
METAL WEATHERSTRIP and sash sections are catalogued with lots of installation data and details. Thick book has listing of special tools for the application of various types of weatherstrip.—Master Metal Strip Service

Circle No. A143 on reply card, p. 19

WEATHERSTRIPPING catalog includes metal door and window types, wood and felt, vinyl, adhesives. Second catalog covers full jamb, kerf, nail-on, door bottoms.—W. J. Dennis & Company.

Circle No. A144 on reply card, p. 19

PLUMBING, WATER SUPPLY, SEWAGE

Pumps, water systems, sewage

PORTABLE and stationary pumps, of both centrifugal and diaphragm types, are shown in this extensive catalog. Sizes, capacities, and prices are included in this information.—Rice Pump & Machine Co.

Circle No. A145 on reply card, p. 19

PACKAGED sewage lift stations and sewage treatment plants are extensively covered in separate catalog. Specifications and operative descriptions appear.—Smith & Loveless Inc.

Circle No. A146 on reply card, p. 19

WATER SYSTEMS ... information about a variety of pumps and how to service them in a big new 11-section catalog. Drawings, charts, photos and prices.—Flint & Walling Manufacturing Company.

Circle No. A147 on reply card, p. 19

TURBINE-TYPE PUMPS described in eight-page booklet, centrifugal pumps in brochure. Information is complete with photos, cutaway drawings, selection charts and parts lists.—Aurora Pump Div., N. Y. Air Brake Co.

Circle No. A148 on reply card, p. 19

PIPE for all purposes covered in catalog and brochures. Full details on laminated, bituminized fiber pipe, fiber forms for columns, fire duct, fiber tube for concrete construction, etc.—Sonoco Products Co.

Circle No. A150 on reply card, p. 19

BITUMINIZED FIBRE PIPE for sewers and cast iron soil pipe covered in a four-page and an 80-page catalog respectively. Both include construction details and specifications for all sizes and fittings.—The Central Foundry Co.

Circle No. A153 on reply card, p. 19

WATER HEATERS, gas and electric, profusely illustrated in catalog. Cutaway drawings, photos, specifications, capacities are given for the line of heaters.—Cleveland Heat Co.

Circle No. A151 on reply card, p. 19

AUTOMATIC WATER HEATERS are subject here. Brochures give full descriptions of all models, both electric and gas; include cutaway drawings, measurements.—White Products Corp.

Circle No. A162 on reply card, p. 19

Water softeners

WATER SOFTENERS are discussed in this eight-page catalog. Information on operation of units, diagrams, specifications, and selection of proper softener is included.—Culligan, Inc.

Circle No. A163 on reply card, p. 19

Bathroom fixtures

PLUMBING FIXTURES for the bathroom, kitchen and washroom are colorfully illustrated in this 152-page loose-leaf book. All major products are described in detail in this big booklet.—Kohler Co.

Circle No. A164 on reply card, p. 19

PLUMBING FIXTURES of porcelain enamel illustrated in various styles and ensembles for all types of installations. Specifications and stock sizes listed for each.—Artina Porcelain Enameling Co.

Circle No. A165 on reply card, p. 19

PLUMBING FIXTURES of all types are shown in booklet. Dimensions, details, and specifications for sinks, bathtubs, closets are included.—Universal-Rundle Corp.

Circle No. A166 on reply card, p. 19

BATHTUBS, LAVATORIES, closets are presented in series of illustrated pamphlets. Special features include duo-colored tubs and decor-matched vanities.—AllianceWare, Inc.

Circle No. A167 on reply card, p. 19

PLUMBING FIXTURES are thoroughly covered in 22-page catalog, with detailed illustrations. Shows packaged bathroom ensembles.—Gerber Plumbing Fixtures Corp.

Circle No. A168 on reply card, p. 19

APRIL 1960
KITCHEN SINKS

COMPLETE LINE of stainless steel sinks and counter tops is covered in pocket-size brochure. Installation photos and what-to-look-for list are included.—Just Mfg. Co. Circle No. A189 on reply card, p. 19

STAINLESS STEEL SINKS for installation anywhere in the house. Complete brochure shows all models and designs—for powder room or garden, kitchen or den. Features of each plus sizes are listed.—Elkay Manufacturing Co. Circle No. A170 on reply card, p. 19

NEW SINK DESIGN teams up with any electric waste disposer. Featured in literature covering stainless-steel kitchen installations. Includes detailed drawings, dimensions, how to order.—Carrollton Mfg. Co. Circle No. A171 on reply card, p. 19

BATH FITTINGS, ACCESSORIES

HEAT CONTROL UNIT that prevents shower scalding is explained in catalog. All dimensions are listed, along with installation data.—W. F. Norman Steel Mfg. Co. Circle No. A178 on reply card, p. 19

TUB ENCLOSURES and shower doors in many designs are shown in eight-page brochure. Full descriptions, specifications and illustrations are included. Also covers accessories.—Beauti-Dur, Inc. Circle No. A179 on reply card, p. 19

METAL ACCESSORIES for the bathroom are listed and specified in this brochure. Mounting brackets of all types are covered.—General Chrome. Circle No. A172 on reply card, p. 19

SINGLE-UNIT shower valves and kitchen faucets with single mixing handles are described in two brochures. Include diagrams, sizes and prices.—Moen Faucet, Div. of Standard Screw Co. Circle No. A174 on reply card, p. 19

SHOWER HEADS that automatically clean themselves are outlined in 11-page catalog. Flush valves in 63-page book. Covers every type of installation, with complete drawings.—Sloan Valve Co. Circle No. A175 on reply card, p. 19

BATHROOM ACCESSORIES...you’ll get a look at the whole new Hoover line in a 12-page, two-color booklet. Photos, details, sizes, etc.—Hoover Ball & Bearing Co. Circle No. A176 on reply card, p. 19

BATHROOM ACCESSORIES of all kinds listed in this folder. Temperature and pressure relief valves, flexible hot connectors, chrome-plated brass fittings, others included.—Reed-Cromax Corp. Circle No. A177 on reply card, p. 19

SHOWER ENCLOSURES

METAL SHOWER CABINETS, shower doors, and shower receptors are reviewed in catalog. All dimensions are listed, along with installation data.—W. F. Norman Steel Mfg. Co. Circle No. A178 on reply card, p. 19

TUB ENCLOSURES and shower doors in many designs are shown in eight-page brochure. Full descriptions, specifications and illustrations are included. Also covers accessories.—Beauti-Dur, Inc. Circle No. A179 on reply card, p. 19

HEATING, COOLING AND VENTILATION

HEATING SYSTEMS

IN-WALL FURNACE features and advantages are explained clearly in this six-page folder. Routing-in dimensions and specifications are also given for builder use.—Motor Wheel Corp. Circle No. A182 on reply card, p. 19

GAS-FIRED FURNACES in a complete range of sizes, both standard and lowboy types, are catalogued here. Literature on individually controlled room-heating units is also available.—Iron Fireman Mfg. Co. Circle No. A183 on reply card, p. 19

BOILERS, RADIATORS, and accessories are subjects of 12-page catalog. Contains descriptions, specifications, and illustrations of factory assembled units.—Dunkirk Radiator Corp. Circle No. A184 on reply card, p. 19

SHOWER INSTALLATIONS—featuring glass tub enclosures, shower doors, stall enclosures, corner tub enclosures—are described in brochures. Specifications complete in all styles, sizes.—Theodore Effen Mfg. Co. Circle No. A180 on reply card, p. 19

LAUNDRY TUBS


OLY BURNERS are discussed in large, fact-packed, indexed catalog. It describes rotary, pressure, boiler and furnace burners. Installation plans and specifications given.—S. T. Johnson Co. Circle No. A194 on reply card, p. 19

AMERICAN BUILDER
RADIANT BASEBOARD HEATING catalog has tab index for every section—radiant panel, residential baseboard, slope top fin tube. All descriptions include drawings, ratings, etc.—Kritzer Radiant Coils, Inc.

Circle No. A193 on reply card, p. 19

PRECAST REGISTER and plenum boxes for concrete slab floors is designed to reduce underfloor heat installation costs. How is shown in booklet with step-by-step photos.—Murphy Precast, Inc.

Circle No. A196 on reply card, p. 19

OIL FURNACES in a variety of models are covered in colorful brochures. Cutaway drawings and complete specifications are included. Also lists outstanding features.—Stewart-Warner Corp.

Circle No. A197 on reply card, p. 19

ELECTRIC HEATING for residential installation covered in 11-page booklet. Discusses advantages, choosing right method, installation, how to specify, illustrated with cutaway drawings, charts, etc.—Edwin L. Wiegand Co.

Circle No. A198 on reply card, p. 19

Combination heating, cooling systems

HEATING-COOLING UNITS are described in complete detail in this new eight-page brochure. The 29 different models listed are designed for either gas or oil firing.—Mueller Climatrol Div., Worthington Corp.

Circle No. A199 on reply card, p. 19

AIR CONDITIONING is clearly explained in terms the home owner can understand in this booklet. Zone control and its application to both heating and cooling are covered.—National-U.S. Radiator Corp.

Circle No. A200 on reply card, p. 19

HEATING, COOLING and air conditioning products are shown in large, tabbed catalog. Discusses, with full technical details and drawings, central station and remote room air conditioning. All types of unit heaters and cooling coils are described.—Young Radiator Co.

Circle No. A201 on reply card, p. 19

AIR CONDITIONING and heating catalog shows gas and oil furnaces, remote and packaged air conditioning, wall and space heaters, etc. Includes specifications, dimensions.—The Coleman Co.

Circle No. A202 on reply card, p. 19

COOLING and heating systems for every type of home installation are described in brochures. Include combined and separate systems, split-system heat pumps, oil furnaces, etc.

APRIL 1960

Give drawings, specifications.—Chrysler Airtemp.

Circle No. A203 on reply card, p. 19

HEATING AND COOLING are subjects of large, well-bound, indexed catalog. Covers in technical detail, oil and gas winter air conditioners, gravity furnaces and boilers.—Janitol Heating and Air Conditioning Div.

Circle No. A204 on reply card, p. 19

FURNACES, gas and oil, are covered in large loose-leaf catalog. Shows all types of water heaters, boosters, air conditioners. Lists baseboard heaters and radiators.—Rheem Mfg. Co.

Circle No. A205 on reply card, p. 19

AIR CONDITIONING for winter and summer is subject of brochure. Evaporator blowers, compressor evaporators, condensing units. Gives all specifications, drawings, complete data on each unit.—The Mathies Company.

Circle No. A206 on reply card, p. 19

CONDENSING UNITS, remote and air cooled, detailed in catalog with detachable pages. Also shows complete line of attic, wall and ceiling fans. Photos, cutaway drawings, sizes, specifications.—Bar-Brook Mfg. Co., Inc.

Circle No. A207 on reply card, p. 19

HEATING, COOLING, ventilation literature covers baseboard heating, packaged attic-type A/C units, remote condensing units, chillers, etc. Installation and structural details on all.—Brown Products Corp.

Circle No. A208 on reply card, p. 19

GAS HEATING and air conditioning portfolio has brochures covering boilers, furnaces, unit heaters, air conditioners, conversion burners. Complete specifications on brochures for each.—Roberts-Gordon Appliance Corporation.

Circle No. A209 on reply card, p. 19

OIL AND GAS FURNACES, oil burners, air conditioners, condensing units are covered in this very complete, looseleaf catalog. Contains ratings and specifications, diagrams, photos.—Williams Oil-O-Matic Heating Co.

Circle No. A310 on reply card, p. 19

CONVECTORS, baseboard heating are some of the heating and cooling products described in portfolio. Others include broilers, chillers and cooling towers. Water ratings, installation details, specifications.—Embassy Steel Products, Inc.

Circle No. A211 on reply card, p. 19

GAS, OIL, COAL FURNACES, summer air conditioning equipment are subjects of this loose-leaf catalog. All specifications, ratings, capacities, dimensions given.—Armstrong Furnace.

Circle No. A212 on reply card, p. 19

Space heaters

ELECTRIC HEATING units for every heating need are subjects of four-page brochure. It illustrates wall and portable models, contains detailed charts of models, sizes and other useful technical information.—Allied Precision Industries, Inc.

Circle No. A213 on reply card, p. 19

ELECTRIC HEATING PANELS for wall mounting, a relatively new concept, are presented in this full-color manual. Designed for builder and home buyer, it contains both "sell" and technical data, a good combination.—Sun-Tron Corp.

Circle No. A214 on reply card, p. 19

ELECTRIC HEATING elements in wall inserts and portables illustrated in four-page folder. Also thermostats, remote heating cables. Complete specifications, technical data, how-to information.—EverWarm, Inc.

Circle No. A216 on reply card, p. 19

FIREPLACE SCREEN of tempered glass that radiates heat throughout room is discussed in two brochures. Screen fits modern and conventional fireplaces.—Thermo-Rite Mfg. Co.

Circle No. A217 on reply card, p. 19

ELECTRIC HEATERS catalog describes wall insert heaters, baseboard, floor furnaces, bathroom heaters, radiant heating cable. Photos and specifications.—Cavalier Corp.

Circle No. A218 on reply card, p. 19

ELECTRICAL HEATING methods covered in portfolio. Brochures describe baseboard, wall, radiant, floor-insert, portable, bathroom heaters, etc. Drawings, specifications on all.—Eletromode Div. Commercial Controls.

Circle No. A219 on reply card, p. 19

Fans, louvers, ventilators

LOUVERS and vents, both galvanized and aluminum in all shapes and sizes, are pictured and described in this notebook-punched single sheet.—Lou-v-r-Pak, Inc.

Circle No. A220 on reply card, p. 19

AIR PURIFICATION in the kitchen is the subject of this colorful, four-page folder. No-duct hood is easy to install, uses activated charcoal filter.—Major Industries, Inc.

Circle No. A221 on reply card, p. 19
FORCED VENTILATION of attic areas discussed in 3 folders. Eave-vent fans, with all-aluminum shutters, roof fans are described. Dimensions and price list.—Phil Rich Fan Mfg. Co.
Circle No. A223 on reply card, p. 19

STRIP VENTILATOR of aluminum is featured in new brochure. Variety of ventilating fans and range hoods is described in other literature.—Leigh Building Products.
Circle No. A223 on reply card, p. 19

ROOF VENTILATORS and wall louvres are described in this 16-page, two-color catalog. It's fully illustrated and includes complete technical details and drawings.—The Burt Manufacturing Co.
Circle No. A224 on reply card, p. 19

FACT-PACKED, technical catalog describes Auer's line of registers, grilles and diffusers. Illustrations are two-color. Price lists, performance data given.—The Auer Register Company.
Circle No. A225 on reply card, p. 19

VENTILATORS and range hoods brochures stress use of ventilator for electrically heated homes. Drawings give construction and installation data.—Stewart Industries, Inc.
Circle No. A226 on reply card, p. 19

VENTILATING and cooling equipment is fully described and pictured in attractive, easy-to-read catalog. Also shows available displays.—The Berna Air King Corp.
Circle No. A227 on reply card, p. 19

VENTILATING LOUVERS, in a variety of styles, are listed in attractive catalog. Offers specifications, details, plus ventilation area chart.—Louver Mfg. & Supply Co.
Circle No. A228 on reply card, p. 19

NEW VENTING METHOD is outlined in a folder which complements an 18-page catalog of products used in ventilation of houses. Gives data on estimating venting requirements.—United States Gypsum Co.
Circle No. A229 on reply card, p. 19

MIDGET VENTILATING LOUVERS of all types and sizes are listed. Installation data is included, as well as information on special hole saw blades designed for the louvers.—The Midget Louver Co.
Circle No. A230 on reply card, p. 19

OVERHEAD AIR DIFFUSER that minimizes drafts, equalizes room temperatures is catalog subject. Diagrams and dimensions of product are included.—Connor Engineering Corp.
Circle No. A231 on reply card, p. 19

FOUNDATION, CORNICE ventilators are pictured in easy-to-read catalog. Six models are described on sheet which also gives specifications and shipping wts.—Hamlin Products, Inc.
Circle No. A232 on reply card, p. 19

Heating controls

AUTOMATIC CONTROLS for virtually all residential and commercial heating and ventilating systems are described. Extensive catalog also specifies and prices the systems.—Minneapolis-Honeywell Regulator Co.
Circle No. A233 on reply card, p. 19

Light fixtures

INCAPDENCENT LIGHTS are illustrated in 21-page catalog featuring chandeliers and modern ceiling fixtures. Supplement covers 15 pages of fixtures in polished or antique brass.—Jay Lighting Mfg. Co., Inc.
Circle No. A234 on reply card, p. 19

FIELD SERVICE BULLETINS cover description, operation, installation, and service of many types of gas controls. Bulletins are bound together and fully illustrated.—Robertshaw-Fulton Controls Company.
Circle No. A235 on reply card, p. 19

AUTOMATIC CONTROLS for a wide range of heating and cooling equipment are covered here. Both residential and commercial applications are included.—White-Rodgers Co.
Circle No. A236 on reply card, p. 19

Ductwork

DUCT INSTALLATION booklet gives basic instructions for fabrication of duct system. Designed for any type of warm air heating or air conditioning system.—Gustin-Bacon Mfg. Co.
Circle No. A237 on reply card, p. 19

Fireplaces, chimneys

PREFAB CHIMNEYS are described in handy folder. Fact-filled, well-illustrated pages show builders how to save money in chimney construction.—Condensation Engineering Corp.
Circle No. A238 on reply card, p. 19

COMPLETE LINE of recessed and surface lighting fixtures for commercial and residential use is illustrated in fact-packed catalog. Easy-to-read technical information is included in this interesting brochure.—Prescolite Mfg. Corp.
Circle No. A239 on reply card, p. 19

ELECTRICAL, LIGHTING, WIRING

Lighting design

BUILT-IN LIGHTING for schools, churches, hospitals, and business is shown in four illustrated brochures. Also available are data sheets on all products, with drawings.—Kirlin Co.
Circle No. A240 on reply card, p. 19

HOME LIGHTING is discussed in an illustrated catalog. Shows indoor and outdoor, floor, wall, table, ceiling lamps. Also a brochure on lighting for schools, stores, office buildings.—John C. Virden Co.
Circle No. A241 on reply card, p. 19

LIGHTED CEILINGS shown in this literature. Complete installation methods and specifications for whole ceilings, panel, single-unit and residential, industrial, commercial uses are given. Plenty of facts to work with.—Luminous Ceilings, Inc.
Circle No. A242 on reply card, p. 19

LIGHT CONTROL equipment for control of sunlight and artificial lighting is described in bulletin. Detailed drawings and illustrations give complete installation data.—The Superior Electric Co.
Circle No. A243 on reply card, p. 19

Light fixtures

INCAPDENCENT LIGHTS are illustrated in 21-page catalog featuring chandeliers and modern ceiling fixtures. Supplement covers 15 pages of fixtures in polished or antique brass.—Jay Lighting Mfg. Co., Inc.
Circle No. A244 on reply card, p. 19

LIGHTING EQUIPMENT is pictured and described in this fact-filled 56-page booklet. Contains many pictures and charts, gives detailed technical information on fixtures for residential, commercial use. Sizes, types, other details included.—The Wakefield Co.
Circle No. A245 on reply card, p. 19

COMPLETE LINE of recessed and surface lighting fixtures for commercial and residential use is illustrated in fact-packed catalog. Easy-to-read technical information is included in this interesting brochure.—Prescolite Mfg. Corp.
Circle No. A246 on reply card, p. 19

AMERICAN BUILDER
GAS LAMPS that provide decorative outdoor lighting touch are subject of handsome brochure. Distinctive models are shown in color in a wide variety of styles. Well-illustrated—Arkla, Gaslite Div.

Circle No. A247 on reply card, p. 19

LIGHTED CEILINGS are subject of illustrated brochure. Installation points for luminous coves, canopy-overhang, soffit, Prefab units and wall-to-wall ceiling are described in detail.—Diffusa-Lite Co.

Circle No. A248 on reply card, p. 19

LIGHTING FIXTURES for low-budget installations are shown in full color in this 12-page catalog. A wide variety of indoor and outdoor lamps are pictured and described.—Minute Mount Co., Inc.

Circle No. A249 on reply card, p. 19

LIGHTING FIXTURES for outdoor use and all types of indoor installation are illustrated in full color and described here. Silhouette index in back is a handy guide to the 50 pages.—Progress Mfg. Co.

Circle No. A250 on reply card, p. 19

ELECTRIC LANTERNS for indoor or outdoor use are featured in full-color brochure. Other catalog sheets cover suspended interior fixtures in contemporary and period designs.—Dayna Lighting Inc.

Circle No. A251 on reply card, p. 19

Wiring devices

WIRING DEVICES of all kinds are shown in thick electrical catalog. Switches, outlets, and lampholders are listed. Included is a complete specification and price list.—Pass & Seymour, Inc.

Circle No. A252 on reply card, p. 19

UNDERFLOOR WIRING systems for use with cellular steel floors are described here. Photos show how a system is set up. Included is a list of all accessories used.—H. K. Porter Co.

Circle No. A253 on reply card, p. 19

WIRING GUIDE lists complete stock of raceways, accessories and fittings. All items are illustrated with photos or drawings. Index is included in 144-page guide.—The Wiremold Co.

Circle No. A254 on reply card, p. 19

Switches, outlets

LOW VOLTAGE switching systems are the subject of this illustrated 16-page booklet. Tells how to plan, install, and trouble-shoot a touch-plate system.—Touch-Plate Mfg. Co.

Circle No. A255 on reply card, p. 19

ELECTRICAL DISTRIBUTION equipment, together with specification and rating data, is listed in 66-page catalog. Fuse panels, breakers, switches, and meter mounts are among subjects covered.—Murray Mfg. Corp.

Circle No. A256 on reply card, p. 19

DECORATOR WALL PLATES in colorful designs meet functional needs of any installation, harmonize with any decor. Folder shows how color schemes may be matched, and illustrates various plates.—General Electric Co.

Circle No. A257 on reply card, p. 19

WALL PLATES and complete line of wiring devices are featured in 145-page catalog. Includes price list and specifications for standard and custom receptacles. Packed with technical data, how-to information, plenty of other good details.—Sierra Electric Corp.

Circle No. A258 on reply card, p. 19

FLOOR, WALL, CEILING MATERIAL

WOOD FLOORING hardcover handbook discusses requisites of high quality flooring, describes processing, species, types, sizes. Further details include selection, laying, finishing.—National Oak Flooring Mfg. Assn.

Circle No. A260 on reply card, p. 19

HARDWOOD FLOORING pictured in a four-page, full-color brochure. Shows variety of styles and typical installations. Gives sizes and pattern suggestions.—Harris Mfg. Co.

Circle No. A262 on reply card, p. 19

HARDWOOD FLOORS—plank, strip, block, laminated oak—are illustrated in colorful booklet. Gives description, grades and species, finish, installation, other technical data for each type.—E. L. Bruce Co.

Circle No. A263 on reply card, p. 19

FLOORING that is subject of this Illustrate 16-page booklet. Tells how to plan, install, and trouble-shoot a touch-plate system.—Touch-Plate Mfg. Co.

Circle No. A255 on reply card, p. 19

VINYL FLOOR TILE in multiple hues and patterns are illustrated in full color. Ten-page brochure includes information charts, characteristics and specifications for many types of floorings.—Uvalde Rock Asphalt Co.

Circle No. A266 on reply card, p. 19

Vinyl specialties

NONELECTRIC DOOR CHIME that sounds two notes, needs no wiring, and has optical lens viewer is catalog subject. Specifications and illustrations of exterior and interior installations.—NuTone, Inc.

Circle No. A259 on reply card, p. 19

ELECTRICAL DEVICES of every kind are carefully detailed in catalog. Sixty pages of sockets, receptacles, cords and plugs. Also shows lamp converters, connectors, fluorescent lamp starters.—Cable Electric Products, Inc.

Circle No. A260 on reply card, p. 19

GARAGE DOOR OPENERS controlled by push-button transmitter is subject of this new four-page color folder. Both advantages and methods of operation are described. Lots of other interesting details and specifications.—Barber-Coleman Co.

Circle No. A261 on reply card, p. 19

CERAMIC TILE line is shown in full color in this large folder, punched for notebook filing. Trim shapes and all-tile accessories are also pictured.—The Mosaic Tile Co.

Circle No. A262 on reply card, p. 19

COLOR PLANNING with ceramic tile and a product catalog are offered by American-Olean. Booklet 450 suggests color schemes, bathroom planning and design ideas.—American-Olean Tile Company.

Circle No. A263 on reply card, p. 19

CERAMIC FLOOR and wall tile catalog covers complete line for 1960. Both glazed and unglazed tile colorfully illustrated in large units and mosaics. Includes heavy-duty, pool tile.—U.S. Ceramic Tile Co.

Circle No. A264 on reply card, p. 19

CONCRETE FLOOR and wall tile cata-

log provides complete line for 1960. Both glazed and unglazed tile colorfully illustrated in large units and mosaics. Includes heavy-duty, pool tile.—U.S. Ceramic Tile Co.

Circle No. A267 on reply card, p. 19

CONCRETE FLOOR and wall tile cata-

log provides complete line for 1960. Both glazed and unglazed tile colorfully illustrated in large units and mosaics. Includes heavy-duty, pool tile.—U.S. Ceramic Tile Co.

Circle No. A267 on reply card, p. 19

Color specialists

ADVANTAGES and performance of vinyl-cork tile is subject of attractive brochure containing pattern and installation data. Appliable photos are included along with other how-to information.—Dodge Cork Co., Inc.

Circle No. A271 on reply card, p. 19

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TILE FLOORS are illustrated in colorful 23-page catalog showing different patterns for seven types. Each is described according to use, cost, size—Kentile, Inc.

Circle No. A272 on reply card, p. 19

RESILIENT TILE flooring is handsomely illustrated in this 20-page catalog. Vinyl, vinyl asbestos, asphalt, rubber tile presented in a variety of colors and styles.—B. F. Goodrich Co.

Circle No. A273 on reply card, p. 19

CERAMIC TILE products are completely covered in colorful 31-page booklet. Includes detailed drawings of all trim with size, color charts, all types of installations.—American Olean Tile Co.

Circle No. A274 on reply card, p. 19

COLORFUL PATTERNS of vinyl and rubber floorings are reproduced in eight-page catalog. Many custom designs in vinyl are also available.—American Biltrite Rubber Co.

Circle No. A275 on reply card, p. 19

VINYL FLOORING...its principal characteristics discussed in colorful booklet. Features classic marbles, Ultralast and Terralast colors, solid colors.—Vinyl Plastics, Inc.

Circle No. A276 on reply card, p. 19

Wall coverings, paneling

HARDBOARD PANELS and the methods of using them in home building are discussed in this eight-pager. Forty-two applications are suggested with details on how to do it.—Silvatek Div., Weyerhaeuser Co.

Circle No. A277 on reply card, p. 19

VINYL WALL COVERING and upholstery are colorfully treated in an eight-page catalog. Includes a wide variety of patterns and color and texture charts.—B. F. Goodrich Co.

Circle No. A278 on reply card, p. 19

PLASTIC-FINISHED PANELING for walls and ceilings come in wide variety of colors and patterns. Booklet illustrates paneling, specifications, installation method, and aluminum mouldings chart.—Marsh Wall Products, Inc.

Circle No. A279 on reply card, p. 19

MASONITE MANUAL offers 28 pages with illustrated, detailed drawings of construction uses. Includes description of products, table of properties, sizes, and working directions as well.—Masonite Corp.

Circle No. A280 on reply card, p. 19

HOW-TO-INSTALL booklet on plywood paneling gives general applica- tion instructions. Separate brochures describe hardboard, marine plywood, and prefinished paneling—Harbor Plywood Corp.

Circle No. A281 on reply card, p. 19

“FACES, FIGURES, FACTS” is the name of a free 1-page, pocket-size booklet that’s full of facts about plywood. Includes pictures and descriptions of grades, types and construction.—Hardwood Plywood Institute.

Circle No. A282 on reply card, p. 19

VINYL WALL COVERING for residential and commercial use is illustrated with samples. Brochures list technical data, properties, uses, and all types of applications.—The Masland Duraleather Co.

Circle No. A283 on reply card, p. 19

HARDBOARD PORTFOLIO includes brochure for each type of hardboard. Includes descriptions, drawings, physical properties, exterior and interior applications, nailing and finishing.—Forest Fiber Products Co.

Circle No. A284 on reply card, p. 19

PHILIPPINE MAHOGANY finishes, and how they are obtained, are described in this brochure. Excellent color photos show the many effects that can be obtained.—Philippine Mahogany Assn.

Circle No. A285 on reply card, p. 19

Ceiling tile

ACOUSTICAL CEILING TILE that offers rated fire protection is discussed in booklet. Specifications and details are given for commercial use of material.—Armstrong Cork Co.

Circle No. A286 on reply card, p. 19

BUILDERS’ GUIDE to Formica surfacing is title of folder. Features 85 page reproductions of color line. Information includes application, sizes. Gives a complete picture as to which type of Formica should be used.—Formica Corp.

Circle No. A289 on reply card, p. 19

SOLID PLASTIC PANELS in many wood grains, patterns and designs. Four-page brochure gives description and uses—furniture, wainscoting, countertops, etc.—Fiberesin Plastics Company

Circle No. A291 on reply card, p. 19

VARIETY OF KITCHENS is described in 20-page booklet. Base and wall cabinets, dishwasher, built-in ovens and surface units are all illustrated.—Youngstown Kitchens.

Circle No. A296 on reply card, p. 19

DIFFERENT WAYS to put up suspended ceilings are described in a 12-page, fully-illustrated catalog. Technical drawings, detail cutaways, in-use photos.—The Burgess-Manning Company.

Circle No. A287 on reply card, p. 19

Partitions

FOLDING PARTITIONS and moveable walls covered in 31-page, tabbed catalog. Cutaways show partition construction details. Installations and specifications given.—Richards-Wilcox Manufacturing Co.

Circle No. A288 on reply card, p. 19

Plastic laminates

LAMINATED SURFACINGS for vertical and horizontal use are shown in 70 full-color illustrations. Uses in all types of buildings and comparative costs with other surfacings are presented in chart form.—General Electric Co.

Circle No. A289 on reply card, p. 19

KITCHEN CABINETS of all types, in varied finishes, are described in colorful brochure. Suggested kitchen layouts and complete planning service for builders are also listed.—The I-XL Furniture Co., Inc.

Circle No. A294 on reply card, p. 19

HARDWOOD CABINETS for storage purposes throughout the home are illustrated in colorful booklet. Features contemporary series designed for adjustable, custom look.—Mutschler Brothers Co.

Circle No. A295 on reply card, p. 19

MILLWORK AND CABINETS

Kitchen planning and cabinets

WOOD CABINET specifications and standard unit details are clearly outlined in six-page folder. Companion brochure contains photos of installations, available color, kitchen ideas.—The Mengel Co.

Circle No. A292 on reply card, p. 19

CUSTOM KITCHENS in a variety of colors and finishes are shown in this “sketchbook.” Handsome catalog includes do’s and don’ts for kitchen planning.—The Kitchen Maid Corp.

Circle No. A293 on reply card, p. 19

KITCHEN CABINETS of all types, and in varied finishes, are described in colorful brochure. Suggested

Circle No. A296 on reply card, p. 19

AMERICAN BUILDER
**KITCHENS in steel and wood are handsomely illustrated in brochure.** Shows traditional, oriental, provincial, modern and other designs. Includes color chart for steel and wood finishes.—Toledo Desk & Fixture Company.

Circle No. A297 on reply card, p. 19

**Bathroom vanities and cabinets**

**BATHROOM VANITIES** of all types and sizes are illustrated in this catalog, along with their dimensions and prices. A color section shows the laminates available as finishes. A good deal of information, plus some helpful decorating ideas.—Regal Laminates, Inc.

Circle No. A298 on reply card, p. 19

**MEDICINE CABINETS, hamper**, kitchen vent hoods — all covered in illustrated catalog. Cutaway drawings, photos, spec sheets on models. Complete price list is given.—Jensen Industries.

Circle No. 299 on reply card, p. 19

**MEDICINE CABINETS** in a wide variety to meet every budget. Decorator-styled and surfaced with Formica. Fold-out brochure shows elevations, available colors, helps in decorating bath.—National Vanity.

Circle No. A300 on reply card, p. 19

**BATHROOM VANITIES in a wide variety to meet every budget.** Decorator-styled and surfaced with Formica. Fold-out brochure shows elevations, available colors, helps in decorating bath.—National Vanity.

Circle No. A301 on reply card, p. 19

**HARDWARE, BUILDING SPECIALTIES**

**Window, door, cabinet and closet hardware**

**FULL LINE** of door hardware is covered in illustrated catalog. Included are locks, latches, entrance handles, door closers, and cabinet hardware.—Dexter Industries, Inc.

Circle No. A306 on reply card, p. 19

**CONCEALED SASH BALANCE story** is told in four well-illustrated pages. Also included are tips on installation and construction details.—The Turner & Seymour Mfg. Co.

Circle No. A307 on reply card, p. 19

**CLOSET FRONTS** are completely assembled and braced, including jamb and header. Brochure gives specifications, illustrations for deluxe, flush, louvered models.—Precision Parts Corporation.

Circle No. A308 on reply card, p. 19

**GLIDING DOOR HARDWARE** is fully described in 23-page catalog. Specifications are given for all types of fittings for pocket and folding doors.—Remstrack Corp.

Circle No. A309 on reply card, p. 19

**SCREEN DOOR** locksets and hardware presented, detailed, in series of pamphlets. Includes glass and aluminum door fittings, panic exit devices, push-pull latches, accessories.—The Yale Towne Mfg. Co.

Circle No. A310 on reply card, p. 19

**ALL-METAL TRIM and casings for door jamb and window are illustrated in brochures.** Data includes specifications, materials, lengths, packing for various kinds of edges.—Drywall Trim, Div. of Casings, Inc.

Circle No. A311 on reply card, p. 19

**MAGNETIC LATCHES** are described in punched catalog sheet. Specifications and sizes given for complete line for both residential and heavy-duty purposes. Ordering data.—Laboratory Equipment Corp.

Circle No. A312 on reply card, p. 19

**DOOR HARDWARE** for all residential purposes are listed in 31-page catalog. Shows many designs of locks, decorative escutcheons, door accessories, closers, etc.—Russell & Erwin Div., American Hardware Corp.

Circle No. A313 on reply card, p. 19

**SASH BALANCES** and hardware products designed for wood and metal are described here. Brochure shows cutaway drawings for "take-out" window hardware.—Unique Window Balance Corp.

Circle No. A314 on reply card, p. 19

**FOLDING DOORS** are subject of looseleaf portfolio. Shows track installation and details panel construction. Offers complete descriptions and specifications.—Nordahl Mfg. Co.

Circle No. A315 on reply card, p. 19


Circle No. A316 on reply card, p. 19

**DRAWER AND CABINET** hardwares covered in series of pamphlets. Roller bearings for drawers are described. Details construction of non-tilting drawers and revolving-shelf cabinets.—Junior-Pro Products Co.

Circle No. A317 on reply card, p. 19

**STEEL SHELVING** that can be assembled with screwdriver and pliers is subject of this folder. Package includes unit specifications and work diagram given.—C & H Air Conditioning Fan Co.

Circle No. A318 on reply card, p. 19

**FOLDING DOORS**, door hardware, closet and kitchen accessories are covered here. Catalog illustrates and describes products, gives specifications and prices.—Leigh Building Products

Circle No. A319 on reply card, p. 19

**REVOLVING SHELVES** for kitchen cabinets are illustrated, along with installation hardware. Brochure gives detailed description and sizes of all parts, with ordering information.—Lake Drive Products Co., Inc.

Circle No. A321 on reply card, p. 19

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**MEDICINE CABINETS, bathroom accessories, light fixtures catalog.** Gives numerous styles for modern bathrooms. All items illustrated in detail with specifications for each.—The Grote Mfg. Co. Inc.

Circle No. A303 on reply card, p. 19

**RECESS MEDICINE CABINETS** are described in brochure which gives illustrations and sizes. Also covers such features as fluorescent lighting and sliding doors.—Zenith Metal Products Company.

Circle No. A304 on reply card, p. 19

**WARDROBE WALLS** are subject of looseleaf portfolio. Shows track installation and details panel construction. Offers complete descriptions and specifications.—Nordahl Mfg. Co.

Circle No. A305 on reply card, p. 19

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**APRIL 1960**
RESIDENTIAL DOOR OPERATOR, the Moore-O-Matic, has its various features explained in a colorful folder. Construction and choice of fingertip controls are highlighted.—A. E. Moore Company.

Circle No. A322 on reply card, p. 19

NYLON INSULATION HANGERS and hanger supports are described fully. Fast-setting adhesive is also covered in folder punched for notebook filing. Facts, specs, technical details.—Goodloe E. Moore, Inc.

Circle No. A322 on reply card, p. 19

SASH HARDWARE catalog has fly sheets on complete line of operative window hardware and weatherstripping. Includes sketches, photos, charts, specifications, plenty of what-how drawings.—Grand Rapids Hardware Co.

Circle No. A324 on reply card, p. 19

Locksets

LOCKSET LINE designed for residential installation is shown in full-color in this eight-page brochure. Miscellaneous items and installation aids are also included.—Kwikset Div., American Hardware Corp.

Circle No. A325 on reply card, p. 19

ESCUTCHEONS, LOCKSETS, and handles of many designs are pictured in this fact-filled manual. Assembly and principles of the different sets are explained.—Schlage Lock Co.

Circle No. A326 on reply card, p. 19

LOCKSET CATALOG covers complete line. Shows cylindrical, decorative, sliding door, screen and storm door hardware. Each item illustrated with specifications.—Lockwood Hardware Mfg. Co.

Circle No. A327 on reply card, p. 19

LOCKSETS, interior and exterior, described in 39-page catalog. Pictures and specifications given for spring latches, dead locks, dead bolts, escutcheons, accessories. How to select, styles, advertising aids.—Weiser Co.

Circle No. A328 on reply card, p. 19

LOCKS, EXIT DEVICES, closers are among subjects of condensed catalog. Photos four lock lines, with charts, showing functions and operation of each.—Sargent

Circle No. A329 on reply card, p. 19

LOCKSETS, LATCHES, reinforcing units covered in bound, looseleaf catalog. Describes standard and heavy-duty locksets, electric locks and decorative escutcheons. Locksmith supplies are detailed.—Challenger Lock Co.

Circle No. A330 on reply card, p. 19

PRE-ASSEMBLED LOCKSETS that install as one unit is subject here. Describes new and improved features in entrance and interior sets, escutcheons, and installation aids.—J. Chesler & Sons, Inc.

Circle No. A331 on reply card, p. 19

BUILDERS HARDWARE line ranges from double-acting floor hinges to door stops. All items are pictured and priced in this 16-page publication. How-to-use details included.—The Shelby Metal Products Co.

Circle No. A332 on reply card, p. 19

BUILDING SUPPLIES for all phases of home construction and finishing are contained in a 182-page wholesale catalog. Features pictures of the product, specifications, prices, and descriptions.—Goodloe E. Moore, Inc.

Circle No. A333 on reply card, p. 19

STEEL WIRE PRODUCTS catalog complete with index. Covers fence wire, baling wire, nails, ornamental gates, screws, staples, etc.—Northwestern Steel & Wire Co.

Circle No. A335 on reply card, p. 19

NAILS, SCREW ANCHORS, and sliding clips are among fasteners which are described in this folder. Includes specifications and suggested uses.—E. G. Building Fasteners Corp.

Circle No. A336 on reply card, p. 19

SWIMMING POOL equipment is itemized in 24-page catalog. Includes chemicals, heaters, footbaths, filter accessories, lighting, safety equipment.—National Pool Equipment Co.

Circle No. A347 on reply card, p. 19

Concrete anchoring, by drill or drive, holds permanently. Anchors are set by air, electric or hand hammers. Described in catalog which is held for all types of loose-leaf binders.—Polis Mfg. Co.

Circle No. A338 on reply card, p. 19

ALUMINUM NAILS are covered in colorful folder. Two-page chart illustrates 24 types of nails and uses of each. Gives packing data chart.—Nichols Wire & Aluminum Co.

Circle No. A339 on reply card, p. 19

ANCHORING AND DRILLING devices are shown in show-sized catalog. Index includes logs and wood screw anchors, machine screw and bolt anchors, machine bolt expansion shields, nail anchors, etc.—Arro Expansion Bolt Co.

Circle No. A340 on reply card, p. 19

STAIRWAYS, railings

ALUMINUM RAILINGS and porch columns are the subject of illustrated folder. The inside spread is devoted to information on how to install both items.—Keystone Alloys Co.

Circle No. A341 on reply card, p. 19

HAND RAIL BRACKETS and railings are described in folder. Detailed drawings show construction and installation. Also shows some of the many railing sections available.—Michel & Pfeffer Iron Works, Inc.

Circle No. A342 on reply card, p. 19

DISAPPEARING STAIRWAYS are illustrated in this four-page booklet. Stairway is one-piece construction, comes in seven models. Also separate specification and price list.—Beesler Disappearing Stairway Co.

Circle No. A343 on reply card, p. 19

Swimming pools

SWIMMING POOL equipment is itemized in 24-page catalog. Includes chemicals, heaters, footbaths, filter accessories, lighting, safety equipment.—National Pool Equipment Co.

Circle No. A344 on reply card, p. 19

SWIMMING POOL BOOK has 47 pages of information for pool owners, builders, architects, engineers. Illustrates every type of equipment with photos, drawings, specifications.—Modern Swimming Pool Co., Inc.

Circle No. A345 on reply card, p. 19

AMERICAN BUILDER
AMCRETE POOL story is told at length in 12-page booklet. Describes and illustrates techniques, improved design and low-cost construction.—Amerete Corp.

Circle No. A349 on reply card, p. 19

Building specialties

STEEL PRODUCTS ... ranging from farm gates to steel clotheline posts. It's a 14-page catalog full of drawings and descriptive data. Plenty of useful information for any builder.—Baumgartner Gate Factory.

Circle No. A350 on reply card, p. 19

APPLIANCES

Ranges and ovens

BUILT-IN ELECTRIC range and oven to fit every need is described in four-page brochure. It lists standard and optional features, gives specifications on four models.—National Stove.

Circle No. A356 on reply card, p. 19

BUILT-IN RANGES electric and gas, are illustrated in every detail with drawings. Contains features of all models, arrangements and sizes. Includes ordering information.—Samuel Stamping and Enameling Co.

Circle No. A358 on reply card, p. 19

BUILT-IN RANGES and free-standing models with the built-in look are subject here. Includes wattage and dimensions for each model.—Monarch Range Co.

Circle No. A359 on reply card, p. 19

BUILT-IN OVEN and surface unit brochure gives specification charts on all sizes and models. Shows adaptations to modern home designs. Also line of built-in refrigerators.—Gray & Dudley Co.

Circle No. A360 on reply card, p. 19

A SERIES of three-page, four-color folders complete with loose-leaf holes describes Caloric's new line of gas ranges. The folders give full technical as well as descriptive details.—Caloric Appliance Corp.

Circle No. A361 on reply card, p. 19

BUILT-IN RANGES combinations and arrangements described in brochure.

BUILT-IN RANGE combinations and arrangements described in brochure. Specifications include shaftway area, car size, load, construction.—Sommer Metalcraft Corp.

Circle No. A353 on reply card, p. 19

BUILDING SPECIALTIES are subject of 68-page catalog. Line includes metal weatherstripping, cabinet hardware, caulkings compounds, and reflective house numbers.—Macklanburg-Duncan Company.

Circle No. A351 on reply card, p. 19

DINING NOOKS that are wall-hung are shown in four-color folder. Information on the snap-on installation system and ordering of the stock parts is included.—The Dormalux Co.

Circle No. A352 on reply card, p. 19

AUTOMATIC DUMB WAITER for home and industrial installations is described in brochure. Specifications include shaftway area, car size, load, construction.—Sommer Metalcraft Corp.

Circle No. A353 on reply card, p. 19

WIRE PRODUCTS for the home—pegboard fixtures, grilles, beverage carriers are shown in brochure. Items are finished in a variety of metals.—Sommer Metalcraft Corp.

Circle No. A354 on reply card, p. 19

FOLDING TABLES, steel drawers are fully covered in brochures. Shows folding wall tables, drop-top folding counters, bases, etc. Lists sizes and prices.—Sturdi-lite Products, Inc.

Circle No. A355 on reply card, p. 19

GAS RANGES with variety of ovens, burners, control panels, colors are color-illustrated. Brochure also contains specifications and details.—The Tappan Co.

Circle No. A356 on reply card, p. 19

CHARCOAL RANGE for barbecue inside home is described in a group of 5 folders. Comes in variety of models, uses charcoal or gas. Photo, diagrams and prices included along with other details.—Hasty-Bake.

Circle No. A357 on reply card, p. 19

COMPLETE REPORT, 18 pages long, gives the entire picture of Dixie's line of gas ranges. Tells a lot about accessories, too. Illustrations are all four-color.—Dixie Products, Inc.

Circle No. A358 on reply card, p. 19

AUTOMATIC GAS RANGES are given complete coverage in 24-page booklet. Photos show sectional details, thermal eye, flame-set control, smokeproof broiler, many other features.—Hardwick Stove Co.

Circle No. A359 on reply card, p. 19

BARBECUES, both indoor and outdoor, pictured in brochure. Sample, detailed installations are given. Describes "Firebird" circulating fireplaces. Price list.—State Steel Industries, Inc.

Circle No. A360 on reply card, p. 19

KITCHENS, all-electric or all-electric, described in 20-page booklet. Complete line of ranges, ovens, ice-cube makers, refrigerator-freezers and dishwashers. Installation details, sizes, photos.—Whirlpool Corp.

Circle No. A361 on reply card, p. 19

Two-ZONE FREEZERS are illustrated in four colorful brochures. New square styling, greater storage is emphasized. Includes drawings and charts for upright and chest models. Plenty of how-to-use-it information.—Manitowoc Equipment Works.

Circle No. A371 on reply card, p. 19

Refrigerators, freezers

ICE-MAKING MACHINES are fully illustrated in 48-page catalog. Shows cubers, flakers, dispensers, crushers, bins. Gives specifications on all models. Installation details, other technical information.—Scottman Ice Machines.

Circle No. A372 on reply card, p. 19

TWO-ZONE FREEZERS are illustrated in four colorful brochures. New square styling, greater storage is emphasized. Includes drawings and charts for upright and chest models. Plenty of how-to-use-it information.—Revco, Inc.

Circle No. A373 on reply card, p. 19

BUILT-IN REFRIGERATORS and freezers with choice of arrangement, capacity, and finish are illustrated in two brochures. Includes photos, drawings of each model, size and spec information.—Revco, Inc.

Circle No. A374 on reply card, p. 19

RANGEHOODS, electric and gas, are illustrated in four-page brochure. Describes and illustrates the venting units, motor and fan units.—Nu-Vent, Inc.

Circle No. A375 on reply card, p. 19

WASHERS and dryers

DISHWASHERS, both portable and built-in, are covered in this fact-filled brochure. Performance-proved features are described, and illustrated in color.—The Hobart Mfg. Co.

Circle No. A376 on reply card, p. 19

AUTOMATIC DUMB WAITER for home and industrial installations is described in brochure. Specifications include shaftway area, car size, load, construction.—Sommer Metalcraft Corp.

Circle No. A377 on reply card, p. 19

ELECTRICAL APPLIANCES catalog describes dishwashers, air conditioners, refrigerators, freezers, water heaters, ranges, etc.—Major Appliance Div., General Electric.

Circle No. A378 on reply card, p. 19

Gas ranges, dishwashers, air conditioners, refrigerators, freezers, water heaters, ranges, etc.—Major Appliance Div., General Electric.

Circle No. A379 on reply card, p. 19

Circle No. A380 on reply card, p. 19
Efficiency units

EFFICIENCY KITCHENS, gas and electric, are described here. Brochure illustrates models, arrangements and sizes.—Acme-National Sales Co.

Circle No. A375 on reply card, p. 19

ALL-IN-ONE kitchen center literature shows five types of efficiency units. Each component contains stove, sink, refrigerator. Complete specifications.—King Refrigerator Corp.

Circle No. A376 on reply card, p. 19

CAN OPENER unit of many uses shown in this series of pamphlets. Unit holds can opener, ice crusher, juicer, etc. Retail price list available.—Kitcheneer Co. of America.

Circle No. A377 on reply card, p. 19

Incinerators

GAS-FIRED INCINERATORS, smokeless and odorless, appear with construction details and specifications in illustrated pamphlets. Both list features.—Locke Stove Co.

Circle No. A378 on reply card, p. 19

INCINERATORS for all types of buildings are illustrated in eight-page booklet which gives capacities and dimensions of units. Comprehensive selection guide.—Brule Incinerator.

Circle No. A379 on reply card, p. 19

Disposers

GARBAGE DISPOSERS for home and commercial use are illustrated in this 12-page brochure. Detailed construction and specifications of models are shown.—In-Sink-Erator Mfg. Co.

Circle No. A380 on reply card, p. 19

FOOD-WASTE DISPOSERS described in series of single-leaf folders. Exploded drawings show assembly; and accessories are listed. "Instant" hot water dispenser is also offered.—National Rubber Machinery Co.

Circle No. A381 on reply card, p. 19

Range hoods

COLOR ILLUSTRATED 12-page catalog shows many types, models of copper and stainless-steel kitchen ventilating hoods. Contains technical details, installation diagrams.—Trade-Wind Div., Robbins & Myers, Inc.

Circle No. A382 on reply card, p. 19

DUCTLESS HOOD that utilizes activated charcoal is discussed here. Brochure illustrates various styles for top burners and ovens, also an air purifier.—Ductless Hood Co., Inc.

Circle No. A383 on reply card, p. 19

Intercoms, radio, stereo

RADIO-INTERCOM systems for the home. Four-color brochure covers complete Rangaire line of wall-mounted units. Describes master stations, room and door stations.—Roberts Mfg. Co.

Circle No. A384 on reply card, p. 19

BUILT-IN RADIOS and combination radio-intercom systems are pictured and described here. Brochure covers all phases of home communications and music distribution.—Flush Wall Radio Co.

Circle No. A385 on reply card, p. 19

THREE-WAY STEREO is one of many subjects covered in series of colorful brochures. Color TV, air conditioners, refrigerator-freezers are described. Portable, table and clock radios are offered.—Admiral Corp.

Circle No. A386 on reply card, p. 19

PAINTS, FINISHES, ADHESIVES, WATERPROOFING

Paints, finishes and coatings

FULL SPECIFICATIONS for paints, varnishes, enamels is offered in this 24-page catalog. A calibrated color planning chart is also included as a bonus feature.—Pratt & Lambert, Inc.

Circle No. A387 on reply card, p. 19

PAINT PRODUCTS MANUAL describes complete line of paints and varnishes. Gives technical information on how to prepare surfaces, how to get best results.—The valspar Corp.

Circle No. A388 on reply card, p. 19

EXTERIOR WALL resurfacing is the purpose of spray-on coating described in this catalog. Before-and-after illustrations of typical jobs are used.—Re-Nu-It Corp.

Circle No. A389 on reply card, p. 19

SAMPLE COLOR SQUARES are featured in a complete paint specifications catalog. Exterior and interior primers and finishes are described.—Barreled Robbins & Myers, Inc.

Circle No. A390 on reply card, p. 19

PAINTS AND STAINS are covered completely in large looseleaf catalog. Price lists. Savogran Co.

Circle No. A391 on reply card, p. 19

PAINTS, VARNISHES, LACQUERS listed in Suggested retail price List. Includes aluminum paints, barn, interior paints, enamels, etc.—American Varnish Co.

Circle No. A392 on reply card, p. 19

PAINT REMOVERS, enamel and varnish removers, paint brush cleaners are some of the subjects in four-page folder. Price lists, Savogran Co.

Circle No. A393 on reply card, p. 19

Paint removers

Putties, glazing and caulking preparations are itemized in 28-page catalog. Describes uses, applications and technical details.—Dicks-Armstrong-Pontius, Inc.

Circle No. A394 on reply card, p. 19

GROUTS, PLASTER are covered in series of single-leaf pamphlets. Describes house and trim paints, mortar and plaster colors. "Dust-On," mortar and plaster colors.—Tamms Industries.

Circle No. A395 on reply card, p. 19

WOOD PRESERVATIVE, with its applications and specifications, is described in this brochure. Advantages of product are discussed. Treating plants are also listed.—Monsanto Chemical Company.

Circle No. A396 on reply card, p. 19

WATERPROOFINGS, dampproofings, and protective products are subject of comprehensive catalog. Includes specifications of products and illustrations of buildings where they've been used.—Minwax Co.

Circle No. A397 on reply card, p. 19

COLORING MASONRY and stucco, as a business, is described in catalogs and leaflets. Covers wall finishing machine in detail, gives series of illustrations.—Colorcrete Industries, Inc.

Circle No. A398 on reply card, p. 19

WATERPROOFING concrete, brick, tile, stone, stucco is subject of 19-page catalog. Gives complete list of corrective and protective products, specifying use of each.—Standard Dry Wall Products, Inc.

Circle No. A399 on reply card, p. 19

WATERPROOFING concrete, brick, tile, stone, stucco is subject of 19-page catalog. Gives complete list of corrective and protective products, specifying use of each.—Standard Dry Wall Products, Inc.

Circle No. A400 on reply card, p. 19

CAULKING PRODUCTS are subject of seven-page booklet. Includes water repellents, masonry sealers, asphaltic sealers, etc. Discusses purposes, descriptions, applications. Illustrated with photos, drawings.—Pecora, Inc.

Circle No. A401 on reply card, p. 19
CONCRETE VIBRATORS and grinders, trowels and scrapers are among the complete line of products pictured here. How-to-do-it photos, specifications.—Stow Manufacturing Co.

Circle No. A411 on reply card, p. 19

POWER TOOLS, their attachments and accessories, are described and priced in this fat 88-page catalog. Illustrations.—Delta Power Tool Div.

Circle No. A412 on reply card, p. 19

METAL WORKING TOOLS are shown in this catalog. It covers the new rod cutter series and bending brakes.—Whitney Metal Tool Co.

Circle No. A413 on reply card, p. 19

POWER TOOL LINE consisting of 114 models of 13 different types is featured in 52-page catalog. Shaper cutters to jointers.—Boise-Orme Co.

Circle No. A414 on reply card, p. 19

POWER EQUIPMENT for masonry and concrete work is discussed in four different folders. Products covered include pin-pullers, trowels, saws, and blades.—Champion Mfg. Co.

Circle No. A415 on reply card, p. 19

POWER-ACTUATED tools and fastenings of tempered steel are subject of 12-page brochure. It covers complete line, applications and other fastening data.—Ramset Fastening System

Circle No. A416 on reply card, p. 19

POWER-ACTUATED TOOLS that have many applications are described and illustrated in four-page brochure. Second brochure gives details on stud welding, includes table of test strengths.—Omark Industries, Inc.

Circle No. A417 on reply card, p. 19

SAW GRINDERS and guppers, hand-saw retouchers and automatic power setters are among subject of five pamphlets. All offer specifications, illustrations.—Foley Mfg. Co.

Circle No. A418 on reply card, p. 19

POWER TOOLS, precision made, are listed together with their prices in leaflet. Saws, sheet-metal shears, and foam-rubber saws are among tools included.—Krieg, Inc.

Circle No. A419 on reply card, p. 19

VIBRATORY COMPACTOR has 3,500-lb. blow, can handle compacting of soil, sand, gravel, rock, or asphalt. Product details, models, specifications, and illustrations shown in leaflet.—Master Vibrator Co.

Circle No. A420 on reply card, p. 19

PORTABLE POWER TOOLS designed for builder use are featured in this illustrated catalog. Information on all accessories and full price data is also included.—Milwaukee Electric Tool Corporation.

Circle No. A421 on reply card, p. 19

PORTABLE ELECTRIC TOOLS are subject of 11-page catalog. Power saws, jig saws, sanders, drills, accessories are all covered with illustrations and specifications for each model.—Cummins Portable Electric Tools.

Circle No. A422 on reply card, p. 19

CUSTOM CUTTER folder illustrates trimming jobs of tool. Back page describes features and advantages of hinge mortiser, tells what it can do.—Dosch Manufacturing Co.

Circle No. A423 on reply card, p. 19

ELECTRONIC SOLDERING gun that comes in six different models shown in series of folders. Sanders, sanders, sanders, and accessories. Specifications, how-to-use it drawings.—Wen Products, Inc.

Circle No. A424 on reply card, p. 19

TERMITE CONTROL through chemical pretreatment of soil is explained in four-page folder. Discusses termite damage and method of prevention.—Velsicol Chemical Corp.

Circle No. A425 on reply card, p. 19

GLAZIERS' TOOLS pictured and described in large catalog. Covers glass cutters, putty knives, points. Also offers wood, paint, glass and wall scrapers, paint conditioners. Prices given.—Red Devil Tools

Circle No. A426 on reply card, p. 19

GASOLINE CHAIN SAWS, subject of folder, are fully covered. Material describes a light machine and a heavier profession model. Also gives tips on how they can be used most profitably.—Pioneer Saws

Circle No. A427 on reply card, p. 19

HAND TOOLS designed for wood-working and their functions are described. Other specialty items such as earth augers are included in this well-illustrated publication.—Greenlee Tool Company.

Circle No. A428 on reply card, p. 19

BONDING PLASTER folder covers restoring old walls, finishing new dry walls, as well as use as a plaster base.—Nu-Wall Mfg. Co.

Circle No. A429 on reply card, p. 19

ADHESIVES FOR WALLS, floors, laminates listed in four-page brochure. Chart gives methods of application and properties, including color, freeze resistance.—Hachmeister, Inc.

Circle No. A405 on reply card, p. 19

CONSTRUCTION BY ADHESION is one title in series of booklets covering anchoring and application methods. Includes ideas for adhering insulation, tile, sealers, coatings.—Miracle Adhesives Corp.

Circle No. A406 on reply card, p. 19

FLOOR AND ROOF maintenance for industrial buildings presented in this folder full of illustrations. Complete data given on new floors, repairs on worn or cracked floors. Roof coatings, paints, varnishes, enamels.—Monroe Company.

Circle No. A407 on reply card, p. 19

TERMITE CONTROL through chemical pretreatment of soil is explained in four-page folder. Discusses termite damage and method of prevention.—Velsicol Chemical Corp.

Circle No. A410 on reply card, p. 19

COATING that protects aluminum from paint and plaster during construction is described in large folder. Chart gives methods of application and prices.—Protectub, Inc.

Circle No. A408 on reply card, p. 19

Bonding agents

FOR JOINING, SETTING, and repair of masonry, tile, etc. Bonding agent is described in brochure. Lists physical properties and applications.—Permagle Corp. of America.

Circle No. A403 on reply card, p. 19

BONDING AGENTS brochure covers bonding of concrete, plaster and tile. Describes characteristics of each and gives project specifications.—Larsen Products Corp., Inc.

Circle No. A404 on reply card, p. 19

TOOLS AND EQUIPMENT

Tools

CONCRETE VIBRATORS and grinders, trowels and scrapers are among the complete line of products pictured here. How-to-do-it photos, specifications.—Stow Manufacturing Co.

Circle No. A402 on reply card, p. 19

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Circle No. A412 on reply card, p. 19

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POWER-ACTUATED TOOLS that have many applications are described and illustrated in four-page brochure. Second brochure gives details on stud
TROWEL TOOLS for almost every job in the trade are listed in this 70-page catalog with index. Includes specifications and prices of almost 300 items.—Goldblatt Tool Co.

A NEW 18-IN. BENCH SAW and other Atlas saws are described in a series of bulletins. Illustrated in two color plates. Full descriptions of each machine, what it is, how it operates.—Atlas Press Co.

SPRING TACKERS for every construction job described in a portfolio of brochures. Includes stapling hammers, radiant heat tackers, etc. Also instructions for installing insulation and ceiling tile.—Bootsch.

ELECTRIC TOOLS are listed in comprehensive 72-page catalog. Contents include portable electric saws, routers, laminate trimmers, jig-saws, etc.—Black & Decker Mfg Co.

CONCRETE VIBRATORS of all types, for paving, flat slabs, beams, heavy structures, finishing are described in a series of brochures. Generators and components included.—Magnesium Power Tool Co.

CONCRETE FORMS and methods of operation are subject of fully illustrated brochure. Also available: a companion field manual.—Irvington Form & Tank Corp.

PORTABLE GENERATORS, hoists and winches are described here. Catalog covers gas, electric and hand-powered models. Information includes charts, drawings, specifications.—Sagen Derrick Co.

POLYETHYLENE COVERS for furniture, storage bags, outdoor construction and building materials, kick-in uses are discussed inleaflets. Include storm windows and doors, give sheet sizes.—Warp Bros.

SHELF, ROISTS and winches are described here. Catalog covers gas, electric and hand-powered models. Information includes charts, drawings, specifications.—Sagen Derrick Co.

SHELF, ROISTS and winches are described here. Catalog covers gas, electric and hand-powered models. Information includes charts, drawings, specifications.—Sagen Derrick Co.

TAPE MEASURES in lengths up to 100' are subject of this brochure. Presents rules, plumb lines, list prices. Price list.—Evans Rule Co.

STEEL SUPPORT DEVICE and floor leveling item is designed for warping, sagging floors, among other uses. Brochure gives complete description.—Perma-Jack Corp.

FUEL LANTERNs with red, clear, amber, blue or green bulbs are described and illustrated in this brochure. Additional literature on battery-powered spotlights & flashers. Highway flares.—R. E. Dietz Co.

AMERICAN BUILDER
A complete listing (with name and full address) of all manufacturers in the building products and equipment field.

You'll find every firm mentioned in the yellow pages is included here, and on the next 17 pages.

A & A Register Co 8327 Clinton Rd
Cleveland 9 Ohio

A Wire Products Co 714 E 61 St
Chicago 3 III

A Window Sales Co 19433 John R St
Detroit 3 Mich

Abbeon Supply Co 179-15 Jamaica Ave
Jamaica 32 NY

Aberdeen Plywood & Veneers Inc
PO Box 1219 Aberdeen
Sick

Abesol Mfg Co 131 Wabash St
Michigan City Ind

Abil Corp 956 Penobscot Bldg
Detroit 26 Mich

Abrasiv Products Inc
South Braintree Mass

Accountants' Supply House 518 Rockaway Ave
Valley Stream NY

Ackerman-Johnson Co 625 W Jackson
Chicago 6 Ill

Acme Appliance Mfg Co Acme Builders Hardware Div 200 E Railroad Ave
Monrovia Cal

Acme Brick Co PO Box 425 Fort Worth Tex

Acme Engineering & Mfg Corp Box 1203
Muskogee Okla

Acme Industries Inc 600 N Mechanic St
Jackson Mich

Acme National Refrigeration Co Inc 19-28
Hazen Astoria Long Island City NY

Acme-Newport Steel Co 9th & Lowell Sts
Sioux City 2 Iowa

Acme Post Mfg Co 9th & Lowell Sts
Newark NJ

Acrane Co Inc 115 Main St
Buffalo 3 NY

Acrorn Mfg Co Mansfield Mass

Albright Mfg Co 1384 W 33rd St
Chicago 22 Ill

Adams & Westlake Co Safford St
Elkhart Ind

Adams Rite Mfg Co 540 Chevy Chase
Washington 6 DC

Adams Tool Co 919 N Bowman Ave
Danville Il

Alabama Oak Flooring Co Guin Ala

Alabama Wire Co Inc PO Box 648
Florence Ala

Alabama Wood Co Inc PO Box 648 Florence Ala

Alabama Wire Co Inc PO Box 648 Florence Ala

Alabama Wood Co Inc PO Box 648 Florence Ala

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<table>
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<tr>
<th>Company Name</th>
<th>Address Details</th>
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<tbody>
<tr>
<td>Berko Electric Mfg Corp</td>
<td>212-40 Jamaica Ave Queens Village 28 NY</td>
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<tr>
<td>Berry Air King Corp</td>
<td>3050 N Rockwell St Edgewater Park 12 NJ</td>
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<tr>
<td>Berry Door Corp</td>
<td>240 E Lincoln Rd Birmingham Mich</td>
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<tr>
<td>Bessco Corp</td>
<td>Box 326 Alpena Mich</td>
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<td>Bessler Disappearing Stairway Mfg Corp</td>
<td>1170 S State St Detroit 13 Mich</td>
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<tr>
<td>Bestwall Gypsum Co</td>
<td>120 E Lancaster Ave Ardmore Pa</td>
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<tr>
<td>Better-Bilt Door Co</td>
<td>950 Harbor Rd Egg Harbor City NJ</td>
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<td>Biddle Co</td>
<td>Breckenridge Industrial Court St Louis 19 Mo</td>
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<td>Bica Co</td>
<td>1170 N State St Girard Ohio</td>
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<td>Biersach &amp; Neidermeyer Co</td>
<td>1957 N Hubbard St Milwaukee Wisc</td>
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<td>Bil-Jax Inc</td>
<td>100 Wyse Rd Archbold Ohio</td>
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<td>Birdsall Glass Co</td>
<td>207 N Main St Houston 1 Tex</td>
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<td>Bird &amp; Son Inc</td>
<td>East Walpole Mass</td>
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<tr>
<td>Birdcage Structures Inc</td>
<td>290 Larkin St Buffalo 10 NY</td>
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<td>Bickell Mfg Co</td>
<td>20th St &amp; Hancock Ave Rockford Ill</td>
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<td>Bickley Co</td>
<td>37 Water St West Haven Conn</td>
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<td>Binns Mfg Co</td>
<td>1498 E Madison Ave Madison 16 Wis</td>
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<td>Black &amp; Decker Mfg Co</td>
<td>600 E Pennsylvania Ave Towson 4 Md</td>
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<td>Black White Luminite Co</td>
<td>Front &amp; Eighth St Quincy Ill</td>
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<td>Blackstone Corp</td>
<td>1022-88 Allen St Jamestown 76 N.Y.</td>
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<tr>
<td>Bliss Steel Prods Corp</td>
<td>617 W Manlius St E Syracuse NY</td>
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<tr>
<td>Briggs Manufacturing Co</td>
<td>6600 E 15 Mile Rd Warren Mich</td>
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<tr>
<td>Brikcrete Associates Inc</td>
<td>501 S Center St Davenport 12 Lowa</td>
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<tr>
<td>Brooks-Scanlon Inc</td>
<td>Box 1111 Bend Ore</td>
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<tr>
<td>Brown Bros Co</td>
<td>150 Cauchoy St Boston 14 Mass</td>
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<tr>
<td>Brown George C &amp; Co Inc</td>
<td>1730 W Lake St Greensboro NC</td>
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<tr>
<td>Brown &amp; Grist Inc</td>
<td>25 Tyler Ave New York Pa</td>
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<tr>
<td>Brown Products Mfg Co</td>
<td>1090 Springfield Union NJ</td>
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<tr>
<td>Brown Stone Works Inc</td>
<td>PO Box 495 Buffalo 7 NY</td>
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<tr>
<td>Brown W R Corp</td>
<td>2701 N Normandy Ave Chicago 33 Ill</td>
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<tr>
<td>Budig Div Gregory Industries Inc</td>
<td>Toledo Ave &amp; E 28 St Lorain Ohio</td>
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<tr>
<td>Bryant Electrical Co</td>
<td>1411 State St Bridgeport 2 Conn</td>
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<td>Bryant Manufacturing Co</td>
<td>2010 Montclair St Montclair 35 N.J.</td>
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<td>Buch Co Div of Mow-Mower Inc</td>
<td>Elizabethport Pa</td>
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<td>Bucyrus-Erie Co</td>
<td>390 Niagara St Buffalo 1 NY</td>
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<tr>
<td>Bufalo Forge Co</td>
<td>490 Broadway Buffalo 4 NY</td>
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<tr>
<td>Bufalo Wallcraft Co Inc</td>
<td>PO Box 54 Bufalo 7 N.Y.</td>
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<tr>
<td>Bugher Mfg Co</td>
<td>301 E Lincoln Rd Kalamazoo Mich</td>
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<tr>
<td>Builders Brick Co</td>
<td>3800 Ninth Ave S Seattle 8 Wash</td>
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<tr>
<td>Builders Fireplace &amp; Supply</td>
<td>2604 Link Rd Buffalo 4 NY</td>
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<td>Burgess-Fanning Co</td>
<td>1220 W Ninth St Cleveland 13 Ohio</td>
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<td>Burgess-Manning Co</td>
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<td>Burgess-Vibracrafters Inc</td>
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<td>1890 Griswold Dr Niles Ohio</td>
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<td>Burnham Corp</td>
<td>Warm Air &amp; Cooling Div Fourth &amp; Main Sts Belle Vernon Pa</td>
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<td>601 Chicago 50 Ill</td>
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<td>Burroughs Corp</td>
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<td>70 Free St Portland Me</td>
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<td>Buschman E W Co Inc</td>
<td>4481 Clifton at Winton Pk Cincinnati 32 Ohio</td>
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<td>3500 W 23rd Pl Chicago 40 Ill</td>
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<td>Butler &amp; Hart Mfg Co</td>
<td>601 Laramie Ave Altona Pa</td>
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<td>Butler Mfg Co</td>
<td>7409 E 13 S Kansas City 26 Mo</td>
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<tr>
<td>Byers A M Co</td>
<td>Clark Bldg Pittsburgh 10 Ohio</td>
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**C & H Air Conditioning Co Inc**

- **C & H Air Conditioning Co Inc 1591-1623 DeKalb Atlanta Ga**
- **C & H Manufacturing Co 3849 N Palmer St Milwaukee 12 Wis**
- **C & H Electric Machine Co 436 W Juene Ave Milwaukee 3 Wisc**
- **Cable Electric Products Inc 234 Daboll St Providence RI**
- **Cabrera Mfg Inc 1102 Gerhart Ave Los Angeles 22 Cal**
- **Caldwell Paint & Varnish Co 45-460 1320 S Harvard St Philadelphia 16 Pa**
- **Caliander Corp 28 W State St Bay City 28 Mich**
- **Caldwell Mfg Co Box 1580 Lancaster 12 Pa**
- **Caldwell Mfg Co 64 Commercial St Rochester 14 NY**
- **California Spray-Chemical Corp Lucas & Ortho Hwy Richmond Cal**
- **Calnall Inc 1922 W Vliet St Milwaukee 18 Wis.**
- **Calorite Appliance Corp Topson CA**
- **Cambridge Tile Mfg Co Box 71 Clinton 20 Cal**
- **Camp Inc 9300 S Sangamon St Chicago 20 Ill**
- **Canadian Forest Prods Ltd Hunting- Merritt Shingle Div 8110 Milton St Vancouver BC**
- **Cannon Electric Co 3208 Humboldt St Los Angeles Cal**
- **Caplan Timber Co Ltd Box 2290 Vancouver BC**
- **Capitol Products Co 1839 S Main Box 251 Jacksonville Ill**
- **Capitol Products Corp Carlisle Pike Mechanicsburg Pa**
- **Capo Mfg Inc 2538 N Naomi St Burbank Cal**
- **Capi Sales Inc 217 N Lake St Burbank Cal**
- **Caradco Inc Eleventh & Jackson Dubuque Iowa**
- **Carbolium Wood Preserving Co 6043 N 40 S Milwaukee 9 Wisc**
- **Carborundum Co PO Box 477 Niagara Falls 22 N.Y.**
- **Carey-McFall Co 2156 E Dauphin St Philadelphia 15 Pa**
- **Carey Phillips Mfg Co 285 S Wayne Cincinnati 15 Ohio**
- **Carlon Products Corp PO Box 133 Aurora 44202 Ohio**
- **Carlyle Tile Co Box 128 Ironton Ohio**
- **Carney Mfg Co PO Box 28 Mankato Minn**
- **Carpenter Oak Flooring Co PO Box 400 Ne 150 Smithville 31133 California**
- **Carroll Carrier Carrier Parkway Syracuse 1 NY**
- **Carrollton Mfg Co Sink Div Carrollton Ohio**
- **Carrier-Waters Corp 344 G W Penneway Kansas City Mo**
- **Carriage Marble Corp Box 612 Carthage Mo**
- **Cascade Lumber Co Div of Boise-Cascade Corp N Seventh & H Sts Yakima Wash**
- **Cascade Pools 811 State Hwy 33 Hamilton Square N.J.**
- **Cascades Plywood Corp 1316 Public Service Bldg Portland 4 Ore**
- **Case J Co 701 State St Racine Wis**
- **Case Mfg Corp 247 Delaware Ave Buffalo 2 NY**
- **Casey & Drywall Trim Div 2408 N 52nd Ave Milwaukee 11 Wis**
- **Caterpillar Tractor Co Peoria 10 Ill**
- **Cavalier Corp 341 W 1st St Chattahoochee Tenn**
- **Ceco Steel Prods Corp 601 W 26 St Chicago 10 Ill**
- **Cedar Supply Co Humptulips Wash**
- **Cedarwood Timber Co Box 105 Vernonia Ore**
- **Celebex Inc 3 Maidens St Natick Mass**
- **Celtex Corp 128 S LaSalle St Chicago 2 Ill**
- **Ceramics of Arizona 8949 Sunset Blvd Las Vegas 46 Cal**
- **Cenatra Industries 5464 Rr 98 S Fresno Cal**
- **Central Foundry Co 922 Broadway New York 10 NY**
- **Central Metal Strip Co 4342 N Western Ave Chicago 18 Ill**
- **Centralia Plywood Inc PO Box 24 Centralia Wash**

**A P R I L 1 9 6 0**
Hasty-Bake Mfg Co Inc 616 S Lewis St Tulsa Okla
Havilugh Brick Works Hattiesburg Miss
Hauserman E F Co 6008 Grant Ave Columbus 16 Ohio
Haven-Bush Co 3443 Chicago Dr SW Grandville Mich
Hayeks W Co 109 Fifth St SW Cedar Rapids Iowa
Haws Drinking Faucet Co Fourth & Page Sts Berkeley 10 Cal
Hayes Adhesives Co Inc 415 Union Blvd St Louis 13 Md
Haynes O E & Sons Inc Box 284 Eatonville Calif
Heartland Continguous Co 3126 Scarborough Cleveland Ohio
Hestmore Inc 651-5 Driggs Ave Brooklyn 17 NY
Hedges M M Mfg Co Inc 700 E Main St Chattanooga Tenn
HearThaire Conditioning Co 3126 Scarborough Cleveland Ohio
Heinemann Saw Corp 2017 Navarre Rd SW Canton 6 Ohio
Heinley Mastercraft Products 5731 Bickett St Huntington Park Calif
Heinemann Saw Corp 2017 Navarre Rd SW Canton 6 Ohio
Hendrick Mfg Co Duffstadt St Carbondale Pa
Henry Furance Co Medina Ohio
Henry Mfg Co Inc 1790 N Clay St PO Box 521 Topeka Kan
Henry W W Co 5731 Bickett St Huntington Park Calif
Hercules Fastener Co 2728 N Clybourn Ave Chicago 14 IL
Hercules-Galium Products Inc Gallion Ohio
Hess Co 1855 S 54 Ave Chicago 530 Ill
Hess Mfg Co Quincy Il
Hettie W E & Son Co 333 Maple Station D Toledo 8 Ohio
Hewitt-Robinson Inc 666 Glenbrook Br Stamford Conn
Hico Corp of America 120 Broadway New York 5 NY
Higbie Mfg Co Avon Tube Div Third & Water Sts Rochester Mich
Higgins Industries Inc PO Box 8169 New Orleans La
Hild Floor Machine Co Inc 1217 W Washington Chicago 23 Ill
Hillwood Mfg Co 21790 St Clair Ave Cleveland 17 Ohio
Hillier-Downs Mfgs Inc Oakland La
Hill Rapid Fastening Systems Inc T3 Southfield Ave Stamford Conn
Hines Edward Lumber Co 200 S Michigan Ave Chicago 14 Ill
Hinge Butt Template 253 W Harriet St Atlanta Ga
Hish S M Mfg Co 8051 N Central Pk Skokie Ill
Hobart Mfg Co 711 Pennsylvania Troy Ohio
Hoe K & Co Inc 910 E 138 St New York 38 NY
Hoffee Cedar Prods Rt 2 Bov 149-B Monroe Pa
Hoffman Specialty Mfg Corp 1700 W 19 St Indianapolis 7 Ind
Hoisma Adjustable Scaffold Bracket Co 284 285 E 23 St Paterson 4 NJ
Holcomb & Hoke Mfg Co Inc 1545 Van Buren Indianapolis 7 Ind
Hollander Mfg Co 3411 Spring Grove Cincinnati 23 Ohio
Holland Furnace Co Holland Mich
Holland Ladder & Mfg Co 1305 17 St Holland Mich
Holy-Gen Co Div Sigler Corp 875 S Arroyo Pkwy Pasadena Calif
Hollm Mfg Co of Ohio 1340 Lake Shore Blvd Akron 1 Ohio
Hollephant Co Inc 342 Madison Ave New York 17 NY
Holt Mfg Co 669 28th St Oakland 12 Cal
Holub Industries Inc 473 Elm St Springfield 3 Ill
Homoys Co Ferwood Rd Trenton NJ
Home Building Plan Service 2454 NE Sandy Blvd Portland 12 Ore
Home Comfort Co Box 68 Primeville III
Home Music Systems Inc 644 Madison St Memphis Tenn
Home Plan Book Co 1356 Seby Ave St Paul 4 Minn
Home Planners Inc 16310 Grand River Detroit Mich
Homedite Div Textron Inc 67 Riverside Ave Port Chester NY
Hood Bros 4326 Orchard St Philadelphia 24 Pa
Hood Mill Fine B Co Daisy Tenn
Hoofer Tarpaulin & Canvas Goods Co PO Box 574 Indianapolis Ind
Hoover Bathroom Accessories Fowerville Mich
Hope Brick Works PO Box 155 Hope Ark
Hopes Windows Inc 848 Hopkins Ave Jamestown NY
Horga Mfg Co Emporia Kan
Horizon Door Co 640 Paula St Glendale 4 Cal
Horn A C Companies Div Sun Chemical Corp 750 Third Ave New York 17 NY
Horner Flooring Co Dollar Bay Mich
Horton Mfg Co PO Box 747-B Goldthwaite Tex
Hosking John H Co 1704 Howland Ave Cincinnati Ohio
Hotpoint Div 5600 W Taylor St Chicago 84 Ill
Hotstream Heater Co 2363 E 69 St Cleveland 4 Ohio
Hough French Co 811 Sunnyvale Ave Libertyville Ill
Hough Mfg Co 1029 S Jackson St Janesville Wis
Howard Mfg Co Kant Wash
Howell Mfg Co Morehead Rd Paoli Pa
Hows M M Mfg Co 267 Oliver St Fall River Mass
Hubbell H L Mfg Co Zeeland Mich
Hubbell Harvey Inc State & Bostwick Bridgeport 5 Conn
Hudson B D Mfg Co 587-91 E Illinois Chicago 11 Ill
Hubert Wm Mill Co PO Box 1111 Evanston Ill
Humboldt Brick & Tile Co 910 New York St Humboldt Kan
Humphrey Products Inc 719 E Zimnner PO Box 2888 Wichita 11 Kan
Humptulips Shingle Co Rt 1 Box 158 Humptulips Wash
Hunter Div-Robinsons & Myers Inc 2500 Frisco Ave Memphis Tenn
Huntington Shingle Co Springfield Ore
Hurn Shingle Co Rt 1 Concrete Wash
Hussey C G & Co 2860 Second Ave Pittsburgh 19 Pa
Butcher R & H Co 260 Sylvan Ave Dallas 12 Tex
Butler Brothers Saw Mfg Co Inc 1290 University Rochester 7 NY
Hyde-Murphy Co Murphy Bldg Ridgway Pa
Hyde Park Prods Co Burch Ave & NWNR Cincinnati 8 Ohio
Hydropile 530 DeSoto Ave Ocean Springs Miss
Hydroturhome Inc Clinton Ave Northvale NJ
Hy psycho Engineering Inc 700 3rd Ave NE Minneapolis 21 Minn
Byster Co 2902-18 NE Clarkacmas Portland 8 Ore
I-XL Furniture Co 410 N Main St Goshen Ind
Ida Products Co 1909 E Forest Ave Detroit Mich
Ideal Brass Works Inc 250 E Fifth St St Paul 1 Minn
Ideal Cement Co 500 Denver Natl Bldg Denver 2 Colo
Ideal Hangar Co 1192 E 53 St Cleveland 14 Ohio
Ideal Mfg Co Div Wm Cameron & Co 2405 N Pulaski Road Chicago 41 Ill
Ideal System Co 2437 W Pico Blvd Los Angeles 6 Cal
Ideal Vent Div Crane-Nevens 605 Summer St Abington Mass
I LG Electrical Ventilating Co 2830 N Pu laski Rd Chicago 11 Il
Illinois Brick Co 228 N LaSalle St Chicago Ill
Impex Molder Chemical & Paper Corp PO Box 231 Glenys Falls NY
Incarnation Div Bowser Inc 4299 Syracuse St Cairo Ill
Inclinator Products Co 633 Post Ave S Detroit Mich
Incourser Co of America 2290 Paxton Blvd Harrisburg Pa
Independence Oak Flooring Co Independence Mo
Independent Lock Co 1959 Cleghorn Pittsfield Mass
Independent Lumber Co 19620 Nottingham Cleveland Ohio
Independent Nail & Packing Co Bridge- water Mass
Indiana Cash Drawer Co Shelbyville Ind
Indiana Limestone Co Inc 405 N 1 St Beech Grove Ind
Industrial Car Pros Div 15-25 Flax St Delaware Ohio
Industrial Iron Works PO Box 4455 Portland 2 Ore
Infra Insulation Inc West Nyack NY
Ingersoll Prod Div Borg-Warner 1000 W 128 St Chicago Ill
Ingersoll-Rand Co 11 Broadway New York 4 NY
Ingram-Richards Mfg Co 32 St Beaver Falls Pa
Inland Steel Co 30 W Monroe St Chicago 3 Ill
Inland Steel Products Co 4025 West Burnham Milwaukee 1 Wisc
In-Sink-Erator Mfg Co 1225 14th St Racine Wis
Insta-matic Heater Co 89 Charles St Providence RI
Insta-Gar Corp 998 E Woodbridge Detroit Mich
Insulation Industries Inc 100 E 69 St Cincinnati 16 Ohio
Insulite Div Minnesota & Ontario Paper Co 500 Investors Bldg Minneapolis Minn
Insul-Wool Insulation Corp 121 N Dodge Michigan 12 Kan
Insul-climate Insulation Inc 100 E 69 St Cincinnati 16 Ohio
International Business Machines Corp 303 Madison Ave New York 22 NY
International Chemical Co Inc 3140 S Central St Chicago 14 Ill
International Fireplace Door Co 76 Lexington Ave Brooklyn 38 NY
International Harvester Co 180 N Michigan Chicago 13 Ill
International Oil Burner Co 3806 Park Ave St Louis 10 Mo
International Paper Co Long-Hill Div 928 Grand Ave Kansas City 6 Mo
International Register Co 2620 S Washington Chicago 14 Ill
International Swimming Pool Corp Federal Savings Bldg White Plains NY
International Harvester Co 180 N Michigan Chicago 13 Ill
International Steel Co 1321 Edgar St Evansville 7 Ind
International Swimming Pool Corp Federal Savings Bldg White Plains NY
International Steel Co 1321 Edgar St Evansville 7 Ind
International Swimming Pool Corp Federal Savings Bldg White Plains NY
International Swimming Pool Corp Federal Savings Bldg White Plains NY
Interstate Brick Co 3100 S 11 E Salt Lake City Utah
Iron Fireman Mfg Co 3170 W 106 St Cleveland 11 Ohio
Irondite Inc 332 Cass Ave Mt Clemens Mich
Irvington Form & Tank Co 100 William St New York 38 NY
Irwin Auger Bit Co Wilmington Ohio
Irvington Form & Tank Co 100 William St New York 38 NY

AMERICAN BUILDER
Kalamazoo Tank & Stove Co 508 Harrison St Kalamazoo Mich
Kane Mg Corp PO Box 641 Kane Pa
Kant-Slim Door Check Co Box 228 Bloomfield Ind
Karelius Albert & Sons Inc 909 S Fremont Ave Ashland Oa
Karyl Hall Body Inc 8231 Clinton Rd Cleveland 9 Ohio
Katolig Corp Box 891 Manhassett Minn
Kaul Clay Co Spring St PO Box 628 Toranto Ohio
Kaufman & Son Co 1492 Washington Ave Detroit 18 Mich
Keen Wire Co 235 8 S 2nd St Salt Lake City Utah
Keen F Mfg Co 706 Park Ave Beatrice Neb
Kelco Div Wells Aluminum Corp North Liberty Ind
Kelley Machine Div Wiener-Rapp Co Inc 285 Hinsman Ave Buffalo 23 NY
Kelvinator Div American Motors Co 14256 Plymouth Rd Detroit 32 Mich
Kencos Manufacturing Co 5211 Telegraph Rd Los Angeles 22 Cal
Kenco Pump Division 1305 Oberlin Ave Lorain Ohio
Kendrick & Tile Co 3255 S Boulevard Charlotte NC
Kennetack Corp Sub Ecko Peds PO Box 877 Elkhart Ind
Kenney Inc Owens St Bingham Me
Kennebec Corp 161 E 42 St New York 17 NY
Kent Air Tool Co 711 Lake St Kent Ohio
Kent Co Inc 331 Canal St Rome NY
Kentile Inc 56 Second Ave Brooklyn 15 NY
Kentucky Flooring Co of Va Inc Orange Va
Kerner Incinerator Div 56 Fifth Ave New York 11 NY
Kescro Peds Inc PO Box 277 Bristol Ind
Kessler Products Co 4521 Lake Park Rd Youngstown Ohio
Kilham M G Mfg Corp 76-70 80th St Glendale 27 NY
Kett Tool Co 5055 Madison Rd Cincinnati 27 Ohio
Keuffel & Esser Co 300 Adams St Hoboken NJ
Keystone Aliies Co Mellon Nati Bank Bldg Latrobe Pa
Keystone Frame & Mfg Co PO Box 25 Spokane Wash
Keystone Mfg Co 23228 Sherwood Ave Warren Mich
Keystone-Standard Wire Cloth Co Factory St Hanover Pa
Keystone Steel & Wire Co 7080 S Adams Peoria 7 Ill
Kief International Products Co Div 240 W Front Ave SW Grand Rapids Mich
Kimball Mfg Co 816 University Pi Evanston Ill
Kimbley-Clark Corp 128 N Commercial Nevins Wash
Kimble Glass Co Sub Owens-Illinois PO Box 1035 Toledo 1 Ohio
King Lumber Industries Canton Minn
King Mfg Co 3146 W Chicago Ave Chicago 31 Ill
King Refrigerator Corp 76-02 Woodhaven Blvd Glendale 27 NY
Kingston Mills Inc Cartersville Ga
Kinkaid Industries Inc 5800 N Pulaski Rd Chicago 30 Mich
Kipling Products Co PO Box 298 Columbus 12 Ohio
Kissel Plastics Co 170 E Jefferson Los Angeles 11 Cal
Kitched Maid Corp 541 Snowden Ave Ann Arbor Mich
Kitchineering Co of America 6618 E 37 St Kansas City 29 Mo
Klauer Mfg Co Nord & Wash St Dubuque Ia
Klauer Mfg Co 32 Cottage Grove SW Grand Rapids 2 Mich
Knape & Vogt Mfg Co 658 Richmond N Wh Grand Rapids 4 Mich
Knapp Brothers Mfg Co 5000 Shell Rd Cincinnati 36 Ohio
Knapp`s Drake Products Inc Box 996 Austin Texas
Kochent Plywood & Veneer Co Inc 110 4 W Roosevelt Chicago 7 Ill
Koebring Co 3020 W Concordia Milwaukee Wis
Kohler Co 44 High St Kohler Wis
Kol-Master Corp 124 Walberg St Oregon Ill
Konvent Metal Awnings Corp of America 902 Redditt Bldg Pittsburgh 22 Pa
Koppers Co Inc Koppers Bldg Pittsburgh Pa
Koppers Co Inc Durethene Plant 7001 W 60 St Chicago 38 Ill
Kordite Corp Cable Nordenney Mich
Kosene Pavilion Cement Co 1529 Starks Bldg Louisiville 2 Ky
Koven L O & Bro Inc Richbouyton Rd Dover Nj
Kraus Walter S 48-42 43 St Woodside 77 NY
Kressy Mfg Co Inc Second & H St Pe- tabula Cal
Kresno-Stamm Mfg Co 460 Commercial Ave Palisades 12 Mich
Kriegle Theatre Inc 611 Broadway New York 12 NY
Kritter Radiant Coils Inc 325 N River St Batavia Ill
Kruige Mfg Co 1445 E Main St Owoos Mich
Kulin Co 3435 E Jefferson Detroit 7 Mich
Kwikset Div American Hardware Corp 516 E Santa Ana St Anaheim Cal
Kyanite Products Inc Second & Boston Sts Everett 49 Mass

L

LCN Closear Co Inc 111 W Railroad Ave Princeton Ill
Laboratory Equip Corp Hilltop Rd St Joseph Mich
Lahrie Mfg Co Inc 3525 NW 50th Miami Fl
Lakeland Steel Co Arcade Bldg St Louis Mo
Lake Drive Products Co Inc PO Box 166 Edderan Wolverine
Lake Lyle Shingle Co Box 371 Manit- tan Beach RS Rockaway Ore
Lake Shore Inc Lake Shore Engineering Div E Magnetic St Iron Mountain Mich
Lamson & Sessions Co 5006 Tiedeman Rd Cleveland 9 Ohio
Lancaster Pump & Mfg Co Inc 1340 Manheim Pike PO Box 778 Lancaster Pa
Landers Segal Color Co 78 Delaware St Brooklyn 31 NY
Lancaster Inc 7240 Fulton Ave N Hollywood Cal
Lancov Mfg Co Inc 110 Main St W Poughkeepsie NY
Larsen Products Corp Box 5756F Ber- erica Ml
Larson Chas O Co PO Box 258 Sterling Ill
Larsen Ladder Co 651 Martin Ave Santa Clara Cal
Lastik Paint Inc 203 Iroquois Bldg Pittsburgh 13 Pa
Latz Products Co Inc 2644 N New Borton Rd Textar- kana Tex
Lau Blower Co 2601 Home Ave Dayton 7 Ohio
Lawah Ber, Automatic Controls Inc 453 N Macquenest Mt Vernon Ny
Lawrence Brothers Inc Sterling Ill
<table>
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<tr>
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<td>Lawrence W W &amp; Co</td>
<td>1124-32 W Carson Pittsburgh 19 Pa</td>
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<td>Le Roi Div Westinghouse Air Brake Co</td>
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<td>Box 29 Dickson Tenn</td>
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<td>Lakeview LI NY</td>
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<td>1639 Bee St Dept 4 Cooper- ville Mich</td>
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<td>Box 649 Jacksonville Fla</td>
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<td>1412 E Michigan St Adrian Mich</td>
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<td>LePrie's Inc</td>
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<td>McGraw-Edison Co 700 W Michigan St Milwaukee Wis</td>
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<td>515 Madison Ave New York 22 NY</td>
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<td>511 Fifth Ave New York 17 NY</td>
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<td>Lomond Inc</td>
<td>3225 Frankford Ave Philadelphia PA</td>
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<td>106 Home Ave Akron 10 OH</td>
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<td>Loomer Mfg &amp; Supply</td>
<td>120 Sixth Ave Seattle 15 WA</td>
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<td>Main St Irving NY</td>
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<td>Louden Machinery Co</td>
<td>2504 West Court Fairfield</td>
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<td>Louis V. F. Mfg &amp; Supply</td>
<td>3601 Woodale Ave Minneapolis Minn</td>
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<td>Loug-B-Pak Co</td>
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<td>Lowe Bros</td>
<td>421 E Third St Dayton 2 Ohio</td>
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<td>Lowdor Systems Inc</td>
<td>Great &amp; High St Monticello IL</td>
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<td>Lock &amp; Smith Co</td>
<td>PO Box 513 Columbia SC</td>
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<tr>
<td>Lucas John &amp; Co Inc</td>
<td>1617 Penn Blvd Philadelphia 3 Pa</td>
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<tr>
<td>Lucke William-B Inc</td>
<td>Inc 814 Railroad Ave E Wilmette IL</td>
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<td>Ludlow Papers Inc</td>
<td>145 Rosemary St Needham Heights 94 Mass</td>
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<td>Ludman Corp</td>
<td>14100 Biscayne Blvd N Miami Flia</td>
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<td>Ludwig Mfg Co Inc</td>
<td>1405-16th St Racine Wine</td>
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<tr>
<td>Lufkin Rule Co</td>
<td>1730 Hess Ave Saginaw Mich</td>
</tr>
<tr>
<td>Lumina Co</td>
<td>315 Madison Ave New York 22 NY</td>
</tr>
<tr>
<td>Luminous Collings Inc</td>
<td>2701 N Ravens- wood Ave Chicago 13 Ill</td>
</tr>
<tr>
<td>Lumix Engineering Co</td>
<td>511 Ninth Ave New York 17 NY</td>
</tr>
<tr>
<td>Lustkat Inc</td>
<td>3225 Frankford Ave Philadelphia PA</td>
</tr>
<tr>
<td>Lustro Tile Mfg Inc</td>
<td>106 Home Ave Akron 10 OH</td>
</tr>
<tr>
<td>Lux Co Inc</td>
<td>315 W Franklin St Elkhart 4 Ind</td>
</tr>
<tr>
<td>Luxor Carpet Co</td>
<td>17 S Cherry St Akron 8 Ohio</td>
</tr>
<tr>
<td>Lyf-Alum Inc</td>
<td>930 Armour Rd Oconomowoc Wisc</td>
</tr>
<tr>
<td>Lynch Asbestos Co</td>
<td>2589 S Sunol Dr Los Angeles 12 Ca</td>
</tr>
<tr>
<td>Lyndale Engineering Works Inc</td>
<td>605 W Mitchell St Milwaukee 14 Wisc</td>
</tr>
<tr>
<td>Liquid-Level Co</td>
<td>Box 538 Redwood Dr Felton Cal</td>
</tr>
<tr>
<td>Littercraft Mfg Corp</td>
<td>545 Rodgers Dr Glendale 1 Cal</td>
</tr>
<tr>
<td>Littihart Co</td>
<td>346 W 14 St Holland Mich</td>
</tr>
<tr>
<td>Little Giant Products Inc</td>
<td>1530 NE Adams St Peoria 3 Ill</td>
</tr>
<tr>
<td>Little H L Baker Co</td>
<td>PO Box 60 San Rafael Cal</td>
</tr>
<tr>
<td>Lock-Joint Window Co</td>
<td>817 NW 61st St Kansas City 14 Mo</td>
</tr>
<tr>
<td>Locke Mfg Co</td>
<td>2820 S Linden Ohio</td>
</tr>
<tr>
<td>Locke Stove Co</td>
<td>114 W 11 St Kansas City 2 Mo</td>
</tr>
<tr>
<td>Lockhart Mfg Corp</td>
<td>6530 E Davison Ave Detroit 12 Mich</td>
</tr>
<tr>
<td>Lockhart Mfg &amp; Supply Co</td>
<td>6560 S Central Ave Chicago 38 Il</td>
</tr>
<tr>
<td>Lockey Co PO Box J</td>
<td>Southhampton NY</td>
</tr>
<tr>
<td>Lockwood Hardware Mfg Co</td>
<td>1906 Cleg- horn St Fitchburg Hill Park</td>
</tr>
<tr>
<td>Logan Clay Prods Co</td>
<td>688 Logan Ohio</td>
</tr>
<tr>
<td>Logan Co</td>
<td>201 Cabel St St Louisville 6 Ky</td>
</tr>
<tr>
<td>Logan Concrete Mfg Co</td>
<td>6600 S Central Ave Chicago 38 II</td>
</tr>
<tr>
<td>Lane Star Cement Corp</td>
<td>100 Park Ave New York 19 NY</td>
</tr>
<tr>
<td>Longview Lime Corp Sub of Woodward Iron Co Woodward Ala</td>
<td></td>
</tr>
</tbody>
</table>

| Manhattan Terrazzo Brass Strip PO Box | 187 Norwalk Conn  |
| Manhattan Equip Works Manhattan Mfg Corp | 1572 E Main St Muncie IN |
| Manning Maxwell & Moore Inc Shaw Box Crane & Heist Div W Broadway 7 Mackonchough Mich |
| Mansfield Sanitary Inc Perryville Ohio |                         |
| Marchant Div Smith-Corona Marchant Inc | 6701 San Pablo Ave Oakland 8 Cal |
| Marietta Paint & Color Co Acme Sts Marietta Ohio |
| Markel Electric Products Inc 151 Seneca St Buffalo NY |
| Markwell Mfg Co Inc 200 Hudson St New York |
| Martin Pool Equip Co 14600 Armitage Van Nuys Cal  |
| Martin Timber Corp Winchester Ore |
| Marlow Pumps Div Bell & Gossett PO Box 290 Midland Park NJ |
| Marmet Corp PO Box 290 Wausau Wisc  |
| Marston-Harrington Co Inc 1545 W Washington Indianapolis 7 Ind  |
| Maruna Mill Co Darrington Wash |
| Marty Builders Mfg Co 20 N Wacker Dr Chicago 6 II |
| Marsch Furniture Co High Point NC  |
| Marsh Lamp Co Box Dover Ohio  |
| Marsh Wall Products Inc 403 Main St Dover Ohio  |
| Martin Bros Corp & Timber Pros Corp PO Box 698 Oakland Ore  |
| Martin-Senour Co 2500 S Senour Ave Chicago 3 Il  |
| Marvan Corp PO Box 219 W Hartford Conn  |
| Marvel Equipment Co 1803 Bowen St Oskosh Wisc  |
| Marvel Metal Products Co 2423 W 42 St Chicago 33 II  |
| Marvin Mfg Co 3171 E 12 St Los Angeles 22 Ca  |
| Masland C H & Sons Carlisle Pa  |
| Masland Duraleather Co Amber & Wil- lard St Philadelphia Pa  |
| Mason City Brick & Tile 290 Brick & Tile Bigson Mason City Iowa  |
| Masoneil Corp 111 W Washington Chicago 2 Il  |
| Masonry Waterproofing Co Inc Box 501 Herndon Va  |
| Massey-Ferguson Industrial Div 1009 S 12 St Wisc 6 Cal  |
| Master Builders Co 7016 East Ave Cleveland 3 Ohio  |
| Master Hung Door Equip Co Frank- lin Apt 26 Bldg Potomac 4 1 Wisc |
| Master Lock Co 2600 N 32 St Milwaukee 13 Wis  |
| Master Mechanic Mfg Co PO Box 389 
Burlington Wisc  |
| Master Metal Strip Service Inc 1720 N Kilbourn Ave Chicago 39 Ill |
| Master Vibrator Co 1722 Stanley Ave Dayton 9 Ohio  |
| Master Woodworker Mfg Co Inc 491-111 E Front St Detroit 26 Mich  |
| Mastic Tile Div Rubberoid Co PO Box 128 
Vaila Gate NY  |
| Mastro Plastics Corp 3640 Webster Ave Bronx NY  |
| Mathes Co Div Glen Alden Corp 1925 E Broadway Ft Worth Tex  |
| Mathews Conveyor Co 190 Tenth St El- wood City Pa  |
| Massing Mfg Co 194 N 4th St Sheboy- gan 11 16 1 Wisc |
| Matthews Mfg Co 194 N 4th St Sheboy- gan 11 16 1 Wisc |
| Mattson Machine Works 545 Blackhawk Park Rockford Ill  |
| May & R & Sons Level Mfg Co 399 Gold- engate Detroit 3 Mich  |
| Mayrberger Air-Conditioners Inc E Sev- enth St at Duluth 2 Paul 6 Minn  |
| Mayhew Steel Products Inc 109 S Searst Philadelphia 9 Mass  |
| Mayhew Steel Products Inc 109 S Searst Philadelphia 9 Mass  |
| McCabery Power Body Co 5900 N Broad- way St Louis 15 Mo  |
Building products and equipment are presented here, alphabetically. The manufacturers who make them are listed under each product heading. For complete address of any manufacturer, turn to Section 2.

**Abrasive Paper & Cloth**
- Abrasive Products Inc
- Bay State Abrasive Products Co
- Behr-Manning Co
- Carboumdum Co
- DeWalt Div AMF
- Merit Products Inc
- Minnesota Mining & Mfg Co
- Pittsburgh Plate Glass Co
- Thor Power Tool Co

**Access Doors**
(See Doors, Access)

**Acoustical Ceilings, Grid Systems For**
- Cupples Products Corp

**Acoustical Materials**
(See also Plaster, Acoustical)
- Armstrong Cork Co
- Baldwin-Khet-Hill Inc
- Bestwall Gypsum Co
- Celotex Corp
- Cenex of Arizona
- Cupples Products Corp
- Curtiss Wright Corp Curon Div
- E G Building Fasteners Corp
- Eastern Machine Products Co
- Erle Perforating Co Inc
- Goodrich B F Co Floor Products
- Gustin-Bacn Mfg Co
- Henry W W Co
- Insullite Div Minn & Ontario Paper Co
- John-Manville Corp
- Kaiser Gypsum Co Inc
- Keenby & Mathison Co
- Lockport Mills Inc
- Mastro Plastics Corp
- National Aluminum Co
- National Gypsum Co
- Owens-Corning Fiberglas Corp
- Pioneer Div Flintkote Co
- Reynolds Aluminum Supply Co
- Reynolds Metals Co
- Ridgidized Metals Corp
- Simpson Logging Co
- Taylor Bedding Mfg Co Inc-Colton Div
- Tectum Corp
- Texas Vermiculite Co
- Tiger Brands Div Basic Inc
- United States Gypsum Co
- U S Mineral Wool Co
- Wood Conversion Co
- Zonolite Co

**Adhesives**
- Abestos Manufacturing Co
- Acton Plywood & Veneer Co
- AFMO Corp
- Allied Chemical Corp Barrett Div
- Ambroid Co
- American Billite Rubber Co
- American Bitumuls & Asphalt Co
- American Sta-Dri Co
- Armstrong Cork Co
- Asphalt Corp of America
- Azrock Floor Products Div
- Barclay Mfg Co Inc
- Bird & Son Inc
- Bonafide Mills Inc
- Borden Chemical Co Div Borden Co
- Bruce B L Co
- Cabot Samuel Inc
- Cambridge Tile Mfg Co
- Camp Co Inc
- Carey Phillips Mfg Co
- Congoleum-Nairn Inc
- Consoweld Corp
- Crown Tile Corp
- Dad & Lad Co
- Dano Co Inc
- Devices Div of Miracle Adhesives Corp
- Dodge Cork Co Inc
- Doypac de Nemours & Co Inc E1
- Elastizell Corp of America
- Fiberboard Paper Products Inc
- Findley F G Co
- Flexrock Co
- Flintkote Co
- Formica Corp
- Fuller H B Co
- Gen Tire & Rub Co Bldg Materials Div
- Goodrich B F Co Flooring Products
- Goodrich B F Industrial Products Co
- Hackmeister, Inc
- Harbor Plywood Corp
- Hayes Adhesives Co Inc
- Henry W W Co
- Higgins Industries Inc
- Insullite Div Minn & Ontario Paper Co
- John-Manville Corp
- Kaiser Mfg Inc
- Kentile Inc
- Kochton Plywood & Veneer Co Inc
- Koppers Co Inc
- LePage's Inc
- Loctite Systems Inc
- Lux Co Inc
- Madison Glue Corp
- Marsh Wall Products Inc
- Marvan Corp
- Mastic Tile Div Ruberoid Co
- Midcontinent Adhesive Co
- Midwest Plywood Co
- Milwaukee Plywood Co
- Minnesota Mining & Mfg Co
- Miracle Adhesives Corp
- Miraplas Tile Co
- Monsanto Chemical Co Plastics Div
- Moore Goodloe E Inc
- Mortell J W Co
- National Casein Co
- Nicholas & Co
- Pemco Inc
- Pioneer Div Flintkote Co
- Pittsburgh Plate Glass Co
- Plastic Products Co
- Plymouth Co
- Prestige Mfg Co
- Riddick Plywood Corp
- Ruberoid Co
- St Regis Paper Co Panelite Div
- Schalk Chemical Co
- Selk Walter E & Co
- Sheffield Bronze Paint Corp
- Silverstone Products Inc
- Sonnenborn L Sons Inc
- Standard Paste & Glue Co Inc
- Stay-Tile Products Co
- Steelcase Manufacturing Co
- Structural Prods Div Natl Starch & Chem
- Tama Industries Co
- Tex A Panel Mfg Co
- Thomas Moulding Floor Co Inc
- Tilmat Co
- Tufelite Co Inc
- United States Gypsum Co
- United States Plywood Corp
- United States Rubber Co
- United Wallpaper Co
- Wallace Mfg Co
- Wasco Products Inc
- Wright Mastic Tile Div Ruberoid Co
- Wurdek Chemical Co
- X-Pando Corp

**Aggregates For Roofing**
(See Roofing, Aggregates For)

**Aggregates, Lightweight**
- Carter-Waters Corp
- Dodeon Mfg Co Inc
- Graybeal C R & Sons
- Great Lakes Carbon Corp Perilite Dept
- John-Manville Corp
- Norton Co
- Texas Vermiculite Co
- Tiger Brands Div Basic Inc
- Vermiculite-Northwest Inc
- Waylite Co
- Zonolite Co

**Air Cleaners**
(See also Dehumidifiers)
- American Air Filter Co
- Ductless Hood Co Inc
- General Cable Corp
### Air Compressors
- C & H Electric Machine Co
- Carrier Corp
- Chicago Pneumatic Tool Co
- Dayton Electric Mfg Co
- Devilbiss Co
- Garrett-Devco Co
- George F C Machine Co
- Ingersoll-Rand Co
- Jaeger Machine Co
- Le Roi Div Westinghouse Air Brake Co
- Lüthi & Co
- Master Mechanic Mfg Co
- Pittsburgh Plate Glass Co
- Thomas Ind Inc Electric Sprayit Div
- United States Air Compressor Co

### Air Conditioners, Baseboard
- Barkow Aug G Mfg Co Inc
- Premier Furnace Co
- United States Register Co
- Woodside Engineering Co

### Air Conditioners, Central Systems
- Acme Industries Inc
- Airetemp Div Chrysler Corp
- Amana Refrigeration Inc
- American Furnace Co
- American Radiator & Standard Sanitary
- American Standard Air Conditioning Div
- American Standard American Blower Div
- Amer-Standard Plumbing & Heating Div
- Arka Air Conditioning Corp
- Armstrong Furn Co Div Natl U & E
- Bar-Brook Mfg Co
- Barlow G Mfg Co Inc
- Bryant Manufacturing Co
- Buffalo Forge Co
- Burnham Boiler Corp
- Burnham Corp
- Carrier Corp
- Chattanooga Royal Co
- Claygo Fan Co
- Coleman Co Inc
- Comfort Products Inc
- Coolerator McGraw-Edison
- Crane Co
- Day & Night Mfg Co
- Delco Dallas Div General Motors
- Dowagiac Steel Furnace Co
- Drayton-Hanson Div Natl U S Rad Corp
- Dunham-Bush Inc
- Embassy Steel Products Inc
- Gaffers & Sattler
- General Air Conditioning Corp
- General Automatic Products Corp
- General Electric Co Air Conditioning Dept
- Gen Elec Co Appliance & Television Div
- Gilbert & Barker Mfg Co
- Great Northern Mfg Corp
- Halstead & Mitchell
- Heil Quaker Corp
- Henry Furnace Co
- Holly-General Co Div Siegler Corp
- Jantral Heating & Air Conditioning Div
- Johnson S T Co
- Lennox Industries Inc
- Majestic Co Inc
- Master Mechanic Mfg Co
- Mathis Co Div Glen Alden Corp
- Mayflower Air-Conditioners Inc

### Air Conditioners, Room Units
- Admiral Corp
- Airetemp Div Chrysler Corp
- Amana Refrigeration Inc
- American Coils Co
- American Radiator & Standard Sanitary
- Barkow Aug G Mfg Co Inc
- Brown Prods Co
- Burnham Corp
- Carrier Corp
- Coolerator McGraw-Edison
- Deale Appliance Div General Motors
- Drayton-Hanson Div Natl U S Rad Corp
- Emerson Electric Mfg Co
- Emerson Electric Corp
- Frigidaire Div General Motors Corp
- Gen Elec Co Appliance & Television Div
- Gibson Refrigerator Co Div Hupp Corp
- Hotpoint Div
- Kelvinator Div American Motors Co
- King Refrigerator Corp
- Kriter Radiant Coils Inc
- Mathis Co Div Glen Alden Corp
- McQuay Inc
- Met-Cro Specialties Co Inc

### Air Conditioning Controls
(See Controls, Heating & Air Conditioning)

### Air-Supported Buildings

### Aluminum Pipe
(See Pipe & Tubing, Aluminum)

### Aluminum Roofing
(See Roofing & Siding, Aluminum)

### Aluminum Windows
(See Windows & Doors, Combination)

### Anchors, Building
- Adams Co
- Akron Products Co
- Aro Expansion Bolt Co
- Baumgartner Gate Factory
- Bulldog Div Gregory Industries Inc
- Chicago Expansion Bolt Co
- Cleveland Steel Specialty Co
- Conver Steel & Wire Co
- Copperweld Steel Co Wire & Cable Div
- Dayton Sure-Grip & Shore Co
- Diamond Expansion Bolt Co Inc
- Donley Brothers Co
- Flash Bridge Co

### Flash Framing Anchors

**Flash Framing Anchors**

"Center of Construction Strength"

Manufactured by

FLASH BRIDGE CO., HOLLAND, MICH.

Hawkeye Sales Co
Holub Industries Inc
Ideal Hanger Co
Jordan Industries
Kees F D Mfg Co

### TIMBERLOCK FRAMING ANCHORS

... offer greatest flexibility plus extra strength factors in construction. Precision manufactured of 18 gauge galvanized steel; measure 4½" in length.

Manufactured by

TIMBERLOCK FRAMING ANCHORS

Laclede Steel Co
Larsen Mfg Co
Merwin Mfg Co
Met-Cro Specialties Co Inc
Base, Mold Metal
(See Moldings, Metal)

Base, Plastic
(See Moldings, Plastic)

Base, Rubber
(See Moldings, Rubber)

Bathroom Accessories
(See also Vanities, Lavaratory)

Air Control Products Inc
American Olean Tile Co
Benin Mfg Co
Borg-Warner Corp Ingersoll-Rand Co
Bridgeport Brass Co
Carey Mfg Corp
Carthage Marble Corp
Cole Prods Corp
Columbus Plastic Prods Inc
Cranes Co
Cutler Metal Prods Co
Ekco Products Co Ekco-Autoyre Div
General Bathrooms Prod Corp
General Chrome Inc
Gilvasse Inc
Great Northern Mfg Corp
Grote Mfg Co
Hall-Mack Inc
Handy Things Mfg Co
Holleander Manufacturing Co
Hoover Bathroom Accessories
Imatron Products Co
Kenettrack Corp Sub Ekco Prods
Ketcham G M Mfg Corp
Kitchen Maid Co
Knape & Vogt Mfg Co
Kohler Co

KOHLER
Lavatories for building-in

THE TAHOE
THE ARROWHEAD
THE RADIANT
KOHLER of KOHLER
Kohler Co., Kohler, Wis.

BATHROOM ACCESSORIES

Kraus Walter S Co
Lawson F H Co
Lehman Spraggsdield Co
Lehon Co
Miami Cabinet Div Philip Carey Mfg
Mirraplas Tile Co
Mirro Chrome Co Inc
Moser Ceramic Tile
Morgan-Wightman Co

Base, Mold Metal
(See Moldings, Metal)

Base, Plastic
(See Moldings, Plastic)

Base, Rubber
(See Moldings, Rubber)

Bathroom Accessories
(See also Vanities, Lavaratory)

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(See Moldings, Metal)

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(See Moldings, Metal)

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(See also Vanities, Lavaratory)

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Kohler Co., Kohler, Wis.

BATHROOM ACCESSORIES

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Lawson F H Co
Lehman Spraggsdield Co
Lehon Co
Miami Cabinet Div Philip Carey Mfg
Mirraplas Tile Co
Mirro Chrome Co Inc
Moser Ceramic Tile
Morgan-Wightman Co
Blackboards & Chalkboards
Benjamin Electric Co
Ingram-Richardson Mfg Co
United States Plywood Corp

Blades, Saw, Circular
Deluxe Saw & Tool Co
Milwaukee Elec Tool Corp
Parker Mfg Co
Producers & Distributors Inc
Remington Arms Co Inc
Rocco Prods Inc
Rockwell Mfg Delta Power Tool Div
Skil Corp
Speedway Mfg Div Thor Power Tool Co

Blades, Saw, Masonry
Bay State Abrasive Products Co
Black & Decker Mfg Co
Carborundum Co
Clipper Mfg Co
Columbia Brick Works
DeWalt Div AMF
Eveready Brik Saw Co
General Engine Co Inc
Goldblatt Tool Co
Milwaukee Elec Tool Corp
Norton Co
Remington Arms Co Inc
Simonds Abrasive Co
Speedway Mfg Div Thor Power Tool Co
Stone Machinery Co
Thor Power Tool Co
Victor Inc

Blocks, Glass
(See Glass Blocks)

Boards, Insulating
(See Insulating Board)

Boilers, Steam & Hot Water
(See Heating Systems, Hot Water & Steam)

Bonding Agents, Plaster & Concrete
Abesto Mfg Co
Allied Chemical Corp Barrett Div
Allied Compositions Co Inc
Anti Hydro waterproofing Co
Bestwall Gypsum Co
Camp Co Inc
Ceresit Waterproofing Corp
Dewey & Almy Chem Div W R Grace Co
Goldblatt Tool Co
Kaiser Mfg Inc
Kay-Tile Co
Larsen Products Corp
Maguire Walter Co Inc
National Gypsum Co
Nu-Wall Mfg Co
Ohio Lime Co
Penn Crete Prods Co
Permagle Corp of America

Standard Dry Wall Products Inc
Steelrite Manufacturing Co
Sullivan Co The
Tampa Industries Co
Tufcote Co Inc
United States Gypsum Co
Wurdeck Chemical Co

Books, Building & Plan
(See Plans, Services & Books)

Booster Pumps, Heating
(See Pumps, Booster)

Brass Pipe
(See Pipe & Tubing, Brass)

Breakfast Nooks
(See Nooks, Dining)

Brick, Common & Face
Acme Brick Co
Acme Shale Brick Co Inc
Belden Brick Co
Black Hills Clay Products Co
Bowerton Shale Co
Brookhaven Pressed Brick Mfg Co
Builders Brick Co
Charleston Clay Products Co
Cherokee Brick & Tile Co
Chicago Fire Brick Co
Clay City Pipe Co
Columbia Brick Works
Elgin-Standard Brick Mfg Co
Evans Brick Co
General Clay Products Co
Hanley Co
Harrisville Brick Co
Hattiesburg Brick Works
Hope Brick Works
Humboldt Brick & Tile Co
Illinois Brick Co
 Interstate Brick Co
Jenkins Brick Co
Kendrick Brick & Tile Co
Mason City Brick & Tile
Metropolitan Brick Inc
Midland Brick & Tile Co
Moorhead Brick & Tile Co
Natio Corp
Paxton Brick Co
Peoria Brick & Tile Co
Robinson Clay Products Co
Rockford Brick & Tile Co
Sacramento Brick Co
Sheridan Pressed Brick & Tile Co
Standard Brick & Tile Corp
Stone Creek Brick Co
Summit Pressed Brick & Tile Co
Summitville Tiles Inc
Texas Brick Co
United Brick & Tile Co
Watertown Brick Co
West Virginia Brick Co
Williamson Clay Products Co
Yankee Hill Brick Mfg Co

Brick, Fire
Acme Brick Co
Armstrong Cork Co
Builders Brick Co
Chicago Fire Brick Co
Columbia Brick Works
Elgin-Standard Brick Mfg Co
Evans Brick Co
Green A P Fire Brick Co
Johns-Manville Corp
Robinson Clay Products Co
Brick Paint
(See Paints & Coatings, Concrete, Brick, Stucco)

Brick, SCR
Acme Brick Co
Acme Shale Brick Co Inc
Black Hills Clay Products Co
Builders Brick Co
Cherokee Brick & Tile Co
Chicago Fire Brick Co
Elgin-Standard Brick Mfg Co
Humboldt Brick & Tile Co
Interstate Brick Co
Kendrick Brick & Tile Co
Metropolitan Brick Inc
Metro Corp
Peoria Brick & Tile Co
Rockford Brick & Tile Co
Summit Pressed Brick & Tile Co
United Brick & Tile Co

Bridging, Steel
(See Steel, Structural)

Buckets, Clamshell
Koehring Co
Ottawa Steel Div Young Sprg & Wire
Schielt Bantam Co

Buckets, Concrete
Bil-Jax Inc
Fortex Industries Inc
Gar-Bro Mfg Co
Koehring Co
Massey-Ferguson Industrial Div
Ottawa Steel Div Young Sprg & Wire
Reeves Steel & Mfg Co Div
Schielt Bantam Co
United States Steel Prods Div U S Steel
Wheeling Corrugating Co

Building Paper
(See Paper, Building)

Building Stone
Briar Hill Stone Co
Empire Stone Co
Finger Lakes Stone Co Inc
Fond Du Lac Stone Co Inc
Indiana Limestone Co Inc

Buildings, Air-Supported
(See Air-Supported Buildings)

Buildings, Metal
Armco Drainage & Metal Products
Belson Mfg Co
Bentonheim Steel Co
Butler Mfg Co
Ceco Steel Prods Corp
Childers Mfg Co
Cuckler Steel Span Co
Inland Steel Products Co
International Steel Co
Luria Engineering Co
Macomber Inc
Menkem George L Steel Corp
Michel & Pfeffer Iron Works Inc
Nuside Metal Products Inc
Prefabricated Prods Co Inc
Republic Steel Corp
Republic Steel Corp Tuscon Div
Reynolds Aluminum Supply Co

Cabinet Hardware
(See Hardware, Cabinet)

Cabinets, Bookcase & Locker, Steel
Alan Wood Steel Co Penco Div
Lyon Metal Products Inc

Cabinets, Kitchen
(See Kitchen Cabinets, Metal or Wood)

Cabinets, Medicine & Bathroom

DODGE REPORTS
HELP CONTRACTORS GET MORE BUSINESS IN NEW CONSTRUCTION

Egy Register Co
Ideal System Co
International Business Machines Corp
Momar Industries
Moore Business Forms Inc
National Cash Register Co
Remington Rand Div Sperry Rand
Standard Register Co
Sunroc Corp
Tedrick Bros Mfg Co Inc
Victor Adding Machine Co

DODGE CORPORATION
Construction News Division
110 W. 40th St., New York 18, N.Y.

Cables, Heating
General Electric Co Const Materials

Calcium Chloride
(See Concrete, Calcium Chloride For)

Canvas, Canvas Products
Berg F O Co
Cabot Samuel Inc
Columbus Coated Fabrics Corp
Fulton Cotton Mills
Goss J C Co
Housey Tarpullin & Canvas Goods Co
Industrial Canvas Prods Corp
Reynolds Aluminum Supply Co
Standard Coated Prods Inc
Troy Sunshade Co
Tucker Duck & Rubber Co
Werner Canvas Prods Co

Carpentry
American Billrite Rubber Co
Armstrong Cork Co

Turn to Section 2—Manufacturers Directory for all addresses
### Carports, Prefabricated
- Aceo Aluminum Products
- Bridgeport Brac Co
- Children Mfg Co
- Joes Shutter Products
- Orchard Bros Inc Alumaroll Products Co
- Panelite Products Inc
- Pennsylvania Wire Glass Co
- Prefabricated Prods Co Inc
- Security Aluminum Co

### Casing, Metal
(See also Lath, Metal or Moldings, Metal)
- Alabama Metal Lath Co Inc
- Bestwall Gypsum Co
- Bostwick Steel Lath Co
- Casings Inc & Drywall Trim Div
- Ceco Steel Prods Corp
- Croft Metal Products Inc
- Inland Steel Products Co
- Mirasite Tile Co
- National Gypsum Co
- Penn Metal Co Inc
- Republic Steel Corp Truscon Div
- Russell F C Co
- Soule Steel Co
- Tennessee Bros Inc
- Vento Steel Products Co

### Cast Iron Pipe
(See Pipe, Cast Iron)

### Caulking & Glazing Compounds
- Abasto Mfg Co
- All-Metal Weatherstrip Co
- Allied Chemical Corp Barrett Div
- Alside Inc
- American Asbestos Product Co
- Anti Hydro Waterproofing Co
- Arco Co
- Asphalt Corp of America
- Baltz Robert N & Co Inc
- Barclay Mfg Co Inc
- Biddle Co
- Calbar Paint & Varnish Co
- Carey Philip Mfg Co
- Ceresit Waterproofing Corp
- Certain-Teed Sales Corp
- Chamberlin Co of America
- Dad & Lad Co
- Devoe & Raynolds Co Inc
- Dicks Armstrong Pontius Inc
- Division Lead Co
- Douglas & Sturgess
- Finkotke Co
- Forrest Div Spray-O-Bond Co
- Glidden Co
- Henry W W Co
- Horn A C Companies Div Sun Chem Corp
- Johns-Manville Corp
- Lastik Paint Inc
- Lawrence W W & Co
- Lucas John & Co Inc
- Macklanburg-Duncan Co
- Marsh Wall Products Inc
- Martin-Scour Co
- McGuire Co
- Meadows W H Inc
- Minwax Co Inc
- Miracle Adhesives Corp
- Monroe Co Inc
- Mortelle J Inc
- National Mfg Corp
- Parker Irr & Sons
- Parr Paint & Color Co
- Pecora Inc
- Pemko Mfg Co
- Pioneer Div Finkotke Co
- Pittsburgh Plate Glass Co
- Plastic Products Co
- Prestige Div American-Marietta Co
- Quartz Mosaic Inc
- Quigley Co Inc
- Ranette Mfg Co
- Ruberoid Co
- Rutland Fire Clay Co
- Sager Weatherstrip & Caulking
- Schalk Chemical Co
- Seal Rite Caulking Co
- Sherwin-Williams Co
- Silka Chemical Corp
- Smooth-on Mfg Co
- Sonneborn L Sons Inc
- Stay-Tile Products Co
- Steelcase Manufacturing Co
- Sterling Quality Products Inc
- Sullivan Co The
- Tamco Industries Co
- Toch Bros
- Tremco Mfg Co
- Truscon Labs Inc
- United Gypsum Laboratories
- United States Gypsum Co
- Wilbor & Williams Co
- X-Pando Corp

### Ceiling Jacks
(See Jacks, Ceiling)

### Ceiling Tile, Acoustical
(See Plaster, Acoustical)

### Ceilings, Suspended
(See Lath, Metal)

### Cellar Doors
(See Doors, Cellar, Bulkhead, Metal)

### Cement, Keenes
- Bestwall Gypsum Co
- Celotex Corp
- Finkotke Co
- National Gypsum Co
- Ohio Lime Co
- United States Gypsum Co

### Cement, Masonry
- Alpha Portland Cement Co
- Arkansas Cement Corp
- Ash Grove Lime & Portland Cement Co
- Chicago Fire Brick Co
- Cordus G W H Inc
- Dacso Co Inc
- Dewey Portland Cement Co
- Finkotke Co
- General Portland Cement Co
- Ideal Cement Co
- Knoxe Portland Cement Co
- Lehigh Portland Cement Co
- Lone Star Cement Corp
- Louis媽 Portland Cement Co
- Marquette Cement Mfg Co
- Medusa Portland Cement Co
- Penn-Dixie Cement Corp
- Permanent Cement Co
- Pittsburgh Plate Glass Co
- Sonneborn L Sons Inc
- Union Atlas Cement Div US Steel Corp

### Cement, Roofing
- Abasto Manufacturing Co
- Allied Chemical Corp Barrett Div
- American Asbestos Product Co
- Bird & Son Ine
- Borden Chemical Co Div Borden Co
- Carey Philip Mfg Co
- Celotex Corp
- Certain-Teed Sales Corp
- Dad & Lad Co
- Devoe & Raynolds Co Inc
- Donley Brothers Co
- Flexrock Co
- Finkotke Co
- Fry Lloyd A Roofing Co
- Henry W W Co
- Horn A C Companies Div Sun Chem Corp
- Johns-Manville Corp
- Koppers Co Inc
- Lastik Paint Inc
- Lebon Co
- Logan-Long Co
- National Mfg Corp
- Pecora Inc
- Pittsburgh Plate Glass Co
- Prestige Div American-Marietta Co
- Ruberoid Co
- Rutland Fire Clay Co
- Sonneborn L Sons Inc
- Sullivan Co The
- Surface Protection Co Inc
- United Gypsum Laboratories
- United States Gypsum Co

### Cement, Tile, Mastic Type
- Alloy Tile Corp
- American Bitulite Rubber Co
- American Bitumuls & Asphalt Co
- Armstrong Cork Co
- Azrock Floor Prods Div Uvalde Rock
- Barclay Mfg Co Inc
- Bonafide Mills Inc
- Borden Chemical Co Div Borden Co
- Camp Co Inc
- Crown Tile Corp
- Dacso Co Inc
- Douglas & Sturgess
- Finkotke Co
Circulators, Hot Water Heating Systems (See Pumps, Booster)

Cleaners, Masonry
Goldblatt Tool Co

Cleaners, Vacuum Central Systems
Atlas Floor Surfacing Machinery Corp
H-P Products Inc
Holt Mfg Co
Kent Co Inc

Clips, Concrete
Goldsmith Metal Lath Co
Peterson Prods Co
Sonnier Metalcraft Corp

Clips, Furring
Cleveland Steel Specialty Co
Copperweld Steel Co Wire & Cable Div
Dayton Sure-Grip & Shore Co
Moore Goodloe E Inc
National Gypsum Co
Penn Metal Co Inc
Peterson Prods Co
United States Gypsum Co

Clips, Plaster, Spring (See Lath, Metal & Accessories)

Clips, Roofing Shingles
Seal-All Clip Co

Clips, Wallboard & Ceiling Tile (See Wallboard)

Clocks, Built-In
Miller Howard Clock Co
Minneapolis Honeywell Regulator
R & H Guaranteed Prods Co
Swanson Mfg Co
Wisconsin Clock Co Inc

Closet Accessories
Aeone Appliance Mfg Co Aeone Bidra
Air Control Prods Inc
American Steel Door Co
Atkinson Mfg Co
Brown George C & Co Inc
Carondeo Inc
Ekco Prods Co Ekco-Autoyre Div
Gerber Plumbing Fixtures Corp
Grant Pulley & Hardware Corp
Home Comfort Co
Kees F D Mfg Co

KEES DUAL PURPOSE ROD & SHELF BRACKETS
F. D. KEES MFG. CO.
Box 762
Beatrice, Nebraska

Kennatrack Corp Sub Ekco Prods
Knape & Vogt Mfg Co
Lawrence Brothers Inc

Leigh Building Products Div
Macklanburg-Duncan Co
Masonite Corp
Mirro Chrome Co Inc
Peerless-Wood Products
Russell & Erwin Div Am Hdw Co
Stanley Works
United Steel Products Co

Closet Lining, Cedar (See Cedar Lining, Closets)

Closets, Prefabricated
Caradeo Inc
Evergreen States Forest Products
Mengel Co
Pedrick Bros Mfg Co Inc
Western Pine Mfg Co

Coatings, Concrete Floor (See Paints & Coatings, Concrete, Brick, Stucco)

Coatings, Concrete Forms
National Mfg Corp
Re-Nu-It Corp
Sherwin-Williams Co
Sonnenborn L Sons Inc
Sullivan Co The
Tufcrete Co Inc
Wood Treating Chemicals Co

Coatings, Roof, Aluminum & Asphalt (See Paints & Coatings, Roof)

Coatings, Wood Treatment (See Paints & Coatings, Wood Treatment)

Color Consultants
Barreled Sunlight Paint Co
Minnesota Paints Inc
Pittsburgh Plate Glass Co
Sherwin-Williams Co
West Beatrice Color Inc

Colors, Concrete & Plaster
Ceresit Waterproofing Corp
Chicago Bronze & Color Works
Colorcrete Industries Inc
Flexrock Co
Hachmeister-Inc
Horn A C Companies Div Sun Chem Corp
Interstate Brick Co
Landers Segal Color Co
Master Builders Co
Quartz Mosaic Inc
Rockcote Paint Co
Smith J Lee & Co Inc
Sonnenborn L Sons Inc
Sullivan Co The
Tama Industries Co
Toch Bros
Truscum Labs Inc
Vitro Mfg Co Div Vitro Corp of America

Columns, Metal (See Steel, Structural; also See Railings & Columns)

Compactors
Maginniss Power Tool Co
Master Vibrator Co

Turn to Section 2—Manufacturers Directory for all addresses
<table>
<thead>
<tr>
<th><strong>Compounds, Anti-Freeze, Concrete</strong></th>
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<tbody>
<tr>
<td>Anti Hydro Waterproofing Co</td>
</tr>
<tr>
<td>Ceresit Waterproofing Corp</td>
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<td>Easibond Corp of America</td>
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<tr>
<td>Finkrow Co</td>
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<tr>
<td>Horn A C Companies Div Sun Chem Corp</td>
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<tr>
<td>Master Builders Co</td>
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<tr>
<td>Ranetite Mfg Co</td>
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<tr>
<td>Sika Chemical Corp</td>
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<tr>
<td>Sonneborn L Sons Inc</td>
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<tr>
<td>Sullivan Co The</td>
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<tr>
<td>Super Concrete Emulsions</td>
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<td>Toch Bros</td>
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<thead>
<tr>
<th><strong>Compounds, Anti-Termite</strong></th>
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<tbody>
<tr>
<td>(See Termite Shields)</td>
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<thead>
<tr>
<th><strong>Compounds, Concrete</strong></th>
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<tbody>
<tr>
<td>(See Concrete Hardeners &amp; Sealers)</td>
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<thead>
<tr>
<th><strong>Concrete Admixtures</strong></th>
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<tbody>
<tr>
<td>Dewey &amp; Almy Chemical Div</td>
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<thead>
<tr>
<th><strong>Concrete Beams</strong></th>
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<tbody>
<tr>
<td>(See Beams, Concrete)</td>
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<table>
<thead>
<tr>
<th><strong>Concrete Block Machines</strong></th>
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<tbody>
<tr>
<td>Besser Co</td>
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<tr>
<td>Brikcrete Associates Inc</td>
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<tr>
<td>Dunn W E Co</td>
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<td>Lithibar Co</td>
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<thead>
<tr>
<th><strong>Concrete Blocks</strong></th>
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<tbody>
<tr>
<td>General Concrete Products Inc</td>
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<tr>
<td>O'Kelly-Eccles Co</td>
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<tr>
<td>West Allis Concrete Prods Co</td>
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<thead>
<tr>
<th><strong>Concrete, Calcium Chloride For</strong></th>
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<tbody>
<tr>
<td>Columbia Southern Chem Corp</td>
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<td>Solvay Process-Allied Chem Dye</td>
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<tr>
<td>Wyandotte Chemicals Corp</td>
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<thead>
<tr>
<th><strong>Concrete Finishing Machines &amp; Equipment</strong></th>
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<tbody>
<tr>
<td>Chain Belt Co</td>
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<tr>
<td>Champion Mfg Co</td>
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<tr>
<td>Dotmar Industries Inc</td>
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<tr>
<td>General Engines Co Inc</td>
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<tr>
<td>Goldblatt Tool Co</td>
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<tr>
<td>Kelley Machine Div Weimer-Rapp Co Inc</td>
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<tr>
<td>Koehring Co</td>
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<tr>
<td>Master Vibrator Co</td>
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<tr>
<td>Muller Machinery Co Inc</td>
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<tr>
<td>Remington Arms Co Inc</td>
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<tr>
<td>Speedway Mfg Div Thor Power Tool Co</td>
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<tr>
<td>Stow Mfg Co</td>
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<tr>
<td>Thor Power Tool Co</td>
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<tr>
<td>Whiteman Mfg Co</td>
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<th><strong>Concrete Form Liners</strong></th>
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<tbody>
<tr>
<td>Bethlehem Steel Co</td>
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<tr>
<td>Harbor Plywood Corp</td>
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<tr>
<td>Masonite Corp</td>
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<tr>
<td>St Paul &amp; Tacoma Lumber Co</td>
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<tr>
<td>Symonds Clamp and Mfg Co</td>
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<tr>
<td>United States Plywood Corp</td>
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<tr>
<td>Visking Co</td>
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<tr>
<td>Youngblood Lumber Co</td>
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<thead>
<tr>
<th><strong>Concrete Form Ties &amp; Accessories</strong></th>
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<tbody>
<tr>
<td>Cleveland Steel Specials</td>
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<tr>
<td>Conver Steel &amp; Wire Co</td>
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<tr>
<td>Dayton Sure-Grip &amp; Shore Co</td>
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<tr>
<td>Economy Forms</td>
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<tr>
<td>Form Co</td>
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<tr>
<td>Gates &amp; Sons Inc</td>
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<tr>
<td>Gerrard A J &amp; Co</td>
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<tr>
<td>Goldsmith Metal Lath Co</td>
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<td>Jeffery Form Tie Co</td>
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<thead>
<tr>
<th><strong>Concrete Forms</strong></th>
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<tbody>
<tr>
<td>NEED CONCRETE FORM SYSTEMS?</td>
</tr>
<tr>
<td>WRITE, WIRE OR CALL NOW!</td>
</tr>
<tr>
<td>Poerform Corporation</td>
</tr>
<tr>
<td>15 140 W 8 Mile Road, Detroit 33, Michigan</td>
</tr>
<tr>
<td>ALWAYS FORMS A BETTER WALL * Rocform System</td>
</tr>
<tr>
<td>DESIGNED, FIELD TESTED, PROVEN BY CONCRETE WALL MEN FOR THE INDUSTRY.</td>
</tr>
<tr>
<td>IMPORTANT! Rocform Systems can be used with equal ease for Commercial, Industrial or Residential work.</td>
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<tr>
<th><strong>Concrete Guns</strong></th>
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<tr>
<td>(See Guns, Pneumatic, Concrete Application)</td>
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<tr>
<th><strong>Concrete Hardeners &amp; Sealers</strong></th>
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<tr>
<td>Allied Compositions Co Inc</td>
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<tr>
<td>American Asbestos Product Co</td>
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<tr>
<td>Anti Hydro Waterproofing Co</td>
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<td>Camp Co Inc</td>
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<td>Carter-Waters Corp</td>
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<tr>
<td>Ceresit Waterproofing Corp</td>
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<tr>
<td>Cuddington E D Mfg Co</td>
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<tr>
<td>Colorcrete Industries Inc</td>
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<tr>
<td>Concrete Weld Co</td>
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<td>Dad &amp; Lad Co</td>
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<td>Devoe &amp; Raynolds Co Inc</td>
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<td>Dewey &amp; Almy Chemical Div</td>
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<tr>
<td>Evercrete Corp</td>
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<tr>
<td>Flexrock Co</td>
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<tr>
<td>Ferrers Div Spray-O-Bond Co</td>
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<td>Fulton Cotton Mills</td>
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<td>Horn A C Companies Div Sun Chem Corp</td>
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<td>Kay-Tite Co</td>
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<td>Koppers Co Inc Durethane Plant</td>
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<td>Kordite Corp</td>
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<tr>
<td>Larsen Products Corp</td>
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<tr>
<td>Maguire Walter Co Inc</td>
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<tr>
<td>Master Builders Co</td>
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<tr>
<td>Monroe Co Inc</td>
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<tr>
<td>Permiteco Inc</td>
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<tr>
<td>Ranetite Mfg Co</td>
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<tr>
<td>Reardon Co</td>
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<tr>
<td>Re-Nu-H Corp</td>
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<td>Rutland Fire Clay Co</td>
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<td>Seddon Co</td>
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<td>Serviseed Prods Corp</td>
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<tr>
<td>Sika Chemical Corp</td>
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<td>Sonneborn L Sons Inc</td>
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<tr>
<td>Standard Dry Wall Products Inc</td>
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<tr>
<td>Steelcote Manufacturing Co</td>
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<tr>
<td>Sullivan Co The</td>
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<td>Super Concrete Emulsions</td>
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<td>Surface Protection Co Inc</td>
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<td>Tamus Industries Co</td>
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<td>Tennant G H Co</td>
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<td>Thompson E A Co Inc</td>
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<td>Toch Bros</td>
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<tr>
<td>Truceon Labs Inc</td>
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<tr>
<td>Tufcrete Co Inc</td>
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<tr>
<td>Vila-Vac Corp</td>
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<tr>
<td>Wilbur &amp; Williams Co</td>
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<thead>
<tr>
<th><strong>Concrete Mixers, Mortar, Etc.</strong></th>
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<tr>
<td>Anchor Mfg Co</td>
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<td>Besser Co</td>
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<td>C H &amp; E Manufacturing Co</td>
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<td>Colorcrete Industries Inc</td>
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<tr>
<td>Construction Machinery Co</td>
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<td>Dotmar Industries Inc</td>
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<td>Dunn W E Co</td>
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<tr>
<td>General Engines Co Inc</td>
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<td>Gilson Brothers Co</td>
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<tr>
<td>Jaeger Machine Co</td>
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<td>Johnson C S Co</td>
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<tr>
<td>Koehring Co</td>
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<tr>
<td>Lithibar Co</td>
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<tr>
<td>Mixermobile Manufacturers</td>
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<tr>
<td>Muller Machinery Co Inc</td>
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</tbody>
</table>
Concrete Mixers, Transit
Chain Belt Co
Construction Machinery Co
General Engines Co Inc
Hermetic-Celco Products Inc
Jasper Machine Co
Maxon Construction Co Inc
Smith T L Co
Whitleman Mfg Co
Worthington Corp

Concrete Paint
(See Paints & Coatings, Concrete)
Concrete Sawing Equipment
Carborundum Co
Champion Mfg Co
Cipper Mfg Co
Eveready Brikax Co
Thor Power Tool Co
Victor Inc
Concrete Vibrators, Gasoline & Electric
Chicago Pneumatic Tool Co
General Engines Co Inc
Homelite Div Textron Inc
Kelley Machine Div Wiesner-Rapp Co Inc
Magnum Power Tool Co
Master Vibrator Co
Pacific Mercury Marketing Div
Remington Arms Co Inc
Speedway Mfg Div Thor Power Tool Co
Stow Mfg Co
Syntrac Co
Thor Power Tool Co
Vibro Plus Prods Inc
Whitleman Mfg Co

Conduits & Raceways
Adam Frank Electric Co
Aluminum Co of America
American Brass Co
American Flexible Conduit Co
Byers A M Co
Chain Belt Co
Columbia Metal Box Co
Gen Elec Co Constr Mat Sales Operation
Johns-Manville Corp
Kees F D Mfg Co
Keystone Mfg Co
Laclede Steel Co
Line Material Ind McGraw-Edison Co
Nati Electric Div H K Porter Co Inc
Onokite Co
Orangeburg Mfg Co Div Flinthotek Co
Prb-National Co
Republic Steel Corp
Skyline Industries Sales Inc
Southwestern Plastic Pipe Co
Triangle Conduit & Cable Co Inc
Unistrut Prods Co
United States Rubber Co

Controls, Heating & Air Conditioning
Arrow Hart & Hegeman Elec Co
Berto Electric Mfg Corp
Controls Co of America
Cutler Hammer Inc

Controls, Lighting (See Wiring Systems, Remote Control)
Conveyors
Alvey Ferguson Co Inc
American Conveyor Co
Barber Greene Co
Baughman Mfg Co Inc
Bodine Mfg Co
Bosworth Mfg Co
Buchanan E W Co Inc
Chair Belt Co
Colson Corp
DeWalt Div AMF
Ferguson Harry J Co
Gee Vee Line
Goodall Rubber Co Inc
Hewitt-Robins Inc
Lake Shore Mfg Lake Shore Eng Div
LeTourneau-Westhinghouse Co
Lippmann Engineering Works Inc
Louden Machinery Co
Mathews Conveyor Co
Metcalf Conveyor Co
Morgen Manufacturing Co
Mulkey Sam Co
New London Engineering Co
Northern Conveyor Co
Oliver Corp
Rapido-Standard Co Inc
Richards-Wilcox Mfg Co
Stephens-Adamson Mfg Co

Copper Tubing (See Pipe & Tubing, Brass & Copper)
Cork Flooring (See Tile, Cork)
Counterflow Furnace Units (See Furnaces, Counterflow Units)
Countertops
Armstrong Cork Co
Boro Wood Prods Co Inc
Carthage Marble Corp
Chemoid Co
Congoleum-Naum Inc
Ekay Mfg Co
Farrar & Loetscher Mfg Co
Fiberglass Plastics Co
Gen Elec Co Laminated Prods Dept

Gas Tire & Rubber Co Bldg Mat Div
Gilmore Inc
Goodyear Tire & Rubber Co
Gregg & Son Inc
Harbor Plywood Corp
Hyde-Murphy Co
Hyde Park Products Co
Kitchen, Kempack Inc
Marsh Wall Products Inc
National Tile & Mfg Co
Quartz Mosaic Inc
Regal Laminates Inc
St Regis Paper Co Panelyte Div
Santi-Top Inc
Teboro Cabinet Corp
Topcraft Inc
United States Plywood
United States Rubber
Vermont Marble Co

Coverings, Wall (See Wall Coverings)
Cranes & Shovels
Allis Chalmers Mfg Constr Mach Div
American Hoist & Derrick Co
Bucyrus-Erie Co
Clark Equip Co Constr Mach Div
Cleveland Trencher Co
Ford Motor Co Tractor & Implement Div
Gar Wood Industries Inc
John Deere Industrial Div
Koehring Co
LeTourneau-Westinghouse Co
Link-Belt Speeder Corp
Northwest Engineering Co
Pitman Manufacturing Co
Pointerv-Williams Co Inc
Radocy P A & Sons
Roud David & Son Inc
Schmidt Bantam Co
Sherman Prods Inc
Silent Holst & Crane Co
Smith Holst Mfg Co
Tractomotive Corp
Unit Crane & Shovel Corp

Curtain Walls
American Art Metals Co
Butler Mfg Co
Fenestra Inc
Harvey Aluminum
Haskelite Mfg Corp
Ingram-Richardson Mfg Co
Kawneer Co
Kimble Glass Co Sub Owens-Illinois
Marmet Corp
Mesker Bros Iron Co
Michel & Pfeffer Iron Works Inc
Pomeroy S H Co Inc
Pro-Tect-U Jalousie Corp
Regulux Sash & Door Co
Republic Steel Corp Truscon Div
Ryerson Joseph T & Son
Slidewall Co
Southern Sash Sales & Supply Co
Stiebelit Inc
United States Plywood Corp
Valley Metal Prods Co
Weaco Products Inc
Werner Canvas Prods Co
Wilke Metal Products Inc
Wolins Ceramic Enameling Co

Cutters, Hardboard
Gairing Tool Co
Hartmann Mfg Inc
Huber Brothers Saw Mfg Co Inc
Kimball Mfg Co
Modern Specialties Co
Rockwell Mfg Delta Power Tool Div
Stanly Tools

Turn to Section 2—Manufacturers Directory for all addresses
Cutters, Insulation Board
Kashkill Mfg Co

Cutters, Molding
Belchow Machinery Co
Belsoo Crane Co
DeWeit Div MF
Dermeyer Co
Duana Mfg Co
Ekstrom Carlson & Co
Ruther Brothers Saw Mfg Co Inc
Jet Tool Inc
Matsion Machine Works
Pootauck Corp
Rockwell Mfg Delta Power Tool Div
Stanley Electric Tools
United Industries Inc
Yates-American Machine Co

Cutters, Shingle & Siding
Flintkote Co
General Hardware Mfg Co Inc
Keech & Mattison Co
Modern Specialties Co
Newark Ladder & Bracket Co Inc
Ruberal Co
Specialty Tool Manufacturers
United States Gypsum Co

Cutters, Stump (See Bulldozer Attachments)

Cypress Lumber (See Lumber, Cypress)

Dampers, Fireplace (See Fireplaces, Outdoor & Equipment)

Decking, Insulating
Armstrong Cork Co
Bergen Insulation Co Inc
Bestwall Gypsum Co
Bird & Son Inc
Bradley Southern Div Potlach Forests Inc
Carey Philip Mfg Co
Celotex Corp
Ceramex of Arizona
Flintkote Co
Gilman Bros Co
Great Lakes Carbon Corp Perlite Dept
Homanote Co
Insulite Div Minnesota & Ontario Paper
Johnson-Manville Corp
Kaiser Gypsum Co Inc
Lehon CCo
Meadows W R Inc
North American Gypsum Div
North American Insulation Corp
Owens-Corning Fiberglas Corp
Paxton Frank Lumber Co
Pioneer Div Flintkote Co
Reynolds Aluminum Supply Co
Ridin Laminated Products Inc
Simpson Logging Co
Tectum Corp
Texas Vermiculite Co
Ther-Mo Roof Inc
Timber Structures Inc
Uni-Crest Div United Cork
Uni Structures Inc
United States Gypsum Co
Waytyle Corp
Wood Conversion Co
Zonolid Co

Decking, Metal
Ceco Steel Prods Corp

Disposers, Garbage
Amer-Standard Plumbing & Heating Div
Chambers Built-Ins Inc
Cranes
Donley Brothers Co
Frigidaire Div General Motors Corp
Gen Elec Co Appliance & Television Div
Gibson Refrigerator Co Div
Hindalloy Div
In-Sink-Erator Mfg Co
James Mfg Co Inc
Kevilton Div American Motors Co
Leigh Cldy Prod Div
Locke Stone Co
Nail Rubber Mfg Co
Plumbing Equip Div
Northwest Metal Products Inc
Pilco Corp
Pioneer Manufacturing Co
Tracy-American Kitchens
Vestal Mfg Co
Westinghouse Electric Corp
Witt Cornice Co
Youngstown Kitchens

Dikers (See Trenchers & Ditches)

Doors & Frames
Auth Electric Co Inc
Cable Electric Products Inc
Carey Philip Mfg Co
Dooroscope Co
Edwards Co Inc
Graham John H & Co Inc
Lehon Co
Miami Cabinet Div Phil Carey Mfg
Morgan-Wightman Co
NuTone Inc
Bittenhouse Co Inc

Door Operators, Garage
Alliance Manufacturing Co Inc
Atlas Overhead Door Co
Barber Colman Co

Chambers BUILT-INS
A COMPLETE "CUSTOM MATCHED" LINE
Ovens and Ranges (gas and electric) . . .
Refrigerator-Freezers . . .
Dishwashers . . .
Ventilating Hoods . . .
Dishwashers

A DESIGN AND SIZE FOR ANY KITCHEN PLAN!
For specifications—Air Mail Chambers Building Co, Dept. AB-600
123 W. Harlem Ave., Chicago 23, III.

Frigidaire Div General Motors Corp
Gen Elec Co Appliance & Television Div
Gibson Refrigerator Co Div
Hindalloy Div
James Mfg Co Inc
Kevilton Div American Motors Co
Philco Corp
Preway Inc
Tracy-American Kitchens
Westinghouse Electric Corp

Weather-King doors and door controls; custom-built. Nationally distributed, guaranteed.

California Mfg Co
Capital Products Co
Crawford Door Co
Delco Appliance Div
Door-o-Matic Div Republic Industries Inc
Fitzgerald M J Co
Franklin Mfg Co
Graham Door Co
Howell Mfg Co
Kinney Mfg Co
Lancaster Pump & Mfg Co Inc
McKee Door Co
Moore E K Co Inc
Morrison Steel Products Inc
Overhead Door Corp
RCA Service Co Div of RCA
Raynor Mfg Co
Richards-Wilcox Mfg Co
Robb Industries Inc
Rowe Mfg Co
Russel F C Co
Sedona Inc
Wagner Mfg Co

Barber Colman OVERdoors
Doors, Access & Crawl Space

Adams Co
Air Control Products Inc
Bilco Co
Carey Philip Mfg Co
Coffman R G Co Inc
Columbia Metal Box Co
Donley Brothers Co
George F C Machine Co
Industrial Iron Works
Inland Steel Products Co
Knapp Brothers Mfg Co
Lehon Co
Leigh Bldg Prods Div Air Control Prods
Miami Cabinet Div Philip Carey Mfg
Morgan Company
Simpson Logging Co
Steelcraft Mfg Co
Vestal Mfg Co
Zurn Industries Inc Plumbing Prods Div

Doors, Collar, Bulkhead, Metal

Bilco Co

Bilco BASEMENT DOOR MILL WOOD & METAL HEAVY-WEIGHT THE BILCO COMPANY Dept. 308—New Haven 5, Conn.

Cellarway Inc
Donley Brothers Co
International Fireproof Door Co
Michel & Pfeffer Iron Works Inc
Pak-Cel Inc
Vega Industries Inc

Doors, Combination, Aluminum
(See Windows & Doors, Combination Screen & Storm Sash, Aluminum)

Doors, Combination, Steel
(See Windows & Doors, Combination Screen & Storm Sash, Steel)

Doors, Combination, Wood
(See Windows & Doors, Combination Screen & Storm Sash, Wood)

Doors, Flexible & Folding

Aeroshade Co
Air Control Products Inc
American Accord-Steel Doors Inc
American Steel Door Co
Amwater Bldg Prods Div Am Welding
Cleopar Corp
Columbia Mills Inc
Consolidated General Prod Inc
Cookson Co
Cox Arthur & Sons Inc
Craftwood Products
Curtillution Corp
Eastern Machine Products Co
Evergreen States Forest Products
Fenestra Inc
Float-Away Door Co
Gates Mfg Co Inc
Grant Pulley & Hardware Corp

AMERICA'S MOST VERSATILE FAMILY OF FOLDING DOORS...

STACKDOOR

customfold

WOODFLEX

evolvef
doors

ACCORDOFOLD

ROYALE

Engineered and manufactured by
AMERICAN ACCORDION-FOOLDORS, INC.
Jamaica 33, New York

Gregg & Son Inc
Harbor Plywood Corp
Holcomb & Hoke Mfg Co Inc
Hough Mfg Co
Leigh Bldg Prods Div Air Control Prods
Michel & Pfeffer Iron Works Inc
Morgan Company
New Castle Products Inc
Nova Sales Co
Paine Lumber Co Ltd
Panelfold Doors Inc
Precision Parts Corp
Ready Hung Door Corp
Repubile Steel Corp Truscon Div
Reynolds Aluminum Supply Co
Richards-Wilcox Mfg Co
Rock Island Millwork Co Factory Div
Reliance Co
Spokane Sash & Door Co
Suncraft Inc
United States Plywood Corp
Waco Transwall Folding Partition
Warren Shade Co Inc
Wel-Bilt Products Co
Wood Specialty Products Inc

Doors, Garage, Upward Acting, Metal

Atlas Overhead Door Co
Barber Colman Co
Berkeley Aluminum Products Inc
Berry Door Corp

Berry STEEL GARAGE DOORS
5-year guarantee

One-piece and sectional models

Ask your distributor or write direct:
Berry Door Corporation
2400 E. Lincoln Road, Birmingham, Michigan

Crawford Door Co
Fenestra Inc
Frantz Mfg Co
Gates Mfg Co
Grant Pulley & Hardware Corp

Rowe Mfg Co
Russell F C Co
Southern Pine Lumber Co
Taylor Garage Doors Inc
Tilt-A-Door Corp
Wagner Mfg Co
Wel-Bilt Products Co
Wilson J G Corp

Doors, Garage, Upward Acting, Wood

Atlas Overhead Door Co
Barber Colman Co

Better-Bilt Door Co
Calder Mfg Co
Capital Products Inc
Commander Doors Inc
Crawford Door Co
Fairley & Loetscher Mfg Co
Franz Mfg Co
General Door Co
General Doors Corp
Georgia Pacific Corp
Goshen Sash & Door Co
Graham Door Co

the world's most beautiful homes wear GRAHAM GARAGE DOORS

Exclusive "Magi-Dor" Automatic Operator available

GRAHAM DOOR COMPANY
6001 Carnegie Ave. Cleveland 3, Ohio ° HE 2-1200

Harriss Inc
Howell Mfg Co
Ideal Co Mfg Div Wm Cameron & Co
International Paper Co Long-Bell Div
Kinnear Mfg Co
Kochton Plywood & Veneer Co Inc
McBee Door Co
Morgan-Wightman Co
Morrison Steel Products Inc
Northwest Door Co Sub St Regis Paper Co
Overhead Door Corp
Pacific Mutual Door Co
Phenix Mfg Co
Raynor Mfg Co
Richards-Wilcox Mfg Co
Ridge Door Co
Rowe Mfg Co
Simpson Logging Co
Southern Pine Lumber Co
Wagner Mfg Co
Winold Door Corp

Doors, Glass
(See Doors, Sliding; also Doors, Shower)

Turn to Section 2—Manufacturers Directory for all addresses
Doors, Interior & Exterior, Metal

Aetna Steel Products Corp
American Art Metals Co
Amweld Building Prod Div
Atco Aluminum Products
Bayley William Co
Berry Door Corp

Berry STEEL GARAGE DOORS
5-year guarantee

One-piece and sectioned models

Ask your distributor or write direct:
Berry Door Corporation
2400 E. Lincoln Road, Birmingham, Michigan

Bilco Co
Burr-Southern Div State Steel
Craft Metal Products Inc
Curta Companies Inc
Federal Windows Mfg Co Inc
Fenestra Inc
International Fireproof Door Co
International Steel Co
Ipk Door Co Inc
Kawneer Co
Kimmer Mfg Co
Leigh Bldg Prod Div Air Con Prod Inc
Maren Corp
Mesker Bros Iron Co
Panelfab Products Inc
National Aluminum Co
Panelpak Products Inc
Republic Steel Corp
Republic Steel Corp Truscon Div
Richards-Wilcox Mfg Co
Richmond Fireproof Door Co
Rowe Mfg Co
Russell F C Co
Spartan Steel Products Corp
State Steel Industries Inc
Steelcraft Mfg Co
United Steel Fabricators Inc
Valley Metal Products Co
Virginia Metal Products Inc
Vulcan Metal Products Inc
Wilson J G Corp

Doors, Interior & Exterior, Wood

Aonos & Gilkey Co
Bellwood Co of California
Caradco Inc
Craftwood Products
Crestline Co
Curta Companies Inc
Evergreen States Forest Products
Farley & Loetscher Mfg Co
General Plywood Corp
Georgia Pacific Corp
Gregg & Son Inc
Harbor Plywood Corp
Hardwood Products Corp
Haskell Mfg Corp
Ideal Co Mfg Div Win Cameron & Co
International Paper Co Long-Bell Div
Ipk Door Co Inc
Ketcham G M Mfg Corp
Kimberly-Clark Corp
Kochan Plywood & Veneer Co Inc
Mako Seattle Lumber Co
Mengel Co
Milwaukee Plywood Co
Mohawk Flash Doors
Morgan Company
Morgan-Wightman Co
Niagara Plywood Co Inc
Northwest Door Co Sub St Regis Paper Co
Pacific Mutual Door Co
Peterson J C Corp

Perrine Industries Inc
Ready Hung Door Corp
Reynolds Aluminum Supply Co
Rock Island Millwork Co Factory Div
Rockland Millwork Co Factory Div
Simpson Logging Co
Spokane Sash & Door Co
Thomson-Plywood Corp
United States Plywood Corp
Western Door & Plywood Corp
Wisconsin Door Co

Doors, Jalousie

Adams Engineering Co
All Weather Jalousies Inc
Alico Inc
Aluminum Industries
Anderson V E Mfg Co Inc
Angel Co
Atco Aluminum Products
Carey-McFall Co
Chamberlin Co of America
Cookson Co
Eagle-Picher Co
Fleet of America Inc
Fulton Glass Co
General Window Co
Hens Mfg Co
Hyde-Murphy Co
Jaseo Aluminum Products
Kelso Div Wells Aluminum Corp
Keystone Alloys Co
Rimbale Glass Co Sub Owens-Illinois
Krueger Manufacturing Co
Leonard R B Inc
Ludman Corp
Moloney Co
Morgan-Wightman Co
North East Metal Products Corp
Paramount Aluminum Prod Corp
Perrine Industries Inc
Pro-Tect-U Jalousie Corp
Regal Products Corp
Regalux Sash & Door Co
Republic Steel Corp
Republic Steel Corp Truscon Div
Reynolds Aluminum Supply Co
Rock Island Millwork Co Factory Div
Royal Jalousie Co
Russell Windows Inc of Florida
Russell F C Co
Simpson Logging Co
Southern Sash Sales & Supply Co
Sun Valley Industries
Tetron Metals Co
Union Machine Co
Universal Fabricators
Ware Laboratories Inc
Wells Aluminum Corp
Winnallite Mfg Co

Doors, Kitchen Cabinet

Fiberesin Plastics Co

Doors, Louver, Metal

Philadelphia Screen Mfg Co

Doors, Louver, Wood

Caradco Inc
Craftwood Products
Crestline Inc
Curta Companies Inc
Farley & Loetscher Mfg Co
Georgia Pacific Corp
Goshen Sash & Door Co
Hensley Manufacturing Co
Hines Mfg Co
Hyde-Murphy Co
Ideal Co Mfg Div Win Cameron & Co

International Paper Co Long-Bell Div
Kennon Track Corp Sub Eko Prods
Missoula White Pine Sash Co
Morgan Company
Morgan-Wightman Co

Faxon Frank Lumber Co
Precision Parts Corp
Quincy Adams Colonial Doors
Ready Hung Door Corp
Rock Island Millwork Co Factory Div
Rockwell of Randolph Inc
Schumacher F E Co
Simpson Logging Co
Tyler Arthur F Co

Union Machine Co
United States Plywood Corp

Doors, Prefabbed & Packaged

Ceco Steel Products Corp
Clark Door Co Inc
Craftwood Products
Goshen Sash & Door Co
Ideal Co Mfg Div Win Cameron & Co
Mescar Bros Iron Co
Panelpak Products Inc
Precision Parts Corp
Ready Hung Door Corp
Steelcraft Mfg Co
Thomson-Plywood Corp

Doors, Prehung

Alumicorp of America
Champion Door Co Inc
Craftwood Products
Ex-Way Sales Inc
Ideal Co Mfg Div Win Cameron & Co
Jenkins Lumber & Mfg Co
Master Hung Door Equip Co
Moloney Co
Peerless-Wood Products
Ready Hung Door Corp
Royal Jalousie Co
Tyre Lumber Mfg Co
Wadsworth Millwork Corp
Wilke Metal Products Inc

Doors, Rolling, Steel

Cockson Co
Kimber Mfg Co
Mahon B C Co
Mescar Bros Iron Co
Michel & Pfeffer Iron Works Inc
Morgan Steel Products Inc
Ridge Door Co
Wilsen J G Corp

Doors, Shower & Bathtub
(See also Shower Stalls)

Adams Engineering Co
American Shower Door Co Inc
Anaco Products Inc
Beauti-Dor Inc
Bismarck Glass Co
Chenault Co
Crane Co
Cutler Metal Products
Dapy Products Corp
Efron Theodore Mfg Co
Evergreen States Forest Products
Flat Metal Mfg Co

International Paper Co Long-Bell Div
Kennon Track Corp Sub Eko Prods
Missoula White Pine Sash Co
Morgan Company
Morgan-Wightman Co

DOORS - INTERIOR, EXTERIOR
SLAB, LOUVRE, S.S.
ALL STYLES - ALL SIZES
WRITE FOR NEW 188 PAGE CATALOG
9910 PAGE - ST. LOUIS, MO.
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industry</th>
<th>Address</th>
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</thead>
<tbody>
<tr>
<td>Fuller W P &amp; Co</td>
<td>Glass Shower Door Products</td>
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<tr>
<td>Glamour Glass Walnut Corp</td>
<td>Glass Shower Door Products</td>
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<tr>
<td>Glass Shower Door Co Inc</td>
<td>Glass Shower Door Products</td>
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<td>Jones Shutter Products</td>
<td>Shutters</td>
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<td>Ketcham G M Mfg Corp</td>
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<td>Lehman Sprayshield Co</td>
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<td>Leonard R B Inc</td>
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<td>Ludman Corp</td>
<td>Aluminum Products</td>
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<td>Milwaukee Stamping Co Bathe-Rite Div</td>
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<td>Pittsburgh Plate Glass Co</td>
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<tr>
<td>Reynolds Aluminum Supply Co</td>
<td>Metal Products</td>
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<tr>
<td>Rusco Windows Inc of Florida</td>
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<td>Safety-Flex Enclosures Div Woodside Ind</td>
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<td>Show Door Co of America</td>
<td>Metal Products</td>
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<td>Showfold Door Corp</td>
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<tr>
<td>Standard Building Products Co</td>
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<td>Standard Steel Cabinet Co</td>
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<td>Tiletone Co</td>
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<tr>
<td>Trimview Metal Products</td>
<td>Metal Products</td>
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<tr>
<td>Wasco Products Inc</td>
<td>Metal Products</td>
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### Doors, Sliding Glass

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<thead>
<tr>
<th>Company Name</th>
<th>Industry</th>
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<tr>
<td>Adams Engineering Co</td>
<td>Doors, Sliding Glass</td>
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<tr>
<td>Ador Corp</td>
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<td>Alco Inc</td>
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<tr>
<td>American-Saint Gobain Corp</td>
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<td>American Shower Door Co Inc</td>
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<td>Anderson V E Mfg Co Inc</td>
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<td>Arcadia Metal Products Inc</td>
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<td>Binswander Glass Co</td>
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<td>Capitel Products Corp</td>
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<td>Capri Sales Inc</td>
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<td>Cole Mfg Co</td>
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<td>Daryl Products Corp</td>
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<td>Fenestra Inc</td>
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<td>Fleet of America Inc</td>
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<td>Flynn Michael Mfg Co</td>
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<td>Fuller W P &amp; Co</td>
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<tr>
<td>General Bronze Corp</td>
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<td>General Window Co</td>
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<td>Glamour Glass Walnut Corp</td>
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<td>Glass Shower Door Co Inc</td>
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<td>Hollyview Aluminum Rolling Glass</td>
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<td>Horizon Door Co</td>
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<td>Lehman Sprayshield Co</td>
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<td>Lenahan Aluminum Window Corp</td>
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<tr>
<td>Leonard R B Inc</td>
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<tr>
<td>Malibu Mfg Corp</td>
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<td>Metal Trims Inc</td>
<td>Doors, Sliding Glass</td>
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<tr>
<td>Miller Frank B Mfg Co</td>
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<td>Miller Sliding Glass Door Co Inc</td>
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<td>National Metal-Art Mfg Co</td>
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<td>National Window Corp</td>
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<td>Nudor Mfg Corp</td>
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<td>Panaview</td>
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<td>Perrine Industries Inc</td>
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<td>Pro-Tect-U Jalousie Corp</td>
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<td>Reynolds Aluminum Supply Co</td>
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<td>Rusco Windows Inc of Florida</td>
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<td>Russel F C Co</td>
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<td>Safetee Glass Co</td>
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<td>Shower Door Co of America</td>
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<td>Steelbilt Inc</td>
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<tr>
<td>Sun Valley Industries Inc</td>
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<td>Toledo Plate &amp; Window Glass Co</td>
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<tr>
<td>Trim Slide Inc</td>
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<td>Universal Fabricators</td>
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<tr>
<td>Virginia Glass Products Corp</td>
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### Doors, Sliding Wood & Metal

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<tr>
<th>Company Name</th>
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<tr>
<td>Aluminum &amp; Glass Products Co</td>
<td>Doors, Sliding Wood &amp; Metal</td>
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<tr>
<td>Cole Mfg Co</td>
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<td>Cox Arthur &amp; Sons Inc</td>
<td>Doors, Sliding Wood &amp; Metal</td>
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<td>Craftwood Products</td>
<td>Doors, Sliding Wood &amp; Metal</td>
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<td>Croft Metal Products Inc</td>
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<td>Curtis Companies Inc</td>
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<td>Dlna-Pak Corp</td>
<td>Doors, Sliding Wood &amp; Metal</td>
<td></td>
</tr>
</tbody>
</table>

### Extension Drawer Support Co

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industry</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant Pulley &amp; Hardware Corp</td>
<td>Drawers, Plastic</td>
<td></td>
</tr>
<tr>
<td>Junior-Pro Products Co</td>
<td>Drawers, Plastic</td>
<td></td>
</tr>
<tr>
<td>Knap &amp; Vogt Mfg Co</td>
<td>Drawers, Plastic</td>
<td></td>
</tr>
<tr>
<td>Leigh Bldg Prod Div Air Con Prods Inc</td>
<td>Drawers, Plastic</td>
<td></td>
</tr>
<tr>
<td>Sterling John Corp</td>
<td>Drawers, Plastic</td>
<td></td>
</tr>
<tr>
<td>Washington Steel Prod</td>
<td>Drawers, Plastic</td>
<td></td>
</tr>
</tbody>
</table>

### Drill Grinders

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industry</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arro Expansion Bolt Co</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Black &amp; Decker Mfg Co</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Bulldog Div Gregory Industries Inc</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Chicago Expansion Bolt Co</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Chicago Pneumatic Tool Co</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Cincinnati Tool Co</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Damascus Steel Products Corp</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Diamond Expansion Bolt Co Inc</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Garing Tool Co</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Gardner-Denver Co</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>General Hardware Mfg Co Inc</td>
<td>Drill Accessories</td>
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<tr>
<td>Hawkeye Sales Co</td>
<td>Drill Accessories</td>
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<tr>
<td>Hood Bros</td>
<td>Drill Accessories</td>
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<tr>
<td>Jordan Industries</td>
<td>Drill Accessories</td>
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<tr>
<td>Mayhew Steel Products Inc</td>
<td>Drill Accessories</td>
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<tr>
<td>Milwaukee Elec Tool Corp</td>
<td>Drill Accessories</td>
<td></td>
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<tr>
<td>Moleo Drilling Machines Inc</td>
<td>Drill Accessories</td>
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<tr>
<td>New England Carbide Tool Co Inc</td>
<td>Drill Accessories</td>
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<tr>
<td>OX-Wall Tool Co Ltd</td>
<td>Drill Accessories</td>
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<tr>
<td>Paine Co</td>
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<tr>
<td>Phillips Drill Co</td>
<td>Drill Accessories</td>
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<tr>
<td>Proto Tool Co Div Pendleton Tool Ind Inc</td>
<td>Drill Accessories</td>
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<tr>
<td>Raplucg Co Inc</td>
<td>Drill Accessories</td>
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</tr>
<tr>
<td>Remington Arms Co Inc</td>
<td>Drill Accessories</td>
<td></td>
</tr>
<tr>
<td>Relton Corp</td>
<td>Drill Accessories</td>
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<tr>
<td>Stanley Tools</td>
<td>Drill Accessories</td>
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<tr>
<td>Star Expansion Industries Corp</td>
<td>Drill Accessories</td>
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<tr>
<td>Syntron Co</td>
<td>Drill Accessories</td>
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<tr>
<td>Ther Power Tool Co</td>
<td>Drill Accessories</td>
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<tr>
<td>Union Twist Drill Co</td>
<td>Drill Accessories</td>
<td></td>
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<tr>
<td>U S Expansion Bolt Co</td>
<td>Drill Accessories</td>
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<tr>
<td>Vistor Inc</td>
<td>Drill Accessories</td>
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</tr>
<tr>
<td>Wodack Electric Tool Corp</td>
<td>Drill Accessories</td>
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</tbody>
</table>

### Drills, Electrical, Portable

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industry</th>
<th>Address</th>
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<tbody>
<tr>
<td>Albertson &amp; Company Inc</td>
<td>Drills, Electrical, Portable</td>
<td></td>
</tr>
<tr>
<td>American Floor Machine Co</td>
<td>Drills, Electrical, Portable</td>
<td></td>
</tr>
<tr>
<td>Black &amp; Decker Mfg Co</td>
<td>Drills, Electrical, Portable</td>
<td></td>
</tr>
<tr>
<td>Blum Julius Co Inc</td>
<td>Drills, Electrical, Portable</td>
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</tr>
<tr>
<td>Bulldog Div Gregory Industries Inc</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Chicago Pneumatic Tool Co</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Cummins Port Tools Div Oster Mfg Co</td>
<td>Drills, Electrical, Portable</td>
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</tr>
<tr>
<td>Dalton Mfg Co</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Diamond Expansion Bolt Co Inc</td>
<td>Drills, Electrical, Portable</td>
<td></td>
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<tr>
<td>Forsberg Mfg Co</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Holub Industries Inc</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Ingersoll-Rand Co</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Kent Air Tool Co</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Ketk Tool Co</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Millers Falls Co</td>
<td>Drills, Electrical, Portable</td>
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</tr>
<tr>
<td>Milwaukee Elec Tool Corp</td>
<td>Drills, Electrical, Portable</td>
<td></td>
</tr>
<tr>
<td>Moleo Drilling Machines Inc</td>
<td>Drills, Electrical, Portable</td>
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</tr>
<tr>
<td>Portable Electric Tools Inc</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Porter-Cable Machine Co</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>R C S Tool Corp</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Ryerson Joseph T &amp; Son</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Skill Corp</td>
<td>Drills, Electrical, Portable</td>
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<tr>
<td>Speedway Mfg Div Thor Power Tool Co</td>
<td>Drills, Electrical, Portable</td>
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</tr>
<tr>
<td>Stanley Electric Tools</td>
<td>Drills, Electrical, Portable</td>
<td></td>
</tr>
<tr>
<td>Thor Power Tool Co</td>
<td>Drills, Electrical, Portable</td>
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</tr>
<tr>
<td>Union Twist Drill Co</td>
<td>Drills, Electrical, Portable</td>
<td></td>
</tr>
<tr>
<td>Wond Prod Inc</td>
<td>Drills, Electrical, Portable</td>
<td></td>
</tr>
<tr>
<td>Wodack Electric Tool Corp</td>
<td>Drills, Electrical, Portable</td>
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</tbody>
</table>

### Drills, Gasoline

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industry</th>
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<tbody>
<tr>
<td>Barco Mfg Co</td>
<td>Drills, Gasoline</td>
<td></td>
</tr>
<tr>
<td>Remington Arms Co Inc</td>
<td>Drills, Gasoline</td>
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</tr>
<tr>
<td>Drivers &amp; Fasteners, Cartridge</td>
<td>Drivers &amp; Fasteners, Cartridge</td>
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### Actuated Type

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industry</th>
<th>Address</th>
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<tbody>
<tr>
<td>Fastway Fasteners Inc</td>
<td>Drivers &amp; Fasteners, Cartridge</td>
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</tr>
<tr>
<td>Hawkeye Sales Co</td>
<td>Drivers &amp; Fasteners, Cartridge</td>
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<tr>
<td>Hill Rapid Fastening Systems Inc</td>
<td>Drivers &amp; Fasteners, Cartridge</td>
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</tr>
<tr>
<td>Omark Industries Inc</td>
<td>Drivers &amp; Fasteners, Cartridge</td>
<td></td>
</tr>
</tbody>
</table>

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**Turn to Section 2—Manufacturers Directory for all addresses**
Remington Arms Co Inc
Dyers, Clothes
(See Washers & Dryers, Clothes)
Ducts, Metal
Penn Supply & Metal Corp
Dumbwaiters
Barrett Cravens Co
Bobinson Mfg Co
Chelsea Elevator Co
Flinnbaugh-Murray Corp
Inclinator Co of America
Lewis-Shepard Products Inc
Oita Elevator Co
Robot Industries Inc
Sedgwick Machine Works
Shepard Elevator Co Div Dover Corp
Westinghouse Electric Corp
Whitney Vincent Co

Earthmoving Equipment
(See Backhoes, Bulldozers, Cranes, Etc.)
Estimating Services
Goshen Sash & Door Co
Tamblyn Systems
Unit Structures Inc
Fans, Commercial
Acme Engineering & Mfg Corp
Air Controls Inc
Buffalo Forge Co
Chicago Blower Corp
Cory Corp
Emerson Electric Mfg Co
ILG Electric Ventilating Co
Peerless Elec Div H K Porter Co Inc
Standard Electric Mfg Co Inc

Fans, Exhaust, Bath & Kitchen
Acme Engineering & Mfg Corp
Air Control Products Inc
Air Controls Inc
American Air Filter Co
American Standard American Blower Div
Aubrey Hardware Mfg Inc
Bar-Brook Mfg Co
Berna Air King Corp
Brown Mfg Co Inc
C & H Air Conditioning Co Inc
Cal Vent Manufacturing Co
Cary Philip Mfg Co
Chambers Built-Ins Inc
Chelsea Fan & Blower Co Inc
Clarage Fan Co
Dayton Electric Mfg Co
Emerson Electric Mfg Co
Emerson-Pryne Co
Fasco Industries Inc
Gaffers & Satter
Gordon Mfg Co
Hudson H D Mfg Co
Hunter Div-Robbins & Myers Inc
ILG Electric Ventilating Co
Jenssen Industries
Lau Blower Co
Leigh Bldg Prods Div Air Con Prods Inc
Master Mechanic Mfg Co
McLean Engineering Labs
Meier Electric & Machine Co Inc
Olson Mfg Co
Peerless Electric Div H K Porter Co Inc
Red Unit Fans Inc
Rich Phil Fan Mfg Co Inc
Robbins & Myers Inc
Standard Electric Mfg Co Inc
Starline Inc
Stewart S J Electric
Tennessee Fabricating Co
Utility Appliance Corp
Vernco Corp
Wasco Products Inc
Westinghouse Electric Corp
Zink John Co

Leigh Bldg Prods Div Air Con Prods Inc
Master Mechanic Mfg Co
McLean Engineering Labs
Miami Cabinet Div Philip Carey Mfg
Morgan-Wightman Co
National Gas Equipment Co Inc
NuTone Inc
Peerless Electric Div H K Porter Co Inc
Perfect Line Mfg
Progress Mfg Co Inc
Reed Unit Fans Inc
Rich Phil Fan Mfg Co Inc
Robbins & Myers Inc
Roberts Mfg Co
Shepley Mfg Co
Sin-Jun Products Co
Standard Electric Mfg Co Inc
Stewart Industries Inc
Stewart S J Electric
Textor Cabinet Corp
Trade-Wind Div Robbins & Myers Inc
Universal Blower Co
Ventrola Mfg Co
West Wind Corp
Wincor Ventilator Co

Fans, Ventilating, Attic
Acme Engineering & Mfg Corp
Aeroshade Co
Air Controls Inc
American Air Cooler Corp
Berna Air King Corp
Buffalo Forge Co
C & H Air Conditioning Co Inc
Cary Philip Mfg Co
Chelsea Fan & Blower Co Inc
Chicago Blower Corp
Clay Equipment Corp
Consolidated General Prod Inc
Damp-Vent Co
Dayton Electric Mfg Co
Diehl Mfg Co
Emerson Electric Mfg Co
Emerson-Pryne Co
Fasco Industries Inc
Gaffers & Satter
Gordon Mfg Co
Hudson H D Mfg Co
Hunter Div-Robbins & Myers Inc
ILG Electric Ventilating Co
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Lau Blower Co
Leigh Bldg Prods Div Air Con Prods Inc
Master Mechanic Mfg Co
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Meier Electric & Machine Co Inc
Olson Mfg Co
Peerless Electric Div H K Porter Co Inc
Red Unit Fans Inc
Rich Phil Fan Mfg Co Inc
Robbins & Myers Inc
Standard Electric Mfg Co Inc
Starline Inc
Stewart S J Electric
Tennessee Fabricating Co
Utility Appliance Corp
Vernco Corp
Wasco Products Inc
Westinghouse Electric Corp
Zink John Co

Fascia & Soffit, Aluminum
Keystone Alloys Co

Fasteners
Arro Expansion Bolt Co
Bethlehem Steel Co
Butcher & Hart Mfg Co
Carey Philip Mfg Co
E G Building Fasteners Corp

E. G. DO-ALL LOC-NAIL
for fastening roofing materials
on insulated roof decks

E. G. BUILDING FASTENERS CORP.
101 Park Ave., New York 17, N. Y.

Timmerman Products Inc
United States Gypsum Co

Faucets, Tub & Shower
Alamark Inc
American-Standard Plumbing & Htg Div
Chicago Faucet Co
Dick Brothers Inc
Gyro Brass Manufacturing Corp
Harvey Aluminum
McDonald A Y Mfg Co
Moen Faucet Div Standard Screw
Star Expansion Industries Corp
Stic-Klip Mfg Co Inc
Superior Fastener Corp

Timber Roofing
(See Roofing, Asphalt)

Fencing
Anchor Fence Div Anchor Post Prods Inc
Archer Tank Co Inc
Baumgartner Gate Factory
Century Fence Co
Colorado Fuel & Iron Corp
Colorado Fuel & Iron Corp
Continental Steel Corp

AMERICAN BUILDER
### Fiber Board

(See Wallboard & Sheathing, Fiber; also Insulating Board)

### Fiber Joint Sewer Pipe

(See Pipe, Sewer)

### Files, Saw & Circular

Belaw Machinery Co
Carborundum Co
Dixton Div H K Porter Co Inc
Hanchett Mfg Co
Heller Tool Co
Hoe R & Co Inc
Huber Brothers Saw Mfg Co Inc
Nicholson File Co
Plumb Fayette R Inc
Simonds Saw & Steel Co

### Finishes, Wallboard

(See Cement, Wallboard Joint)

### Finishes & Sealers

Allied Chemical Corp Barrett Div
American Asbestos Product Co
American Floor Machine Co
American Marietta Co Valudra Div
American Varnish Co
Armstrong Cork Co
Asphalt Corp of America
Bangkok Industries Inc
Barreled Sunlight Paint Co
Barnes Brothers Div of Am Marietta Co
Biddle Co
Borden Chemical Co Div Borden Co
Bruce E L Co
Camp Co Inc
Ceressal Waterproofing Corp
Chicago Bronze & Color Works
Clarke Floor Machine Co
Cromar Co
Dad & Lad Co
Devoe & Reynolds Co Inc
Dixson Joseph Crucible Co
Douglas & Sturgess
DuPont de Nemours & Co Inc E I
Eliott Paint & Varnish Co
Flexrock Co
Flintkote Co
Forman-Ford & Co
Gildden Co
Globe Paint Works Inc
Hill Floor Machine Co Inc
Horn & C Companies Div Sun Chem Corp
International Chemical Co Inc
Johnson's Wax
Kyanite Paints Inc
Lawrence W W & Co
LeRoy Bros
Lucas John & Co Inc
Marietta Paint & Color Co
Martin-Senour Co
McGuffie Co
Minnesota Mining & Mfg Co
Minnesota Paints Inc

### Minwax Co Inc

11 WEST 42nd ST.
NEW YORK 36, N.Y.

Minwax Tile Co
Monroe Co Inc
Moore Benjamin & Co
National Chemical & Mfg Co
National Mfg Corp
O'Brien Corp
Poe Paint & Color Co
Patterson-Sargent Co
Peterson D J Co
Fifetko-Paint Paint Mfg Co
Pittsburgh Plate Glass Co
Pratt & Lambert Inc
Protection Products Mfg Co
Quartz Mosaic Inc
Ranette Mfg Co
Rockoote Paint Co
Sagolla Paints Inc
Sefilditz Paint & Varnish Co
Selby Battersby & Co
Sherwin-Williams Co
Sonbern P L Sons Inc
Stay-Tite Products Co
Steelcoat Manufacturing Co
Tamms Industries Inc
Thompson E A Co Inc
Tremco Mfg Co
Tufcrete Co Inc
Twentieth Century Paint & Varnish
United States Gypsum Co
United States Plywood Corp
U S Protective Coatings Inc
Vaupar Corp
Vita-Yar Corp
Wadsworth Hewland & Co
Water-Dennis Corp
Woofer Sealcoat Co
X-Pando Corp
Yenkin-Majestic Paint Corp
Zinner William & Co Inc

### Finishing Machines, Concrete (See Concrete Finishing Machines)

Fire, Lumber
(See Lumber, Fir, Douglas)

Fire, Plywood
(See Plywood, Douglas Fir)

Fire Alarm Systems
(See Alarms, Fire & Burglar)

Fire Extinguishers
Moore Pipe & Sprinkler Co

### Fireplaces, Outdoor & Equipment

Adams Co
Benett Irelan Inc
Burr-Southern Div State Steel Ind Inc
Colonial Fireplace Co
Columbia Brick Works
Donley Brothers Co
Dura-Vent Corp
Goodwin of Calif Inc
Grillcraft Co
Halsey Bros
Harrise Inc
Hasty-Bake Mfg Co Inc

### Fireplaces, Prefabricated

Condensation Engineering Co
Condon-King Co
Donley Brothers Co
Hearthrite Conditioning Co
Majestic Co Inc
Oakland Foundry Co
Readybuilt Products Co
Stratton Terstegge Co
Vega Industries Inc

### Fireplaces, Units, Metal

Bennett-Ireland Inc
Bullden Brick Co
Bullden Fireplace & Supply
Colonial Fireplace Co
Columbia Brick Works
Condon-King Co
Donley Brothers Co
Douglas Mfg Corp
Grillcraft Co
Hearthrite Conditioning Co
Majestic Co Inc
State Steel Industries Inc
Stratton Terstegge Co
Superior Fireplace Co
Vega Industries Inc

### Fixtures, Electric Lighting

American Louvre Co
Arrow Hart & Hegeman Elec Co
Art Metal Co
Atlas Electric Prod Co
Benjamin Electric Co
Cannon Electric Co
Curtiss-Albright Lighting Co
Del Val Mfg Co
Eagle Electric Mfg Co
Emerson Electric Mfg Co
Emerson-Imperial Lighting Co
Emerson-Pryne Co

---

**Jaycandescent LIGHTING ORIGINALS**

100% of traditional, contemporary and transitional ceiling and wall fixture designs for home and commercial use.

**PARASOL SERIES**

Newest light under the sun! Wall and ceiling fixtures resplendent in white and gold stripping.

**ANZAC**—Spectacular wall and ceiling fixtures with walnut boomerang motif.

**VISORITE**—New concept in dramatic wall lighting.

At distributors in principal cities or write for literature Dept. A800.

**JAY LIGHTING MFG. CO., Inc.**

5 East 35th St., New York 16, N. Y.
Saint Paul Corrugating Co
Tennison Bros Inc
Wheeling Corrugating Co
Yeck Mfg Co

**Flashing, Paper-Treated**

American Sisalkraft Corp
Johnson-Manville Corp
Kordite Corp
Lehon Co
Ludlow Papers Inc
Pioneer Div Flintkote Co
Protective Papers Inc
Richter Co
Thilmany Pulp & Paper Co
Wasco Products Inc

**Flashing, Plastic**

Carrollton Manufacturing Co
Dasco Co Inc
Delta Co
Dow Chemical Co
Visking Co
Wasco Products Inc

**Flooring, Asphalt Tile** *(See Tile, Asphalt)*

**Flooring, Beech**

Marsh Lumber Co

**Flooring, Ceramic Tile** *(See Tile, Ceramic)*

**Flooring, Cork** *(See Tile, Cork)*

**Flooring, Hardwood, Oak**

Alabama Oak Flooring Co
Arkansas Oak Flooring Co
Atlanta Oak Flooring Co
Bradley So Div Politch Foresta Inc
Bruce E L Co
Carpenter Oak Flooring Co
Chickasawga Cedar Co Inc
Cloud Oak Flooring Co
Commonwealth Lumber Corp
Connor Lumber & Land Co
Cook A B Co
Cook F C & Co
Cromar Co
Crossett Lumber Co
DeSoto Hardwood Flooring Co
Dierks Forests Inc
Exchange Sawmills Sales Co
Fair D L Lumber Co
Fordyce Lumber Co
Frost Forest Products Div
Galloway Lumber Co
General Oak Flooring Co
Georgia Pacific Corp
Graybeal C R & Sons
Grissom-Rakestraw Lumber Co
Hardwood Corp of America
Harrs Hardwood Co Inc
Harris Mfg Co
Hassell & Parke Inc
Higgins Industries Inc
Independent Oak Flooring Co
International Paper Co Long-Bell Div
Kentucky Flooring Co of Va Inc
King Lumber Industries
Leathers A H Mfg Co
Marsh Lumber Co
McMinnville Mfg Co
Meadow River Lumber Co
Meridian Wood Prods Co
Miller Bros Co
Monarch Flooring Co
Mower Lumber Co
National Forest Prods Co
Ozan Lumber Co
Osark Oak Flooring Co
Phillips Ryman Lumber Co Inc
Pickens Hardwood Flooring Co Inc
Pelletier Inc
Plywood Inc
Plywood Co
Robbins Flooring Co
Sealey Flooring & Lumber Co Inc
Smith W T Lumber Co
Southern Pine Lumber Co
Texoaq Flooring Co
Thompson Oak Flooring Co
Tibbals Flooring Co
Tremont Lumber Co
Triplett Lumber Co Inc
Vesch-May-Wilson Inc
Virginia Oak Flooring Co Inc
Webster H E Lumber Co
Weils J W Lumber Co
Williams J L & Sons
Williams & Varis Hardwood Co
Wood-Mosaic Corp Parkay Div
Yawkey Bissell Hardwood Flooring Co
Youngblood Lumber Co

**Flooring, Linoleum**

Armstrong Cork Co
Bird & Son Inc
Congoleum-Naarm Inc

**Flooring, Maple**

Marvel Metal Prods Co

**Flooring, Parquetry**

Bangkok Industries Inc
Berger Insulation Co Inc
Bradley So Div Politch Foresta Inc
Bruce E L Co
Cromar Co
Fair D L Lumber Co
Higgins Industries Inc
Horner Flooring Co
McMinnville Mfg Co
Memphis Hardwood Flooring Co
Modernwood Co
Plyfloor Inc
Wood-Mosaic Corp Parkay Div

**Flooring, Pecan**

Hassell & Parke Inc

---

**Fixtures, Plumbing** *(See Plumbing Fixtures)*

**Flashings, Aluminum**

Aluminum Co of America
Kaiser Aluminum & Chemical Sales Inc
Ludlow Papers Inc
Nichols Wire & Aluminum Co
Penn Supply & Metal Corp
Quaker State Metals Co
Revere Copper & Brass Inc
Reynolds Aluminum Supply Co
Reynolds Metals Co
Wasco Products Inc
Yeck Mfg Co

**Flashings, Copper**

American Brass Co
American Sisalkraft Corp
Bridgport Brass Co
Ceco Steel Prods Corp
Chase Brass & Copper Inc
Conover Steel & Wire Co
Delta Co
Hussey C G & Co
Inland Steel Products Co
Klauer Mfg Co
Ludlow Papers Inc
Penn Supply & Metal Corp
Revere Copper & Brass Inc
Reynolds Aluminum Supply Co
Wasco Products Inc

**Flashings, Galvanized & Terne**

Bethlehem Steel Co
Ceco Steel Prods Corp
Columbia Brick Works
Conover Steel & Wire Co
Fullanabbee Steel Corp
Inland Steel Products Co
Klauer Mfg Co
Northwest Metal Products Co
Penn Supply & Metal Corp
Reeves Steel & Mfg Co Div
Republic Steel Corp
Reynolds Aluminum Supply Co
Flooring, Pine & Fir
Bradley So Div Potlatch Forests Inc
Brooks-Scanton Inc
Crossett Lumber Co
Dierks Forests Inc
Fair D L Lumber Co
Georgia Pacific Corp
Hardwood Corp of America
Lightsey Bros
Mauk Seattle Lumber Co
Ozan Lumber Co
Pacific Lumber Co
Phillips Ryhne Lumber Co Inc
Russbro Lumber Co
Southern Pine Lumber Co
Vesch-May-Wilson Inc
Weyerhaeuser Co Lumber & Plywood Div

Flooring, Plastic
(See Tile, Vinyl)

Flooring, Rubber
(See Tile, Rubber)

Flooring, Underlayment
Aetna Plywood & Veneer Co
Allied Chemical Corp Barrett Div
Allied Compositions Co Inc
American Asbestos Product Co
American Bitumuls & Asphalt Co
American Mat Corp
Armstrong Cork Co
Azrock Floor Prod Div Uvalde Rock
Borden Chemical Co Div Borden Co
Camp Co Inc
Carey Phillips Mfg Co
Celerex Corp
Dasco Co Inc
Flexrock Co
Flintkote Co
Forest Fiber Products Co
Georgia Pacific Corp
Gering Plas Div Studebaker-Packard Co
Goodrich B F Co Flooring Products
Harbor Plywood Corp
Insulite Div Minn & Ontario Paper Co
Johns-Manville Corp
Kochton Plywood & Veneer Co Inc
Kontex Corp
Meadow W R Inc
Milwaukee Plywood Co
Miracle Adhesives Corp
National Mfg Corp
Paxon Frank Lumber Co
Pecora Inc
Presstite Div American-Marietta Co
Protective Papers Inc
Selby Batterby & Co
Southern Plaswood Corp
Tamms Industries Co
Thomas Moulding Co Inc
Thomason Plywood Corp
Tremco Mfg Co
Tufcrete Inc
United States Gypsum Co
United States Plywood Corp
Weyerhaeuser Co Silvatek Div
Wood Conversion Co

Flooring, Wall & Covering,
Marble
(See also Stone, Marble)
Carthage Marble Corp
Daseo Co Inc
Marsh Wall Products Inc
Vermont Marble Co

Flue Lining
American Vitrified Prods Co
Columbia Brick Works
Dee Clay Prod Co Inc
Evans Brick Co
Interstate Brick Co
Owensboro Sewer Pipe Co
Pattin Clay Mfg Co
Pomona Terra-Cotta Co
Robinson Clay Product Co
Stillwater Clay Products Co
Stratville Brick Co
Stratton Drain Tile Co

Flues & Chimneys,
Prefabricated
Condensation Engineering Co
General Products Co
Majestic Co Inc
Metalswest Div Wm Wallace Co
Stratton Drain Tile Co
Van Packer Co Div Flintkote Co
Vega Industries Inc

Folding Doors
(See Doors, Flexible & Folding)

Forced Air Furnaces
(See Furnaces, Forced Air)

Fork Lifts
(See Trucks, Fork Lift)

Forms, Concrete
(See Concrete Forms)

Frames, Door & Window,
Metal
Aetna Steel Prods Corp
Amweld Bldg Prods Div Am Weld & Mfg
Ceco Steel Prods Corp
Clay Equipment Corp
Federal Windows Mfg Co Inc
Fenestra Inc
International Fireproof Door Co
Kewanee Mfg Co
Knapp Brothers Mfg Co
Lorenz Prods Inc
Marmet Corp
Mauk Seattle Lumber Co
Messer Bros Iron Co
Metal Crafters
Mueller Brass Co
National Aluminum Co
One-der Frame Corp
Pittsburgh Plate Glass Co
Republic Steel Corp Truscon Div
Richards-Wilcox Mfg Co
Richardson Fireproof Door Co
Spartan Steel Products Corp
Starline Inc
Steelcraft Mfg Co
Trinco Metal Products
United Steel Fabricators Inc
Virginia Metal Products Inc

Frames, Door & Window,
Wood
Andersen Corp
Anson & Gilkey Co
Bradley So Div Potlatch Forests Inc
Caraco Inc
Cel Mfg Co
Crestline Co
Curtis Companies Inc
Deer Park Pine Industry Inc
Dierks Forests Inc
Farley & Loetcher Mfg Co
Fiprime Products Co
Fordyce Lumber Co
Georgia Pacific Corp
Goshen Sash & Door Co
Gregg & Son Inc
Hines Edward Lumber Co
Hyde-Murphy Co

Flames & Flames,
(See also Fire, Flames)

Framing, Steel
(See Steel, Structural)

Framing, Wood
(See Lumber)

Freezers
(See Refrigerators & Freezers)

Fronts, Store
(See Store Fronts)

Furnaces, Counterflow Units
Airtemp Div Chrysler Corp
American Furnace Co
Amber Standard Air Conditioning Div
Armstrong Furn Co Div Natl U E
Bard Mfg Co
Bryant Manufacturing Co
Burnham Corp Warm Air & Cooling Div
Carrier Corp
Chattanooga Royal Co
Coleman Co Inc
Day & Night Mfg Co
Delco Appliance Div General Motors
Dowagiac Steel Furnace Co
Dravo Corp
Empire Stove Co
General Automatic Products Corp
Gen Electric Co Air Conditioning Dept
Hill-Quaker Corp
Henry Furnace Co
Hess Co
International Oil Burner Co
Irvez Fireman Mfg Co
Jackson & Church Div York-Shipley Inc
Janitrol Heating & Air Conditioning
Kaustine Furnace & Tank Co
Lennox Industries Inc
Majestic Co Inc
Mayflower Air-Conditioners Inc
Meyer Furnace Co
Monogram Industries Inc
Merrison Steel Products Inc
Motor Wheel Corp Duro-Therm Div
Mueller Climatrol Div Worthington Corp
National-U S Radiator Corp
Niagara Furn Div Forest Fire Co
Northwest Foundry & Furnace Co
Oslen C A Mfg Co
Pattin J V Co
Payne Co
Perfection Industries Div Hupp Corp
Pioneer Manufacturing Co
Premier Furnace Co
Rheem Mfg Co
Richmond Plumbing Fixtures
Roberts Gordon Appliance Corp
Rybolt Heater Co
Samuel Stamping & Enameling Co
Sequilla Manufacturing Co
Smith A O Corp Fernaglas Div
Stratton Terstegge Co
Tifoce Inc
Temperature Appliance Mfg Co
Thatcher Furnace Co
Toridheet Div Cleveland Steel Prods Corp

Ideal Co Mfg Div Wm Cameron & Co
International Paper Co Long-Bell Div
Keystone Frame & Mfg Co
Lorenz Prods Inc
Malet Mfg Co
Misoula White Pine Sash Co
Mutual Fir Column Co
Pacific Mfg Co
Pacific Mutual Door Co
Rockwell of Randolph Inc
Southern Mill & Mfg Co
Wel-Bilt Products Co
Western Pine Mfg Co
White Pine Sash Co
Woodward Lumber Co

Turn to Section 2—Manu fac turers Directory for all addresses
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Division / Department</th>
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<tbody>
<tr>
<td>Typhoon Air Cond Co Div Hupp Corp</td>
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<tr>
<td>Viking Mfg Corp</td>
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<tr>
<td>Wayne Home Equipment Co Inc</td>
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<tr>
<td>Williams Oil-O-Matic Heat Co Div</td>
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<td>Williamson Co</td>
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<td>Wood John Co Heater &amp; Tank Div</td>
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<tr>
<td>York Corp Sub Borg-Warner</td>
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<tr>
<td>York-Shipley Inc</td>
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</tbody>
</table>

**Furnaces, Floor**

- Bryant Manufacturing Co
- Cavalier Corp
- Cellnet Inc
- Coleman Co Inc
- Coolerator McGraw-Edison
- Empire Stove Co
- General Automatic Products Corp
- Holly-General Co Div Siegler Corp
- Janitor Heating & Air Conditioning Div
- Kresky Mfg Co Inc
- Kremo-Stamm Mfg Co
- Little H C Burner Co
- Monogram Industries Inc
- Morrison Steel Products Inc
- Northwest Metal Products Inc
- Payne Electric Co
- Premier Furnace Co
- Rheem Mfg Co
- Samuel Stamping & Enameling Co
- Stratton Terstegge Co
- Superflame Queen Prods Div King Seeley
- Teco Inc
- Temperature Appliance Mfg Co
- Typhoon Air Cond Co Div Hupp Corp
- Viking Mfg Corp

**Furnaces, Forced Air**

- Airtex Div Chrysler Corp
- American Furnace Co
- American Standard Air Conditioning Div
- Armstrong Furn Co Div Natl U E
- Bard Mfg Co
- Bryant Manufacturing Co
- Burnham Corp Warm Air & Cooling Div
- Carrier Corp
- Chattanooga Royal Co
- Coleman Co Inc
- Day & Night Mfg Co
- DeLo Appliance Div General Motors
- Dowagiac Steel Furnace Co
- Dravo Corp
- Empire Stove Co
- Gaffers & Sattler
- Gen Electric Co Air Conditioning Dept
- Heil-Quaker Corp
- Henry Furnace Co
- Hess Co
- Holland Furnace Co
- Holly-General Co Div Siegler Corp
- Ingersoll Prod Div Borg-Warner
- International Oil Burner Co
- Iron Fireman Mfg Co
- Jackson & Church Div York-Shipley Inc
- Janitrol Heating & Air Conditioning Div
- Johnston S T Co
- Kaustine Furnace & Tank Co
- Lennox Industries Inc
- Majestic Co Inc
- Mayflower Air-Conditioners Inc
- Meyer Furnace Co
- Mississippi Steel Products Inc
- Mueller Climatrol Div Worthington Corp
- National-U S Radiator Corp
- Niagara Furnace Co Div Forest Foundries Co
- Norman Products Co
- Northwest Foundry & Furnace Co
- Olsen C A Mfg Co
- Patten J V Co
- Payne Co
- Perfecto Industries Div Hupp Corp
- Pioneer Manufacturing Co
- Premier Furnace Co
- Reznor Mfg Co
- Rheem Mfg Co
- Richmond Plumbing Fixtures
- Robert's Gordon Appliance Corp
- Rybalde Heating Co
- Sequoia Manufacturing Co
- Smith A O Corp Permaglass Div
- Stewart-Warner Corp
- Stratton Terstegge Co
- Teco Inc
- Temperature Appliance Mfg Co
- Thatcher Furnace Co
- Torrident Div Cleveland Steel Prods Corp
- Typhoon Air Cond Co Div Hupp Corp
- Viking Mfg Corp
- Wayne Home Equipment Co Inc
- Williams Oil-O-Matic Heat Co Div
- Williamson Co
- Wood John Co Heater & Tank Div
- York Corp Sub Borg-Warner
- York-Shipley Inc
- Zink John Co

**Furnaces, Suspended**

- Airtex Div Chrysler Corp
- American Furnace Co
- American Standard Air Conditioning Div
- Armstrong Furn Co Div Natl U E
- Bard Mfg Co
- Bryant Manufacturing Co
- Burnham Corp Warm Air & Cooling Div
- Carrier Corp
- Chattanooga Royal Co
- Chicago Fire Brick Co
- Coleman Co Inc
- DeLo Appliance Div General Motors
- Dowagiac Steel Furnace Co
- Dravo Corp
- Empire Stove Co
- General Automatic Products Corp
- Gilbert & Barker Mfg Co
- Heil-Quaker Corp
- Henry Furnace Co
- Hess Co
- Iron Fireman Mfg Co
- Jackson & Church Div York-Shipley Inc
- Janitrol Heating & Air Conditioning Div
- Kaustine Furnace & Tank Co
- Lennox Industries Inc
- Majestic Co Inc
- Mayflower Air-Conditioners Inc
- Meyer Furnace Co
- Mississippi Steel Products Inc
- Mueller Climatrol Div Worthington Corp
- National-U S Radiator Corp
- Niagara Furnace Co Div Forest Foundries Co
- Norman Products Co
- Northwest Foundry & Furnace Co
- Olsen C A Mfg Co
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- Pioneer Manufacturing Co
- Premier Furnace Co
- Reznor Mfg Co
- Rheem Mfg Co
- Richmond Plumbing Fixtures
- Rybalde Heating Co
- Sequoia Manufacturing Co
- Stratton Terstegge Co
- Teco Inc

**Furnaces, Wall**

- Armstrong Products Corp
- Chattanooga Royal Co
- Coleman Co Inc
- Day & Night Mfg Co
- Empire Stove Co
- Gaffers & Sattler
- Holly-General Co Div Siegler Corp
- International Oil Burner Co
- Kresky Mfg Co Inc
- Little H C Burner Co
- Morrison Steel Products Inc
- Muller Climatrol Div Worthington Corp
- Northwest Metal Products Inc
- Ohio Foundry & Mfg Co
- Payne Co
- Perfection Industries Div Hupp Corp
- Pioneer Manufacturing Co
- Samuel Stamping & Enameling Co
- Stewart-Warner Corp
- Suburban Propane Gas Corp
- Teco Inc

**Fuse Boxes**

- Adam Frank Electric Co
- Columbia Metal Box Co
- Cutler Hammer Inc
- Federal Pacific Electric Co
- General Electric Co Circuit Prot Devices
- Kees F D Mfg Co
- Keystone Mfg Co
- Square D Co

**Garage Doors**

(See Doors, Garage)

**Garage Hardware**

(See Hardware, Garage)

**Garages, Prefabricated**

(See Directory of Home Manufacturers)

**Garbage Disposers**

(See Disposers, Garbage; also See Incinerators)

**Generators, Engine-Driven**

- Fabrow Mfg Inc
- Kalamazoo Corp
- Kohler Co
- Onan D W & Sons Inc
- Pacific Mercury Marketing Div
- Universal Motor Co
- Waukesha Motor Co
- Wincharger Corp
- Witte Engine Works Oil Well Supply Div

**Generators, Portable, Electric**

- Allis Chalmers Mfg Const Mach Div
- Caterpillar Tractor Co

**AMERICAN BUILDER**
Dayton Electric Mfg Co
Fairbanks Morse & Co
Homelite Div Textron Inc
Jackson Vibrators Inc
Kohler Co
Koala Industries Inc
Le Bureson & Sons Inc
Pacific Mercury Marketing Div
Pioneer Gen E Motor Corp
Rockaway Sales Co
Speedway Mfg Div Thor Power Tool Co
Thor Power Tool Co
Universal Motor Co
Wincharger Corp
Winpower Mfg Co

Glass, Architectural & Ornamental
America-Saint Gobain Corp
Blue Ridge Glass Corp
Cortez-Forman Co
Forman-Ford & Co
Kimble Glass Co
Libbey-Owens-Ford Glass Co
Mississippi Glass Co
Nurre Co
Pennsylvania Wire Glass Co
Perrine Industries Inc
Pittsburgh Plate Glass Co
Safete Glass Co

Glass Blocks
Forman-Ford & Co
Kimble Glass Co
Libbey-Owens-Ford Glass Co
Mississippi Glass Co
Nurre Co
Pennsylvania Wire Glass Co
Perrine Industries Inc
Pittsburgh Plate Glass Co
Southern Sash Sales & Supply Co

Glass, Crystal Sheet
American-Saint Gobain Corp
Fourco Glass Co
Libbey-Owens-Ford Glass Co
Nurre Co
Pittsburgh Plate Glass Co
Toledo Plate & Window Glass Co

Glass, Double Pane
Forman-Ford & Co
Libbey-Owens-Ford Glass Co
Mondial United Corp
Nurre Co
Perrine Industries Inc
Pittsburgh Plate Glass Co
Toledo Plate & Window Glass Co

Glass, Plate
American-Saint Gobain Corp
Donnelly-Kelly Glass Co
Forman-Ford & Co
Gates Sash & Door Co
Libbey-Owens-Ford Glass Co
Nurre Co
Pittsburgh Plate Glass Co
Safete Glass Co
Toledo Plate & Window Glass Co

Glass, Structural
American-Saint Gobain Corp
Mondial United Corp
Perrine Industries Inc

Glass, Window, Wire
American-Saint Gobain Corp
Blue Ridge Glass Corp
Forman-Ford & Co
Gates Sash & Door Co
Libbey-Owens-Ford Glass Co
Mississippi Glass Co
Nurre Co
Perrine Industries Inc
Pittsburgh Plate Glass Co
Toledo Plate & Window Glass Co

Glazing Compounds
(See Caulking & Glazing Compounds)

Greenhouses, Prefabricated
Jones Shutter Products
Lord & Burnham Div Burnham Corp

Grilles, Door & Window
Bayley William Co
Cincinnati Iron Fence Co Inc
Curtis Companies Inc
Hendrick Mfg Co
Hutchinson R H & Co
MacMillan-Hughes Co
Metallurgical Co
Meyers Fred L Mfg Co
United States Register Co
Weib Mfg Co Inc
Yock Mfg Co

Grinders, Drill
McDonough Mfg Co

Grinders, Tool & Cutter
McDonough Mfg Co

Guards, Areawall
(See Areawalls & Guards)

Gum Lumber
(See Lumber, Gum)

Guns, Caulking
Force-Flo Inc

Guns, Paint Spray
(See Paint Spray Guns)

Guns, Pneumatic Concrete Application
Air Placement Equipment Co
Santa Ana Mfg Co
Sprayton Equipment Co

Guns, Pneumatic, Plaster
Plastering Development Center Inc

Gutters, Metal
Alabama Metal Lath Co Inc
Aluminum Co of America
Cece Steel Prod Co
Chase Brass & Copper Co
Inland Steel Products Co
Keystone Mfg Co
Krause Mfg Co
Lyon Coop五金 Co
Northwest Metal Products Inc
Penn Supply & Metal Corp
Quaker State Metals Co
Reeves Steel & Mfg Co
Republic Steel Corp
Reynolds Aluminum Supply Co
Reynolds Metals Co
Saint Paul Corrugating Co
Tennent Bros Inc
Wheeling Corrugating Co
Zurn Industries Inc Plumbing Prods Div

Gypsum Plaster
(See Plaster, Gypsum)

Hammers, Gasoline
Barco Mfg Co

Hammers, Hand
(See Tools, Carpenter, Hand)

Hammers, Pneumatic
Chicago Pneumatic Tool Co
Dayton Electric Mfg Co
Forman-Ford & Co
Kohler Co
Le Bureson & Sons Inc
Milwaukee Elec Tool Corp
Power Line Sales Inc
Power Tool Co
Speedway Mfg Div Thor Power Tool Co

Hammers, Portable Electric
Black & Decker Mfg Co
Blum Julius & Co Inc
Forman-Ford & Co
Homelite Div Textron Inc
Ingersoll-Rand Co
Master Vibrator Co
Mills & Co
Milwaukee Elec Tool Corp
Phillips Drill Co
Rawplug Co Inc
Skill Corp
Speedway Mfg Div Thor Power Tool Co
Stanley Electric Tools
Syntron Co
Ther Power Tool Co
Wodack Electric Tool Corp

Hangers, Bathtub
Amer-Standard Plumbing & Heating Div
Hollander Manufacturing Co
Kohler Co
Lucke William B Inc
Miron Chrome Co Inc

Hangers, Insulation
Moore Goodloe E Inc

Hangers, Joist & Lumber
Adams Co
Baumgartner Gate Factory
Cleveland Steel Specialty Co
Copco Steel & Engineering Co
Dayton Sure-Grip & Shure Co
Donley Brothers Co
Harris Inc
Ideal Hanger Co
Inland Steel Products Co
Kees F D Mfg Co

Hinges
Armstrong Cork Co
Aetna Plywood & Veneer Co
Armstrong Cork Co

KEES HEAVY DUTY FLUSH MOUNTING JOIST HANGERS
. . . eliminate notching. Made of 14 gauge rust resistant galvanized steel. Can accommodate rods or lag screws. Inexpensive. Single or double width.

Box 762
F. D. KEES MFG CO.
Beatrice, Nebraska

Lanebro Mfg Co
Rudeen N H Co Inc
Timber Engineering Co
Timber Fasteners Inc
United Steel Products Co
Vestal Mfg Co

Hardboard
Abitibi Corporation
Aetna Plywood & Veneer Co
Armstrong Cork Co

American-Saint Gobain Corp
Blue Ridge Glass Corp
Pittsburgh Plate Glass Co
Forman-Ford & Co
Gates Sash & Door Co
Libbey-Owens-Ford Glass Co
McDonough Mfg Co
Powernail Co
Speedway Mfg Div Thor Power Tool Co

APRIL 1960

Turn to Section 2—Manufacturers Directory for all addresses
Hardware, Cabinet
Acme Appliance Mfg Co Acme Bidrs
Acorn Mfg Co
Ajax Hardware Corp
Amerock Corporation

Hardware, Closet
(See Closet Accessories)

Hardware, Door
Acme Appliance Mfg Co Acme Bidrs
Adams Rite Mfg Co
Air Control Products Inc
Ajax Hardware Corp
Allister Mfg Co
Alliston-Prouty Inc
American Screen Products Co
Amerock Corporation

Aubrey Hardware Mfg Inc
Auburn Hardware Inc
Braiser Mfg Co
Challenger Lock Co
Colombian Bronze Co
Corbin L & F Div Amer Hardware Corp
Designware Industries Inc
Dexter Lock Div Dexter Industries
Engineered Products Co
Extension Drawer Support Co
Frantz Mfg Co
Frink-Gallagher Mfg Co Inc
Genaco Tools
Grant Pulley & Hardware Corp
Griffin Mfg Co
H & M Cabinet Service
Hager C & Sons Hinge Mfg Co
Heller W C & Co
Ideal Brass Works Inc
Ives H B Co

Pushbutton, magnetic, and friction types for every purpose. Chromium, Brass, Copper, and Colonial finishes.

Baldwin Hardware Mfg Corp
Bommer Spring Hinge Co Inc
Braiser Mfg Co
Challenger Lock Co
Chicago Spring Hinge Co
Colorado Fuel & Iron Corp
Corbin L & F Div Amer Hardware Corp
Detroit Hardware Mfg Co
Dexter Lock Div Dexter Industries
Earle Hardware Mfg Co
Fenestra Inc

Frantz Mfg Co
Getty H S & Co Inc
Gouger C L Machine Co Lock Div
Grand Specialties Co
Grant Pulley & Hardware Corp
Griffith Mfg Co
Hager C & Sons Hinge Mfg Co
Hardware Products Inc
Harlow Products Corp
Hinge Butt Template
Ideal Brass Works Inc
Independent Lock Co
Ives H B Co
Kant-Slam Door Check Co
Knape & Vogt Mfg Co
Kwikset Div American Hardware Corp
LCN Closers Inc
Lawrence Brothers Inc
Leigh Bidg Prod Div Air Con Prod Inc
Lockwood Hardware Mfg Co
Mackinley-Duncan Co
McKinney Mfg Co
Morgan-Wightman Co

National Aluminum Co
National Lock Co
National Mfg Co
Norton Door Closer Co
Nudor Mfg Corp
Pacific Brass & Hardware Mfg Co
Parker & Hdw Mfg Corp
Peters Jas & Son
Richards-Wilcox Mfg Co
Russell & Erwin Div Amer Hardware Corp
Safe Padlock & Hdw Co
Sargent & Co
Selco Walter E & Co
Sheron Hardware Mfg Co
Shelby Metal Prod Co
Shelby Spring Hinge Co
Shymaker Lock Co
Soss Mfg Co
Stanley Works
Sterling John Corp
Sturdilite Products Inc
Triangle Mfg Co
Turner Corp
Washington Steel Prod
Western Lock Mfg Co
Yale & Towne Mfg Co Yale & Lock & Hardware Div
Yoder Manufacturing Co

Hardware, Garage, Upward Acting
Alliston-Prouty Inc
Ambassa Dor Co
Barber Colman Co
Better-Bilt Door Co
Calder Mfg Co
Capirol Products Co
Colorado Fuel & Iron Corp
Crawford Door Co
Frantz Mfg Co
Hager C & Sons Hinge Mfg Co
Howell Mfg Co
Lawrence Brothers Inc
McKee Door Co
Phenix Mfg Co
Power Door Co
Raynor Mfg Co
Richards-Wilcox Mfg Co
Ridge Door Co
Stanley Works
Tavard Co
Taylor Lock Co
Wagner Mfg Co

Hardware, Closets (See Closet Accessories)

AMERICAN BUILDER
### Heating Controls

<table>
<thead>
<tr>
<th>Corporation</th>
<th>Division</th>
</tr>
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<tbody>
<tr>
<td>Motor Wheel Corp</td>
<td>Duo-Therm Div</td>
</tr>
<tr>
<td>Holly-General Co</td>
<td>Siegler Corp</td>
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<tr>
<td>Heil-Quaker Corp</td>
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<tr>
<td>Young Radiator Co</td>
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### Heating Registers

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<tr>
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<tr>
<td>Carrier Corp</td>
<td>Ceilheat Inc</td>
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<td>Cavalier Corp</td>
<td>Continental Radiant Glass Heating</td>
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<td>Coolerator McGraw-Edison</td>
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<tr>
<td>Berko Electric Mfg Corp</td>
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<td>General Electric Co</td>
<td>Wiring Device Dept</td>
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<td>Gen Elec Co Const Mat Sales Operation</td>
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<td>Electrend Products Corp</td>
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<td>Dixie Radiant Electric Heat Corp</td>
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<td>Coolerator McGraw-Edison</td>
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<td>Wiring Device Dept</td>
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<td>Gerwin Industries Inc</td>
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<td>Heatmore Inc</td>
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<td>Hunter Div-Robbins &amp; Myers Inc</td>
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<td>ILG Electric Ventilating Co</td>
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<td>International Oil Burner Co</td>
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<td>Markel Electric Prods Inc</td>
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<td>Meier Electric &amp; Machine Co Inc</td>
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<td>Muncie Gear Co</td>
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<td>Precision Parts Corp</td>
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<td>Rybolt Heater Co</td>
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<td>Slant-Fin Radiator Corp</td>
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<td>Sunwarm Inc</td>
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<td>Thermodor Elec Mfg Co</td>
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<tr>
<td>Typhoon Heat Pump Co</td>
<td>Div Hupp Corp</td>
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<tr>
<td>Vulcan Electric Co</td>
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<tr>
<td>Westinghouse Electric Corp</td>
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<td>Wingard Edwin L Co</td>
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### Heating Systems, Electric

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<td>Burnham Corp</td>
<td>Warm Air &amp; Cooling Div</td>
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<td>Carrier Corp</td>
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<td>Chattanooga Royal Co</td>
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<td>Coleman Co Inc</td>
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<td>Crane Co</td>
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<td>Day &amp; Night Mfg Co</td>
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<td>Delco Appliance Div General Motors</td>
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<td>Dowagiac Steel Furnace Co</td>
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<td>Dravo Corp</td>
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<tr>
<td>Electrend Products Corp</td>
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<tr>
<td>Electrode Div Commercial Controls</td>
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<td>Empire Stove Co</td>
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### Additional Information

- **Slant-Fin Radiator Corporation**, 130-15 89 Bd, Richmond Mil, H. Y.

- **SOLD**

- **The largest selling baseboard.**

- **Offers more to buyer, builder, contractor**
  - most desired heating
  - most economical to install
  - made by hot water heating specialists

- **Known by those who know**
  - fastest installing baseboard
  - industry's premium product

- **Known by those who know**
  - board sells homes faster

- **“The largest selling baseboard.”**

- **Smith A O Corp** Pernaglas Div
- **Smith H B Co**
- **Spencer Heater Lycoming Div-Aveo**
- **Stratton Terstegge Co**
- **Suburban Propane Gas Corp**
- **Taco Heaters Inc**
- **Thrush H A & Co**
- **Torridsheet Div Cleveland Steel Prods Corp**
- **Trane Co**
- **Triplex Heating Specialty Co Inc**
- **Utica Radiator Corp**
- **Viking Mfg Corp**
- **Vulcan Radiator Co**
- **Waterfilm Boilers**
- **Wayne Home Equipment Co Inc**
- **Webster Warren & Co**
- **Well-McClain Co**
- **Williams Oil-O-Matic Heating Co Div**
- **Wood John Co Heater & Tank Div**
- **York-Shipley Inc**
- **Young Radiator Co**

- **AMERICAN BUILDER**
Insulation, Batt or Blanket, Mineral Wool

- Allied Chemical Corp
- Barrett Div
- Baldwin-Ehret-Hill Inc
- Berger Insulation Co Inc
- Carey Philip Mfg Co
- Carney Co Inc
- Celotex Corp
- Chamberlin Co of America
- Chicago Fire Brick Co
- Corson G & W H Inc
- Eagle-Picher Co
- Forty-Eight Insulations Inc
- Johns-Manville Corp
- Kaiser Gypsum Co Inc
- Lehigh Co
- Logan-Long Co
- National Gypsum Co
- Reynolds Aluminum Supply Co
- Sealtite Insulation Mfg Corp
- Tiger Brands Div Basic Inc
- United States Gypsum Co
- U S Mineral Wool Co

Insulation, Batt or Blanket, Wood Fiber

- Berger Insulation Co Inc
- Pal-O-Pak Insulation Co Inc
- Reynolds Aluminum Supply Co
- Wood Conversion Co

Insulation, Board, Fiber

- Abibiti Corporation
- Air-O-Cel
- Allied Chemical Corp
- Barrett Div
- Bird & Son Inc
- Carey Philip Mfg Co
- Celotex Corp
- Cernei of Arizona
- Certain-Teed Sales Corp
- Creo-Dipt Co Inc
- Dant & Russell Inc
- Flinthkote Co
- Homasote Co
- Inulite Div Minn & Ontario Paper Co
- Johns-Manville Corp
- Keasbey & Mattison Co
- Logan-Long Co
- National Gypsum Co
- Pioneer Div Flintkote Co
- Reynolds Aluminum Supply Co
- Simpson Logging Co
- Southern Pine Lumber Co
- United States Gypsum Co
- Weatherbest Corp
- Wood Conversion Co

Insulation, Glass Cellular

- Falcon-G-Pak Insulation Co Inc
- Pittsburgh Corning Corp
- Reynolds Aluminum Supply Co
- Ultra-Pane

Insulation, Granular Fill

- Acme Brick Co
- Armstrong Cork Co
- Berger Insulation Co Inc
- Certain-Teed Sales Corp
- Dow Chemical Co
- Great Lakes Carbon Corp
- Johns-Manville Corp
- Nelson B F Mfg Co
- Reynolds Aluminum Supply Co
- Roberoid Co
- Texas Vermiculite Co
- Vermiculite-Northwest Inc
- Waylite Co

Insulation, Rigid Foamed Plastic

- Dow Chemical Co
- Gilman Bros Co
- Sterling Alderfer Co
- Uni-Crest Div United Cork

Insulation, Roof, Deck

- Certain-Teed Sales Corp
- Dow Chemical Co
- Forty-Eight Insulations Inc
- Meadows W R Inc
- National Gypsum Co
- Owens-Corning Fiberglas Corp
- Simpson Logging Co
- Tiger Brands Div Basic Inc
- U S Mineral Wool Co

Insulation, Slab Edge

- Baldwin-Ehret-Hill Inc
- Berger Insulation Co Inc
- Certain-Teed Sales Corp
- Dow Chemical Co
- Forty-Eight Insulations Inc
- National Gypsum Co
- Owens-Corning Fiberglas Corp
- Simpson Logging Co
- Tiger Brands Div Basic Inc
- U S Mineral Wool Co

Intercoms & Radios

- Abbeon Supply Co
- American Sisalkraft Corp
- Certain-Teed Sales Corp
- Delta Co
- Infra Insulation Inc
- Insulation Industries Inc
- Janesville Cotton Mills
- Kaiser Aluminum & Chemical Sales Inc
- Lehn Co
- Lifetime Industries Inc
- Lockport Mills Inc
- Logan-Long Co
- Ludlow Papers Inc
- Protective Paper Inc
- Quaker State Metals Co
- Reflectal Corp
- Sub Borg Warner
- Reynolds Aluminum Supply Co
- Reynolds Metals Co
- Roperoid Co
- Silvercote Prod Inc
- Steelcote Manufacturing Co
- Thilmany Pulp & Paper Co
- Wilson Grant Inc

Insulation, Batt or Blanket, Cotton Fiber

- Barnhardt Mfg Co
- Insulation Industries Inc
- Janesville Cotton Mills
- Lockport Mills Inc
- Logan-Long Co
- Pioneer Div Flintkote Co
- Reynolds Aluminum Supply Co
- Taylor Bedding Mfg Co
- Insulation, Batt or Blanket, Fiber Glass

- Armstrong Cork Co
- Berger Insulation Co Inc
- Certain-Teed Sales Corp
- Dow Chemical Co
- Great Lakes Carbon Corp Perlite Dept
- Johns-Manville Corp
- Michigan C B & Sons
- National Gypsum Co
- Oakland Mfg Co
- Sterling Alderfer Co
- Uni-Crest Div United Cork

Iron, Ornamental (See Ornamental Iron)

- Armstrong Cork Co
- Armour Cork Co
- Certain-Teed Sales Corp
- Dow Chemical Co
- Great Lakes Carbon Corp Perlite Dept
- Johns-Manville Corp
- Michigan C B & Sons
- National Gypsum Co
- Oakland Mfg Co
- Sterling Alderfer Co
- Uni-Crest Div United Cork

Ironers, Built-In

- American Sisalkraft Corp
- Armstrong Cork Co
- Berger Insulation Co Inc
- Certain-Teed Sales Corp
- Dow Chemical Co
- Great Lakes Carbon Corp Perlite Dept
- Johns-Manville Corp
- Michigan C B & Sons
- National Gypsum Co
- Oakland Mfg Co
- Sterling Alderfer Co
- Uni-Crest Div United Cork

Jack's, Ceiling

- Ameri-Standard Mfg Co
- Ameritool Inc
- Appliance Mfg Co
- Armstrong Cork Co
- Berger Insulation Co Inc
- Certain-Teed Sales Corp
- Dow Chemical Co
- Great Lakes Carbon Corp Perlite Dept
- Johns-Manville Corp
- Michigan C B & Sons
- National Gypsum Co
- Oakland Mfg Co
- Sterling Alderfer Co
- Uni-Crest Div United Cork

Jammers, Metal (See Frames, Door & Window)

- Aladdin Mfg Co
- Ameri-Standard Mfg Co
- Ameritool Inc
- Appliance Mfg Co
- Armstrong Cork Co
- Berger Insulation Co Inc
- Certain-Teed Sales Corp
- Dow Chemical Co
- Great Lakes Carbon Corp Perlite Dept
- Johns-Manville Corp
- Michigan C B & Sons
- National Gypsum Co
- Oakland Mfg Co
- Sterling Alderfer Co
- Uni-Crest Div United Cork

Joiners (See Planer & Jointers)
Joist Bridging
(See Steel, Structural)

Joists, Concrete, Precast
Colorerete Industries Inc
Flexico Stone Products Co

Joists, Steel
Bethlehem Steel Co
Ceco Steel Prods Corp
Cleveland Steel Specialty Co
Haven-Busch Co
International Steel Co
Jones & Laughlin Steel Corp
Laclede Steel Co
McCumber Inc
Penn Metal Co Inc
Republic Steel Corp
Republic Steel Corp Truscon Div
Ryerson Joseph T & Son
Sheffield Div Arco Steel Corp
Stran-Steel Corp Div Natl Steel Corp

Kitchen Appliances
(See Ranges & Ovens; also Refrigerators, Etc.)

Kitchen Cabinets, Metal
Beautyrack Kitchens Div Miller Metal
Dwyer Products Corp
Earle Kitchen Unit Co
Eljer Div Murray Corp of America
Gen Elec Co Appliance & Television Div
General Metalcraft Inc Olympia Div
Geneva Modern Kitchens
Kelvinator Div American Motors Co
Kohler Co
Krause Walter S Co
Marvel Metal Prods Co
Morgan-Wightman Co
Oakland Foundry Co
Shirley Corp
Toledo Deck & Fixture Co
Tracey-American Kitchens
United Metal Cabinet Corp
Walters Mfg Co
Westinghouse Elec Appliance Div
Youngstown Kitchens
Zenith Metal Products Co

Kitchen Cabinets, Wood
Abbeon Supply Co
Adams Engineering Co
Akron Wood Products Corp
Bettercraft Kitchens Div Miller Metal
Belwood Industries Inc
Bore Wood Prods Co Inc
Brammer Mfg Co
Caradco Inc
Colonial Products Co
Coppes Inc
Curtis Companies Inc
Del-Mar Cabinet Co Inc
Earle Kitchen Unit Co
Fairley & Leech Inc
Gegg & Son Inc
Hyde-Murphy Co
Hyde Park Products Co
I-XL Furniture Co
Ideal Co Mfg Div Wm Cameron & Co
International Paper Co Long-Bell Div
Kitchen Kompact Inc
Kitchen Maid Corp
Kitcheenizing Co of America
Krause Walter S Co
Major Line Products Co Inc
Marsh Furniture Co

Laminated Plastic
(See Plastic Laminate)

Latches
(See Hardware, Cabinet; Hardware, Door; Hardware, Window)

Lath, Gypsum
Alloy Chemical Corp Barrett Div
Bestwall Gypsum Co
Celotex Corp
Flintkote Co
Grand Rapids Gypsum Co
Jay Lighting Mfg Co Inc
Kaiser Gypsum Co Inc

Lath, Insulating
Bestwall Gypsum Co
Grand Rapids Gypsum Co
National Gypsum Co
Pioneer Div Flintkote Co
Pieterson Wall Board Co
Reynolds Aluminum Supply Co
Simpson Logging Co

Lath, Metal & Accessories
(See also Moldings, Metal)

Levels, Carpenter & Masons
Bergen C L & Sons
Bostrom-Brady Mfg Co
Columbia Brick Works
Empire Level Mfg Co
Engin Equipment Co
Goldblatt Tool Co
Graham John H & Co Inc
Hall Level & Mfg Works
Hydrolevel
Levelall
Macleanburg-Duncan Co
Mayes Bros Tool Mfg Co
Mayes R & Son Level Mfg Co
Millers Falls Co
Ox-Wall Tool Co Ltd
Peerless Level & Tool Co
Picketts Products Inc
Port Austin Level & Tool Mfg Co
Sands Level & Tool Co Div Harmon Inc
Spartan Mfg Co
Simplex Level Co
Stanley Tools
Starrett L S Co

Lighting Controls
(See Wiring Systems)

Lighting Fixtures
(See Fixtures, Electric Lighting)

Lighting, Outdoor, Gas
Arka Air Conditioning Corp
General Gas Light Co
Glasoiler Co
Robert Gordon Appliance Corp

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<td>Tamms Industries Co</td>
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<td>Toch Bros</td>
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<td>Tremco Mfg Co</td>
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<td>Truscon Labs Inc</td>
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<td>Tufcote Co Inc</td>
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<tr>
<td>Twentieth Century Paint &amp; Varnish United States Gypsum Co</td>
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<tr>
<td>US Protective Coatings Inc</td>
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<td>Valspor Corp</td>
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<td>Vita-Var Corp</td>
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<td>Wadsworth Howland Co</td>
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<td>Watco-Dennis Corp</td>
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<td>Wilbur &amp; Williams Co</td>
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<td>Wooster-Sealkote Co</td>
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**Paints & Coatings, Wood Treatment**

- Abeto Manufacturing Co
- Allied Chemical Corp Barrett Div
- Anti Hydro Waterproofing Co
- Cabot Samuel Inc
- Carbolineum Wood Preserving Co
- Chemical Products Div Darwish Inc
- Cool Roof Inc
- CRE-O-Tox Chemical Co
- Dacso Co Inc
- Desmond Bros Paint Co
- DuPont de Nemours & Co Inc
- E I Lucas John & Co Inc
- Marietta Paint & Color Co
- Osomoe Wood Preserving Co of America
- Pluxtonz Corp of America
- Reynolds Aluminum Supply Co
- Shell Chemical Corp
- Watco-Dennis Corp
- Wilbur & Williams Co
- Wood Tresting Chemicals Co

**Paints, Interior & Exterior Plastic**

- American Marietta Co Valdura Div
- Cook Paint & Varnish Co
- Dacco Co Inc
- Deveo & Raynolds Co Inc
- DuPont de Nemours & Co Inc
- Fuller W P & Co
- Glidden Co
- Kyanize Paints Inc
- Lowe Bros
- Lucas John & Co Inc
- Marietta Paint & Color Co
- National Casein Co
- National Gypsum Co
- National Mfg Corp
- Penncrete Prods Co
- Plextone Corp of America
- Quartz Mosaic Inc
- Reardon Co
- Seldlitz Paint & Varnish Co
- Tamms Industries Inc
- Twentieth Century Paint & Varnish United States Gypsum Co
- Vita-Var Corp
- Wilbur & Williams Co
- Wooster Sealkote Co

**Paints & Stains, Interior & Exterior, Oil**

- American Asbestos Product Co
- American Varnish Co
- Aresco Co
- Berry Bros Div American Marietta Co
- Chicago Bronze & Color Works
- Cook Paint & Varnish Co
- Flexrock Co
- Forman-Ford & Co
- Glidden Co

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- American Asbestos Product Co
- American Varnish Co
- Arco Co
- Berry Bros Div American Marietta Co
- Chicago Bronze & Color Works
- Cook Paint & Varnish Co
- Flexrock Co
- Forman-Ford & Co
- Glidden Co

Turn to Section 2—Manufacturers Directory for all addresses.
Today's Home Fawcett Publishing Corp
Universal Plan Service
Weyerhaeuser Co Lumber & Plywood

**TITLE INSURANCE**
**TO FILL EVERY REQUIREMENT**

**Lawyers Title Insurance Corporation**
Home Office - Richmond, Virginia

**Plaster, Acoustical**
Bestwall Gypsum Co
Builders Fireproof & Supply
Dodd Mfg Co Inc
Great Lakes Carbon Corp Perlite Dept
Johns-Manville Corp
National Gypsum Co
Nelson B F Mfg Co
Texas Vemiculite Co
Tiger Brads Div Basic Inc
United States Gypsum Co
US Mineral Wool Co
Vermiculite-Northwest Inc
Zonolite Co

**Plaster Bonding**
(See Bonding Agents, Plaster & Concrete)

**Plaster, Guns, Pneumatic**
(See Guns, Pneumatic, Plasterers)

**Plaster, Gypsum**
Allied Chemical Corp Barret Div
Bestwall Gypsum Co
Celotex Corp
Chicag Fire Brick Co
Easikote Co
Grand Rapids Gypsum Co
Kaiser Gypsum Co Inc
National Gypsum Co
Ruberoid Co
Tanum Industries Co
United States Gypsum Co

**Plaster, Insulating**
Camp Corp
Great Lakes Carbon Corp Perlite Dept
Johns-Manville Corp
National Gypsum Co
Texas Vemiculite Co
US Mineral Wool Co
Vermiculite-Northwest Inc
Zonolite Co

**Plaster & Stucco, Colored**
Grand Rapids Gypsum Co
National Gypsum Co
Ohio Lime Co
Penn Crete Prods Co
United States Gypsum Co

**Plasterboard**
(See Lath, Gypsum)

**Plastering Tools**
(See Tools, Masons, Plasterers)

**Plastic Laminates**
(See also Countertops)
Aetna Plywood & Veneer Co
Aluminum Co of America
Chemoid Co
Chlad-Relx Div Simoniz Co
Continental Can Co Comolite Dept
Evergreen States Forest Products
Fabricon Products
Farley & Loetscher Mfg Co
Fiberglas Plastics Co
Filon Plastics Corp
Formica Corp
Gen Electric Co Laminated Prods Dept
Gen Tire & Rubber Co Bldg Materials
Haskell Mfg Corp
Jones Shutter Products
Kochland Plywood & Veneer Co Inc
Ludlow Papers Inc
Masland Duraleather Co
Midwest Plywood Co
Milwaukee Plywood Co
New England Plywood Corp
National Plastic Products Co
Parkwood Laminates Inc
Paxton Franklin Lumber Co
Pioneer Plastics Corp
Plyplastex United Inc
Rainier Plywood Corp
Ray-O-Lite Corp of America
Regal Laminates Inc
Roddis Plywood Corp
Ryerson Joseph T & Son
Sandfast Glass Co
St Regis Paper Co Panelite Div
Selleck Walter E & Co
Thilmany Pulp & Paper Co
Thompson Plastics Corp
United States Plywood Corp
Westinghouse Electric Corp
Woodall Industries Inc
Youngstown Kitchens

**Plastic Moldings**
(See Moldings, Plastic)

**Plastic Panels, Reinforced**
Allied Chemical Corp Barret Div
Aluminum Co of America
Barclay Mfg Co Inc
Baxter Mfg Co
Chamberlin Co of America
Farley & Loetscher Mfg Co
Fiberglas Plastics Co
Filon Plastics Corp
Haskell Mfg Corp
Johns-Manville Corp
Lyon Asbestos Co
Miraplas Tile Co
Monographie Inc
Pennsylvania Wire Glass Co
Plywood Laminates Corp
Plywood Co
Polyplastex United Inc
Rescold Corp
Structural Mfg Co
United States Plywood Corp
United States Rubber Co
Waco Products Inc

**Plastic Pipe**
(See Pipe & Tubing, Plastic)

**Plastic Screening**
(See Screening, Plastic)

**Plastic Tile**
(See Tile, Vinyl)

**Plate Glass**
(See Glass, Plate)

**Plumbing Fixtures**
(See also Shower Stalls; Vanities, Lavatory)

**Active Tool & Manufacturing Co**
Centralia Plywood Co
Comfort Geo N Lumber Co
Corvallis Plywood
Diamond Lumber Co
Douglas Fir Plywood Co
Drain Plywood Co
Durable Fir Lumber & Plywood Co
Evans Products Co
Fort Vancouver Plywood Co
Georgia Pacific Corp
Harbor Plywood Corp
Heller Mutual Plywood Corp
Hines Edward Lumber Co
International Paper Company Long-Bell Division
Kochton Plywood & Veneer Co Inc
Linn Plywood Corp
Mar-Lin Timber Corp
Martin Bros Cont & Timber Prods Corp
Mauk Seattle Lumber Co
Medford Veneer & Plywood Corp
Menasha Sales Corp
Midwest Plywood Co
Milwaukee Plywood Co
Mt. Baker Plywood Inc
Multinomah Plywood Corp
Niagara Plywood Co Inc
North Pacific Plywood Inc
Northwest Door Co Sub St Regis Paper
Oregon Veneer Co
Oregon-Washington Plywood Co
Pacific Mutual Door Co
Paxton Frank Lumber Co
Peninsula Plywood Corp
Plywood Service Inc
Puget Sound Plywood Inc
Robison Plywood & Timber Co
Roddie Plywood Corp
Roddickraft Inc
Rosboro Lumber Co
St Paul & Tacoma Lumber Co
Simpson Logging Co
Snellstrom Lumber Co
Standard Veneer & Timber Co
Summit Sales Co
Sunset Plywood Co
Three Rivers Plywood & Timber
Timber Products Co
Triplitt Lumber Co Inc
US Plywood Corp Mutual Plywood
United States Plywood Corp
Vancouver Plywood Co
Webster H E Lumber Co
West Coast Plywood Co
Western Door & Plywood Corp
Weyerhaeuser Co Lmbr & Plywood Div
Willamette Valley Lumber Co
Woodward Lumber Co
Youngblood Lumber Co

Georgia Pacific Corp
Harbor Plywood Corp
Higgins Industries Inc
Hikko Door Co Inc
Jasper Wood Products Co Inc
Kennebec Inc
Kochton Plywood & Veneer Co Inc
Mauk Seattle Lumber Co
Midwest Plywood Co
Milwaukee Plywood Co
Niagara Plywood Co Inc
North Pacific Plywood Inc
Northwest Door Co Sub St Regis Paper
Pacific Mutual Door Co
Paxton Frank Lumber Co
Flyshoir Inc
Plywall Products Co Inc
Plywood Service Inc
Puget Sound Plywood Inc
Robison Plywood & Timber Co
Roddie Plywood Corp
Simpson Logging Co
Thomason Plywood Corp
United States Plywood Corp
Vancouver Plywood Co
Weber Veneer & Plywood Co
Western Door & Plywood Corp
Woodward Lumber Co
Youngblood Lumber Co

Plywood, Hardwood Surfaced
Aetna Plywood & Veneers Inc
Aetna Plywood & Veneer Co
Cascades Plywood Corp
Diamond Lumber Co
General Plywood Corp
Harbor Plywood Corp
International Paper Co Long-Bell Div
Kimble Glass Co Sub Owens-Illinois
Mauk Seattle Lumber Co
Midwest Plywood Co
Milwaukee Plywood Co
Paxton Frank Lumber Co
Southwood Corp
Tex-A-Panel Mfg Co
US Plywood Corp California Div
United States Plywood Corp
Woodward Lumber Co
Youngblood Lumber Co

Plywood, Overlaid
Aetna Plywood & Veneer Co
Cascades Plywood Corp
Chamolod Co
Crown Zellerbach Corp
Diamond Lumber Co
Farley & Loetscher Mfg Co
Georgia Pacific Corp
Harbor Plywood Corp
Haskette Mfg Corp
Hines Edward Lumber Co
International Paper Co Long-Bell Div
Kochton Plywood & Veneer Co Inc
Midwest Plywood Co
Milwaukee Plywood Co
Paxton Frank Lumber Co
Plywood Service Inc
Ranier Plywood Co
Roddie Plywood Corp
Simpson Logging Co
St Paul & Tacoma Lumber Co
US Plywood Corp California Div
United States Plywood Corp
West Coast Plywood Co
Westinghouse Electric Corp
Woodward Lumber Co
Youngblood Lumber Co

Plywood, Douglas Fir
Aberdeen Plywood & Veneers Inc
Aetna Plywood & Veneer Co
Arcata Plywood Corp
Atlanta Oak Flooring Co
Barnes J J H & Co
Brookings Plywood Corp
Cascades Plywood Corp

Plywood, Embossed
Aetna Plywood & Veneer Co
Georgia Pacific Corp
Harbor Plywood Corp
Kochton Plywood & Veneer Co Inc
Midwest Plywood Co
Milwaukee Plywood Co
Paxton Frank Lumber Co
Plywood Service Inc
Ranier Plywood Co
Roddie Plywood Corp
Simpson Logging Co
US Plywood Corp California Div
United States Plywood Corp
Vancouver Plywood Co
Woodward Lumber Co
Youngblood Lumber Co

Plywood, Hardwood
Aetna Plywood & Veneer Co
APCO Corp
Atlanta Oak Flooring Co
Bangkok Industries Inc
Brindell Plywood Inc
Empire Lumber & Land Co
Dulany Plywood Corp
Elliott Bay Mill Co

Porch Enclosure Panels
(See Plastic Panels, Reinforced)

Post-Hole Diggers
Ford Motor Co Tractor & Implement Di
Pumps, Booster, Heating

American Coil Co
Aurora Pump Div NY Air Brake Co
Barnes Mfg Co
Bell & Gossett Co
Chicago Pump Co
Dayton Electric Mfg Co
Decatur Pump Co
Demping Co
Erie Pump & Mfg Co Inc
Gardner-Denver Co
Godfrey Pumps Inc
Hoffman Specialty Mfg Corp
Hypro Engineering Inc
Jacuzzi Bros Inc
Lancaster Pump & Mfg Co Inc
McDonald A Y Mfg Co
Modern Swimming Pool Co Inc
Myers F E & Bros Co
National-US Radiator Corp
Novo Pump & Engine Co
Peerless Pump Div Food Machinery Corp
Red Jet Mfg Co
Taco Heaters Inc
Thrush H A & Co
Universal Mfg Co
Well Pump Co
Worthington Corp

Pumps, Contractors

Aurora Pump Div NY Air Brake Co
Barnes Mfg Co
Buffalo Forge Co
C H & E Manufacturing Co
Chain Belt Co
Chicago Pneumatic Tool Co
Chicago Pneumatic Tool Co
Continental Pump Co
Dayton Electric Mfg Co
Demping Co
Erie Pump & Mfg Co Inc
Everitt Pump & Mfg Co Inc
Flint & Walling Mfg Co Inc
Gorman-Rupp Co
Godfrey Pumps Inc
Griffin Wellpoint Corp
Homelite Div Textron Inc
Jacuzzi Bros Inc
Jaeger Machine Co
Kenco Pump Division
Le Roy Div Westinghouse Air Brake Co
Marlow Pumps Div Bell & Gossett Co
Master Mechanic Mfg Co
Midland Products Co
Morgan-Wightman Co
Morris Mfg Co
Novo Pump & Engine Co
Pacific Mercury Marketing Div
Peerless Pump Div Food Machinery Corp
Red Jet Mfg Co
Rice Pump & Machine Co

Pumps, Domestic Water Supply

Aermotor Co
Aurora Pump Div NY Air Brake Co
Baker Mfg Co
Barnes Mfg Co
Clayton Mark & Co
Continental Pump Co
Cranz Co
Dayton Electric Mfg Co
Decatur Pump Co
Demping Co
Dempster Mill Mfg Co
Everitt Pump & Mfg Co Inc
Fairbanks Morse & Co
Flint & Walling Mfg Co Inc
Goulds Pumps Inc
Hypro Engineering Inc
Jacuzzi Bros Inc
Lancaster Pump & Mfg Co Inc
McDonald A Y Mfg Co
Morrison Co
Myers F E & Bros Co
Red Jet Mfg Co
Robbins & Myers Inc
Sumo Pumps Inc
Tair Manufacturing Co
Uniflow Mfg Co
Universal Mfg Co
Wayne Handy Equipment Co Inc
Well Pump Co

Pumps, Sump

Aermotor Co
Aurora Pump Div NY Air Brake Co
Barnes Mfg Co
Chicago Pneumatic Tool Co
Chicago Pumps Co
Clayton Mark & Co
Construction Machinery Co
Dayton Electric Mfg Co
Decatur Pump Co
Demping Co
Dempster Mill Mfg Co
Everitt Pump & Mfg Co Inc
Flint & Walling Mfg Co Inc
Gorman-Rupp Co
Goulds Pumps Inc
Ingersoll-Rand Co
Jacuzzi Bros Inc
Kenco Pump Division
Lancaster Pump & Mfg Co Inc
Le Roy Div Westinghouse Air Brake Co
Marlow Pumps Div Bell & Gossett Co
Master Mechanic Mfg Co
Midland Products Co
Morgan-Wightman Co
Morris Mfg Co
Novo Pump & Engine Co
Pacific Mercury Marketing Div
Peerless Pump Div Food Machinery Corp
Red Jet Mfg Co
Rice Pump & Machine Co

Prefabricated Garages (See Directory of Home Manufacturers)

Prefabricated Houses

(See Section 5 for Names and Addresses of Home Manufacturers)

Prefabricated Garages

(See Directory of Home Manufacturers)

Prefabricated Houses

(See Section 5 for Names and Addresses of Home Manufacturers)

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Prefabricated Garages

(See Directory of Home Manufacturers)

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(See Section 5 for Names and Addresses of Home Manufacturers)
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Cribben & Sexton Co
Dixie Products Inc
Frigidaire Div General Motors Corp
Gaffers & Sattler
Gen Econ Co Appliance & Television Div
Gray & Dudley Co
Gregg & Son Inc
Hotpoint Div
Kentivator Div American Motors Co
Lindemann A J & Hoverson Co
Magic Chef
Monarch Range Co
Morgan-Wightman Co
Mt Vernon Furnace & Mfg Co
National Stove Co
Norge Div Borg-Warner Corp
Oakland Foundry Co
O’Keefe & Merritt Co
Philo Corp
Preway Inc
Roper Geo D Corp
Samuel Stamping & Enameling Co
Stiltz Corp
Stove Works Inc
Tappan Co
Tennessee Stove Works
Thermador Elec Mfg Co
Tracy-American Kitchens
Utility Appliance Corp
Wellbilt Stove Co
Westinghouse Electric Appliance Div
Westinghouse Electric Corp
Whirlpool Corp

Ranges & Ovens, Electric
Admiral Corp
Athens Stove Works Inc
Chambers Built-Ins Inc
Dixie Products Inc
Frigidaire Div General Motors Corp
Gen Econ Co Appliance & Television Div
Gibson Refrigerator Co Div Hupp Corp
Gray & Dudley Co
Gregg & Son Inc
Hotpoint Div
Kentivator Div American Motors Co
Lindemann A J & Hoverson Co
Monarch Range Co
Mt Vernon Furnace & Mfg Co
National Stove Co
Norge Div Borg-Warner Corp
Oakland Foundry Co
Philo Corp
Preway Inc
Roper Geo D Corp
Samuel Stamping & Enameling Co
Stiltz Corp
Stove Works Inc
Tappan Co
Tennessee Stove Works
Thermador Elec Mfg Co
Tracy-American Kitchens
Utility Appliance Corp
Wellbilt Stove Co
Westinghouse Electric Appliance Div
Westinghouse Electric Corp
Whirlpool Corp

Ranges & Ovens, Gas
Athens Stove Works Inc
Brown Stove Works Inc
Caloric Appliance Corp
Chambers Built-Ins Inc
Cribben & Sexton Co
Dixie Products Inc
Gaffers & Sattler
General Air Conditioning Corp
Gray & Dudley Co
Hardwick Stove Co

Redwood Lumber
(See Lumber, Redwood)

Refrigerators, Built-In
Admiral Corp
Amana Refrigeration Inc
Athens Stove Works Inc
Chambers Built-Ins Inc

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Douglas Crestlyn International Inc
Dwyer Products Corp
Gray & Dudley Co
Hotpoint Div
Kentivator Div American Motors Co
Lindemann A J & Hoverson Co
Mallitow fec Equipment Works
Philo Corp
Preway Inc
Quicfrez Inc
Revo Inc
Sub Zero Freezer Co Inc
Thermador Elec Mfg Co
Westinghouse Electric Appliance Div
Westinghouse Electric Corp
Whirlpool Corp

Refrigerators & Freezers, Electric
Acme National Refrigeration Co Inc
Admiral Corp
Amana Refrigeration Inc
Barkow Aug G Mfkg Co Inc
Ben-Hur Mfg Co
Chambers Built-Ins Inc
Dwyer Products Corp
Frigidaire Div General Motors Corp
Gen Econ Co Appliance & Television Div
Gibson Refrigerator Co Div Hupp Corp
Hotpoint Div
Insta-Matic Heater Co
Kentivator Div American Motors Co
King Refrigerator Corp
Manitowoc Equipment Works
Maytag Co
Norge Div Borg-Warner Corp
Quicfrez Inc
Revo Inc
Sub Zero Freezer Co Inc
Tappan Co
Victor Products Corp
Westinghouse Electric Appliance Div

AMERICAN BUILDER
Refrigerators & Freezers, Gas

Acme National Refrigeration Co Inc
Gray & Dudley Co
Insta-Matic Heater Co
Preway Inc
Whirlpool Corp

Roofing, Asphalt

Allied Chemical Corp Barrett Div
American Bitumuls & Asphalt Co
Bird & Son Inc
Borden Chemical Co Div Borden Co
Carey Philip Mfg Co
Celotex Corp
Certain-Teed Sales Corp
Sheetboard Paper Prods Inc
Flintkote Co
Fry Lloyd A Roofing Co
Globe Roofing Products Co Inc
Johns-Manville Corp
Keasby & Mattison Co
Lastik Paint Inc
Lehon Co
Logan-Long Co
Monroe Co Inc
National Mfg Corp
Sonneborn L Sons Inc
Reynolds Aluminum Supply Co
Ruberoid Co
United States Register Co

Roofing, Copper

American Brass Co
Bridgeport Brass Co
Ceco Steel Prods Corp
Chase Brass & Copper Inc
Hussey C G & Co
Revere Copper & Brass Inc
Reynolds Aluminum Supply Co

Roofing & Siding, Aluminum
(See also Siding, Aluminum Clapboard)

Aluminum Co of America
Edco Products Inc
Granite City Steel Co
Hess Mfg Co Inc

Roofing, Steel

Bethlehem Steel Co
Monroe Co Inc
National Gypsum Co
Pecora Inc
Pioneer Div Flintkote Co
Reynolds Aluminum Supply Co
Ruberoid Co
Sonneborn L Sons Inc
Supradur Corp of N Y

Roofing, Terne Metal

Ceco Steel Prods Corp
Follansbee Steel Corp
Inland Steel Products Co
Kaiser Mfg Co
Reeves Steel & Mfg Co Div
Reynolds Aluminum Supply Co

Roofing, Tile
(See Tile, Roofing)

Room Dividers
(See Partitions)

Routers & Shapers, Electric

Beach Mfg Co
Black & Decker Mfg Co
Boise Crane Co
Consolidated Mach & Supply Co Ltd
Dewalt Div AMF
Duro Metal Products Co
Ekstrom Carlson & Co
Oliver Machinery Co
Porter-Cable Machine Co
Rockwell Mfg Delta Power Tool Div
Ski Corp
Stanley Electric Tools
Wallace J D Co Inc
Whitney Baxter D & Son Inc
Yates-American Machine Co

Rubber Flooring
(See Tile, Rubber)

Safes, Wall, Built-In

Diebold Inc
Melink Steel Safe Co

Salamanders
(See Heaters, Contractors, Portable)

Sanders

Albertson & Company Inc
American Floor Machine Co
Atlas Floor Surfacing Machinery Corp
Atlas Press Co
Beach Mfg Co
Behr-Manning Co
Black & Decker Mfg Co
Boise Crane Co
Burgess Virobcrafters Inc
Chicago Pneumatic Tool Co
Clarke Floor Machine Co
Cummins Port Tools Div J Oster Mfg Co
DeWalt Div AMF
Dremel Mfg Co
Duro Metal Products Co
Ekstrom Carlson & Co
Grinding & Polishing Mach Corp
Holt Mfg Co
Mattison Machine Works
Merit Products Inc
Millers Falls Co
Milwaukee Elec Tool Corp

Reinforcing Bars & Mesh
(See also Steel, Masonry Wall Reinforcing)

Amer Steel & Wire Div U S Steel Corp
Bethlehem Steel Co
Ceco Steel Prods Corp
Cleveland Steel Specialty Co
Colorado Fuel & Iron Corp
Colorado Fuel & Iron Corp
Continental Steel Corp
Copperweld Steel Co Wire & Cable Div
Dayton Sure-Grip & Shore Co
Dolley Brothers Co
Forbes Steel Corp
Jones & Laughlin Steel Corp
Kaiser Aluminum & Chemical Sales Inc
Kees F D Mfg Co
Laclede Steel Co
Mid-States Steel & Wire Co
Northwestern Steel & Wire Co
Republic Steel Corp Truscon Div
Ryerson Joseph T & Son
Signode Steel Strapping Co
Soule Steel Co
United States Steel Corp
Youngstown Sheet & Tube Co

Roof Decks
(See Decking)

Roofing Shingles
(See Shingles)

Roofing, Aggregates For

Black White Limestone Co

Roofing, Asbestos Cement

Asbesto Manufacturing Co
Allied Chemical Corp Barrett Div
Carey Philip Mfg Co
Cerest Waterproofing Corp
Certain-Teed Sales Corp
Fiberboard Paper Prods Inc
Flintkote Co
Johns-Manville Corp
Keasby & Mattison Co
Lastik Paint Inc
Logan-Long Co

April 1960

Turn to Section 2—Manufacturers Directory for all addresses
American Coolair Corp
Aleo Aluminum Products
Coffman R G Co
Edco Products Inc
Georgia Pacific Corp
Gray Lumber & Shingle Co
Gray's River Shake Co
Forks Shingle Co Inc
Hoffee Cedar Prods
Hones Edward Lumber Co
Hoffee Cedar Prods
Hubert Wm Mill Co
Humptulips Shingle Co
Huntington Shingle Co
Lake Lytle Shingle Co
Lewis J A Shingle Co
Longview Shake Co
OV Settler Shake Co
Olympic Stained Prods Co
New London Shake Co
Mt Pleasant Shingle Co
Mauk Seattle Lumber Co
Marona Mill Co
Mackie Mill Co
Mackie Mill Co
Nova Sales Co
Parker & Sons Shake Mill
Northwest Shake Distributors
Quality Wood Prods
R H N Shade Co
Saginaw Shingle Co
Seattle Cedar Lumber Mfg Co
Shakertown Corp
Super Mill Co
Westernbest Corp
Weyerhaeuser Co Lumber & Plywood
Shoring, Horizontal
(See also Scaffolding & Shoring)
Arrow Corp of America
Biro Lumber Corp
Brewster Lumber Corp
Spannall of the Americas Inc
Shutters, Wood
Caradco Inc
Cole Mfg Co
Crestline Co
Cutler Companies Inc
Farley & Loetscher Mfg Co
Goshen Sash & Door Co
Hines Edward Lumber Co
Heinley Mastercraft Products
Hyde-Murphy Co
Ideal Co Mfg Div Wm Cameron & Co
Morgan Co
Morgan-Wightman Co
Rock Island Millwork Co Factory Div
Rockwell of Randolph Inc
Schumacher F E Co
Tyler Arthur F Co
Siding, Asbestos Cement
Allied Chemical Corp Barrett Div
Carey Philip Mfg Co
Certain-Teed Sales Corp
Fiberboard Paper Prods Inc
Fry (See Lumber)
Fry Lloyd A Roofing Co
Johns-Manville Corp
Keashey & Mattison Co
Lehoh Co
Logen-Long Co
National Gypsum Co
Pioneer Div Flintkote Co
Re-Nu-H Corp
Reynolds Aluminum Supply Co
Rubberoid Co
Supradur Corp of N Y
United States Gypsum Co
Siding, Aluminum Clapboard
Aeroshade Co
Alsco Inc
Chamberlin Co of America
Consolidated General Prod Inc
Edco Products Inc
Globe Roofing Products Co Inc
Hastings Aluminum Products Inc
Keystone Alloys Co
Lifeline Industries Inc
Lyf-Alum Inc
Morgan-Wightman Co
National Metal Prods
Quaker State Metals Co
Reynolds Aluminum Supply Co
Security Aluminum Co
Texton Metals Co
U S Aluminum Siding Corp
Wisco Inc
Siding, Hardboard
(See also Hardboard)
Aetna Plywood & Veneer Co
Armstrong Cork Co
Celotex Corp
Evans Products Co
Forest Fiber Products Co
Hines Edward Lumber Co
Insulite Div Mm & Ontario Paper Co
Maronite Corp
National Gypsum Co
Reynolds Aluminum Supply Co
United States Plywood Corp
Siding, Plywood
(See also Plywood, Douglas Fir)
Aetna Plywood & Veneer Co
Cascade Plywood Corp
Georgia Pacific Corp
Harbor Plywood Corp
Midwest Plywood Co
Milkwaukee Plywood Co
Paxton Frank Lumber Co
Reynolds Aluminum Supply Co
Rosboro Lumber Co
St Paul & Tacoma Lumber Co
United States Plywood Corp
Youngblood Lumber Co
Siding, Steel
Bethlehem Steel Co
Continental Steel Corp
Granite City Steel Co
Reeves Steel & Mfg Co Div
Republic Steel Corp Truscon Div
Tenison Bros Inc
Siding, Underliner, Insulating
(See Sheathing, Insulating)
Siding, Wood
(See also Lumber; Shingles)
Aloha Lumber Corp
Arrow Tank Co Inc
Bradley Southern Div Pedalch Forests
Dierks Forests Inc
Georgia Pacific Corp
Goodman Lumber Div Calumet & Hecla
Hardwood Corp of America
Homaekie Co
Jones Harold R
Mauk Seattle Lumber Co
McMillonville Mfg Co
Olympic Stained Prods Co
Ozam Lumber Co
Pacific Lumber Co
Paxton Frank Lumber Co
Rosboro Lumber Co
Saginaw Shingle Co
Seattle Cedar Lumber Mfg Co
Shake-A-Ply Co
Summit Sales Co
Upson Co
Weyerhaeuser Co Lumber & Plywood

**Lower Costs & Installation Time**

**ALSCO Rigid BAK-R-FOAM Aluminum Siding**

...applies directly to the Studs...no underlay materials needed!

*Patent Pending

Write for AlSCO's BUILDER'S DIGEST

AlSCO, Inc., Box AS-86, Akron 8, Ohio

94
Sinks, Metal or Stainless Steel
- Active Tool & Mfg Co
- Aerogas Mfg Co Metal Products Div
- Amer-Standard Plumbing & Heating Div
- Caloric Appliance Corp
- Carrollton Mfg Co
- Copymatic Inc
- DuMms Hood Co Inc
- Ekco Prods Co
- Eljer Div Murray Corp of America
- Farrel-Met Fab Co
- Geneva Modern Kitchens
- Legion Stainless Sink Corp
- Lyon Inc
- Tracy-American Kitchens
- Universal-Rundle Corp

Sinks, Porcelain Enamel (See Plumbing Fixtures)

Skylights
- Allied Chemical Corp Barrett Div
- Chemoid Co
- Consolidated General Prod Inc
- Johns-Manville Corp
- Kansas Glass Co Sub Owens-Illinois
- Kline Mfg Co
- Owen-Illinois
- Pennsylvania Wire Glass Co
- Pittsburgh Corning Corp
- Plastico Inc
- Resolite Corp
- Rohm & Haas Co
- Saint Paul Corrugating Co
- Structoglas Inc
- Waco Products Inc

Slats
- Fond Du Lac Stone Co Inc
- North Bangor Slate Co
- Western States Stone Co

Sliding Doors, Windows (See Doors, Sliding; Windows, Horizontal Gliding)

Spray Guns, Paint (See Paint Spray Guns)

Stains (See Paints, Interior & Exterior, Oil)

Stairs, Nosing for
- Crown Rubber Co
- Moore Goodloe E Inc

Stairs, Steel, Cellular (See Doors, Cellular, Bulkhead)

Stairs, Treads For
- American Abrasive Metals Co
- American Mat Corp
- Bradley Southern Div Pollatch Forests
- Cloud Oak Flooring Co
- Crown Rubber Co
- Dravo Corp
- Farley & Loetscher Mfg Co
- Goodrich B F Co Flooring Products
- Hardwood Corp of America
- Harris Mfg Co
- Jones & Laughlin Steel Corp
- Muson B C Rubber Co
- Norton Co
- Robbins Floor Products Inc
- Wooster Products Inc

Stairs, Disappearing
- Belsey Disappearing Stairway
- Craftwood Products
- Ez-Way Sales Inc
- Fabriform
- Farley & Loetscher Mfg Co
- Goshen Sash & Door Co
- Newark Ladder & Bracket Co Inc
- Precision Parts Corp
- Reynolds Aluminum Supply Co
- Richbilt Mfg Co
- Tennessee Fabricating Co
- Wel-Bilt Products Co

Stairways, Steel
- Michel & Pfeffer Iron Works Inc
- Valley Metal Products

Staplers, Tackers & Staples
- Arrow Fastener Co Inc
- Bostitch
- Burgen Fastening Co
- Copperweld Steel Co Wire & Cable Div
- Everwarm Inc
- Fastener Co

Steel, Masonry Wall Reinforcing (See also Reinforcing Bars & Mesh)
- A A Wire Products Co
- Carter-Waters Corp
- Convex Steel & Wire Co
- Dur O Wal Div Cedar Rapids Block Co
- Keystone Steel & Wire Co
- Lenawee Peerless Inc

Steel, Structural (See also Studding & Channels, Steel)
- Adams Co
- Adjusta Post Mfg Co
- Baumgartner Gate Factory
- Bethlehem Steel Co
- Butler Mfg Co
- Byers A M Co
- Colorado Fuel & Iron Corp
- Columbia Geneva Steel Div US Steel
- Copco Steel & Engineering Co
- Cuckler Steel Span Co
- Flash Bridge Co
- Graeco Steel Products
- Haven-Bush Co
- Inland Steel Co
- International Steel Co
- Jackson & Church Div York-Shipley Inc
- Jones & Laughlin Steel Corp
- Junior-Pro Products Co
- Kaiser Steel Corp
- Kees F D Mfg Co

Kees Ribbed Steel Cross-Bridging . . . stronger than wood, leaves maximum open space, saves labor. Made of 18 gauge heavily galvanized V-rib steel. In 17' and 20' lengths; flat ends with 5 nail holes.

3754-64 River Road, Franklin Park, Ill.

Hillwood Mfg Co
- Markwell Mfg Co Inc
- Mid-States Steel & Wire Co
- Power Line Sales Inc
- Signode Steel Strapping Co
- Spotnails Inc
- Tennessee Coal & Iron Div US Steel

Steel, Granite
- North Carolina Granite Corp
- Tamms Industries Co
- Vermont Marble Co

Steel, Limestone
- Bloomington Limestone Corp
- Corson G & W H Inc
- Fond Du Lac Stone Co Inc
- Georgia Marble Co
- Indiana Limestone Co Inc
- Longview Lime Corp
- Mansfield Stone Co
- San-Tex Stone Quarry Inc

Staplers, Tackers & Staples
- Arrow Fastener Co Inc
- Bostitch
- Burgen Fastening Co
- Copperweld Steel Co Wire & Cable Div
- Everwarm Inc
- Fastener Co

Send for Free Builders Brochure FT-26.

FASTENER CORPORATION
3754-64 River Road, Franklin Park, Ill.

Hillwood Mfg Co
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- Flash Bridge Co
- Graeco Steel Products
- Haven-Bush Co
- Inland Steel Co
- International Steel Co
- Jackson & Church Div York-Shipley Inc
- Jones & Laughlin Steel Corp
- Junior-Pro Products Co
- Kaiser Steel Corp
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- Keystone Steel & Wire Co
- Lenawee Peerless Inc

Steel, Structural (See also Studding & Channels, Steel)
- Adams Co
- Adjusta Post Mfg Co
Texas Quarries Inc
Tiger Brands Div Basic Inc
Woodville Lime Products Co
Woolery Stone Co Inc

Stone, Marble
Carthage Marble Corp
Georgia Marble Co
Mankato Stone Co
Stone Products Co
Tamms Industries Co
Vermont Marble Co

Stone Patching Compounds
(See Paints & Coatings, Concrete)

Stone, Palos Verdes
Palos Verdes Stone Dept

Stone, Slate
(See Slate)

Stone Veneer, Synthetic
General Concrete Products Inc
Stone Products Co

Stone Veneer, Synthetic
General Concrete Products Inc
Stone Products Co

Stone Veneer, Synthetic
General Concrete Products Inc
Stone Products Co

Store Fronts
American Art Metals Co
Chase Brass & Copper Inc
Davidson Enamel Products Inc
Fenelon Industries Inc
Ingram-Richardson Mfg Co
Kawneer Co
Libbey-Owens-Ford Glass Co
Leaflak Inc
Marmet Corp
Metal Trims Inc
Pittsburgh Plate Glass Co
Reynolds Aluminum Supply Co
Toledo Plate & Window Glass Co
United States Plywood Corp
Werlevere Porcelain Enameling Co

Storm Windows
(See Windows & Doors, Combination)

Structural Steel
(See Steel, Structural)

Stucco, Pro-Mixed
Colorcrete Industries Inc
Penn Crete Prod Co
United States Gypsum Co

Studding & Channels, Steel
Alabama Metal Lath Co Inc
Brandt Steel Lath Co
Casings Inc & Drywall Trim Div

Tiger Brands Div Basic Inc
Woodville Lime Products Co
Woolery Stone Co Inc

Sump Pumps
(See Pumps, Sump)

Surveying Instruments
(See Instruments, Surveying)

Swimming Pool Equipment
Amcrete Corp
Award Pools
Birdair Structures Inc
Bower Inc Supply Div
Capri Mfg Inc
Cascade Pools
Chester Products Inc
Continental Pump Co
Goodrich B F Industrial Products Co
Hoosier Tarpaullin & Canvas Goods Co
Jossan Mfg Co
King Mfg Co
Lancaster Pump & Mfg Co Inc
Landon Inc
Marlin Pool Equipment Co
Modern Swimming Pool Co Inc
National Pool Equipment Co
Padlock of California
Permutit Co Div Fendall Permutit Inc
Poolquip Mfg Inc
Quartz Mosaic Inc
Romar Filter Corp
Wahlstrom Bros Inc Nail Div
Weissmüller Johnny Clemma Pools
Zurn Industries Inc Plumbing Products Div

Swimming Pools
Amcrete Corp
Arrow Tank Co Inc
Award Pools
Capri Mfg Inc
Cascade Pools
Chester Products Inc
Hoosier Tarpaullin & Canvas Goods Co
International Swimming Pool Corp
Koven L O & Bro Inc
National Pool Equipment Co
Padlock of California
Wahlstrom Bros Inc Nail Div

Tackers
(See Staplers, Tackers & Staples)

Tampers, Powered
Barco Mfg Co
Chicago Pneumatic Tool Co
Cleveland Trencher Co
Gardner-Denver Co
Ingersoll-Rand Co
Jay Co Div Leukart Mach Co Inc
Kelley Machine Div Wiener-Rapp Co Inc
Le Roi Div Westinghouse Air Brake Co
Ottawa Steel Div Young Spring & Wire
Rowland Mfg Co
Thor Power Tool Co
Vilbro Plus Prods Inc
Whitman Mfg Co

Tank, Septic, Clay
(See Septic Tanks, Clay)

Tank, Septic, Steel
(See Septic Tanks, Steel)

Topes
Behr-Manning Co
Durrhe-Atwood Co

Tarpaulins
Arvey Corp
Berg F O Co
Delta Co
Pfiiiton Cotton Mills
Gering Plastics Div
Goodrich B F Industrial Products Co
Goss J C Co
Hoosier Tarpaullin & Canvas Goods Co
Industrial Canvas Prod Corp
Koppers Co Inc Durahene Plant
Kordite Corp
Newark Ladder & Bracket Co Inc
Richter Co
Thelmany Pulp & Paper Co
Tiger Brands Div Basic Inc
Tucker Duck & Rubber Co
Viking Co
Werner Canvas Prod Co

Television Antennas
(See Antennas, TV)

Tension Screens
(See Screens, Tension)

Termite Shields
Abesco Mfg Co
Allied Chemical Corp Barrett Div
Cabot Samuel Inc
California Spray-Chemical Corp
Chemical Products Div Darwurth Inc
Crc-O-Tex Chemical Co
Daeo Co Inc
Dow Chemical Co
Monanto Chem Co Organic Chem Div
National Mfg Corp
Pnn Supply & Metal Corp
Phean-Faust Paint Mfg Co
Protection Products Mfg Co
Shell Chemical Corp
Sonenebom L Sons Inc
Sullivan Co The
Velsicol Chemical Corp
Water-Dennis Corp
Wood Treating Chemicals Co

Thresholds
Adams Co
Adams Engineering Co
All-Metal Weatherstrip Co
Allmetal Weatherstrip Co
Aluminum Co of America
American Brass Co
Ames Metal Moulding Co
B & T Metals Co
Baldwin Hardware Mfg Corp
Blum Julius & Co Inc
Bommer Spring Hinge Co Inc
Bradley Southern Div Potliach Foresta
Ceco Steel Prod Co
Chamberlin Co of America
Chase Brass & Copper Inc
Chicago Metal Strip Co
Cloud Oak Flooring Co
Coff Metal Products Inc
Curtis Companies Inc
Dennis W J & Co
Donley Brothers Co
Duraflex Co
General Window Co
Goodrich B F Co Flooring Products
Harris Inc
Kaiser Aluminum & Chem Sales Inc
Kawneer Co
Mackinburg-Dunean Co
Master Metal Strip Service Inc
Metal Crafters
Michiade Tile Co
Monarch Metal Weatherstrip Co
Moran-Wightman Co

AMERICAN BUILDER
National Metal Prods
National Aluminum Co
Pemko Mfg Co
Parker S Hdwe Mfg Corp
Penko Mfg Co
Reynolds Aluminum Supply Co
Reynolds Metals Co
Royal Zonolite Co
Safety-Flex Enclosures Div Woodside Ind
Sager Weatherstrip & Caulking
Sentry Stop-A-Draft Co
Sharline Div Bettiger Corp
Styron Corp
Three Centuries

Ties, Concrete Form
(See Concrete Form Ties)

Ties, Acoutical
(See Acoustical Materials)

Ties, Asbestos, Floor
Armstrong Cork Co
Azrock Floor Products Div

AZROCK
FLOOR PRODUCTS
Vina-lux vinyl asbestos • Azrock asphalt
Asphalt vinylized tile
Complete Model Home Display Program
Frost Bank Bldg. • San Antonio 6, Texas

Bonafide Mills Inc
Congoleum-Nairn Inc
Flintkote Co
Goodrich B F Co Flooring Products
Hachmeister-Inc
Johns-Manville Corp
Kentile Inc
Mastic Tile Div Ruberoid Co
Pioneer Div Flintkote Co
Thomas Moulding Floor Co Inc
Wright Mastic Tile Div Ruberoid Co

Tile, Ceramic, Floor & Wall
Abitibi Corp
American Olean Tile Co
Architectural Tiling Co

ATCO
TILES
Architectural Tiling Co, Inc.

Associated Plumbing Supply Co Inc
Cambridge Tile Mfg Co
Columbia Brick Works
Design Techniques
Gladding McBean & Co
Hood Mifflin B Co
Jones & Brown Inc
Marlin Pool Equipment Co
Marsh Wall Products Inc
Mirapolis Tile Co
Miter Ceramic Tile Co
Mosaic Tile Co
Natco Corp

National Tile & Mfg Co
Norton Co
Oxford Tile Co Div of Universal
Pacific Tile & Porcelain Co
Pomona Tile Mfg Co
Quartz Mosaic Inc
Selleck Wall E & Co
Sharline Div Bettiger Corp
Styron Corp
Three Centuries

AZROCK
FLOOR PRODUCTS

Bonafide Mills Inc
Congoleum-Nairn Inc
Flintkote Co
Goodyear Tire & Rubber Co
Goodrich B F Co Flooring Products
Hachmeister-Inc
Johns-Manville Corp
Kentile Inc
Mitchel Rubber Products Inc
Morton Ceramic Tile Co
National Window Corp
New York, N.Y.

Tile, Roofing
Gladding Bros Mfg Co
Gladding McBean & Co
Hilow-Celadon Co
M.Lalco Tile Co
Murray Tile Co Inc
Summitville Tiles Inc
United States Ceramic Tile Co

Tile, Structural

Tile, Vinyl
American Biltrite Rubber Co
Armstrong Cork Co
Azrock Floor Products Div
Bird & Son
Bonafide Mills Inc
Congoleum-Nairn Inc
Dodge Cork Co Inc
Forman-Ford & Co
Kentile Inc
Robbins Floor Products Inc

Tile, Glazed
Elgin-Standard Brick Mfg Co

Tile, Insulating
(See Insulating Board)

Tile, Linoleum, Floor
(See Linoleum Roll & Tile)

Tile, Quarry
Builders Brick Co
Carlyle Tile Co
Congoleum-Nairn Inc
Dodge Cork Co Inc
Forman-Ford & Co
Hond Mifflin B Co
Interstate Brick Co
Ludlow-Celadon Co
M.Lalco Tile Co
Murray Tile Co Inc
Summitville Tiles Inc
United States Ceramic Tile Co

Tile, Roofing
Gladding Bros Mfg Co
Gladding McBean & Co
Hilow-Celadon Co
Wolverine Porcelain Enameling Co
Zonolite Co

Tile, Rubber
American Biltrite Rubber Co
Armstrong Cork Co
Congoleum-Nairn Co
Danbury Rubber Co Inc

Tile, Stone

Tile, Wall, Hardboard
Barclay Mfg Co Inc
Higgins Industries Inc
Marsh Wall Products Inc
Masonite Corp
Wood Conversion Co

Tile, Wall, Leather
Kiefer International Products Co Div

Tile, Wall Marble
(See Flooring & Wall Covering, Marble)

Tile, Wall, Metal

Tile, Wall, Plastic
Arterest Products Co Inc
Bonafide Mills Inc

Turn to Section 2—Manufacturers Directory for all addresses
Cermak Tile Co Inc
Copenhagen-Nairn Inc
Forman-Ford & Co
Formica Corp
Gen Tire & Rub Co Bltg Materials Div
Hachmeister-Inc
Jones & Brown Inc
Lauro Tile Mfg Co
Marsh Wall Products Inc
Mastic Tile Div Ruberoid Co
Mastro plastics Corp
Miesman Tile Co
Quartz Mosaic Inc
Miraplas Tile Co
Selick Walter E & Co
Skyline Industries Sales Inc
Sunbeam Plastics Corp
Tile-Rite Co
Tile, Wall, Porcelain Enamel
Interstate Brick Co
Wolverine Porcelain Enameling Co

Tileboard, Prefinished
Arta Plywood & Veneer Co
APFCO Corp
Barclay Mfg Co Inc
Marsh Wall Products Inc
Pioneer Div Flamkote Co
Premstle Mfg Co
Simpson Logging Co
Tex-A-Fasen Mfg Co
United States Gypsum Co
Wallace Mfg Co
Wood Conversion Co

Timber Connectors
Cleveland Steel Specialty Co
Kees F D Mfg Co

TIMBERLOCK
SPLIT RING CONNECTORS
For simplified, stronger timber construction. Outstanding for quality and economy. Extensively used in government and private construction. Two sizes: 2½" and 4" I.D.

McKeown Bros Co
Timber Engineering Co
Timber Fasteners Inc
Timber Structures Inc

Toilets
(See Plumbing Fixtures)

Tools
(See Cutters, Drills, Guns, Hammers, Nailing Machines, Etc.)

Tools, Carpenter
Bridgeport Hardware Mfg Corp
Champion Dearment Tool Co
Cincinnati Tool Co
Cummins Prible Tools Div J Oster Mfg Co
DeWalt Div AMF
Dietz Div Div H K Porter Co Inc
Eagle Rule Mfg Corp
Eliason Tool Co
Empire Level Mfg Co
Felder Hardware Prods Inc
Fletcher-Terry Co
Foyle Mfg Co
Freeman Doorjack Co
General Hardware Mfg Co Inc
Geneco Tools
Graham John H & Co Inc
Greenlee Tool Co

Gypsum Ceiling Jack Co
Hartford Clampo
Hartmeister Mfg Inc
Hood Bros
Irwin Auger Bit Co
J M J Industries Inc
Kedman Co
Kenco Mfg
Kimballi Mfg Co
Lestonia Tool Co
Mayhew Steel Products Inc
Millers Falls Co
Milwaukee Elec Tool Corp
Milwaukee Tool & Equipment Co
Nicholls Mfg Co
Nicholson File Co
Nicholson File Co
Owatonna Tool Co
Ox-Wall Tool Co Ltd
Parker Mfg Co
Phillips Drill Co
Plumb & Foyette R Inc
Portsmouth Corp
Portable Electric Tools Inc
Ramset Fastening System
Rockwell Mfg Delta Power Tool Div
Roe Justus & Sons
Safety Nail Driver Corp
Sargent & Co
Silver Belts Ltd
Stanley Tools
Starrett L S Co
Storz John & Son Inc
True Temper Corp
Turn-A-Bore Equipment Co
Union Tool Co
Vaughan & Bushnell Mfg Co
Wallboard Tool & Equipment Co
Warren Tool Corp
Will-Burt Co

MORE THAN A VISE... A WORKSHOP TOOLS!

VERS-A-VISE
Turns full circle... upright or laid flat, locks automatically!

Get one "13" POST-KIT MADE AT CIRCULAR
Available at dealers or write VERSA-VISE, ORRVILLE, OHIO

Yates-American Machine Co

Tools, Concrete Finishing
(See also Concrete Vibrators)

Chicago Pneumatic Tool Co
Cisco Div Div H K Porter Co Inc
Goldblatt Tool Co
Nicholls Mfg Co
Remington Arms Co Inc
Sands Level & Tool Co
Speedway Mfg Div Thor Power Tool Co
Storz John & Son Inc
Strow Mfg Co
Thor Power Tool Co
Whitman Mfg Co

Tools, Masons, Plasterers
Adams Co
Bridgeport Hardware Mfg Corp
Clapper Mfg Co
Columbia Brick Works
Damasco Steel Products Corp
Dietz Div Div H K Porter Co Inc
Empire Level Mfg Co
Fletcher-Terry Co
General Hardware Mfg Co Inc
Goldblatt Tool Co
Graham John H & Co Inc
Industrial Iron Works
Karelus Auger & Sons Inc
Kent Air Tool Co
Mayes Bros Tool Mfg Co
Nicholls Mfg Co
Park Tool Co
Peerless Level & Tool Co
Phillips Drill Co
Plumb Foyette R Inc
Port Austin Level & Tool Mfg Co
Ramset Fastening System
Remington Arms Co Inc
Rice Pump & Machine Co
Safety Nail Driver Corp
Sands Level & Tool Co
Stanley Tools
Shorts John & Son Inc
Superior Scaffold Co
Tru-Line Co
Vaughan & Bushnell Mfg Co

Tractor Attachments
Alis Chalmers Mfg Const Mach Div
Arco Corp
Case J J Co
Caterpillar-Tractor Corp
Clark Equip Co Const Machinery Div
Dannen Machine Co
Elmco Corp
Ford Motor Co Tractor & Implement Div
Gar Wood Industries Inc
Henry Mfg Co Inc

HENRY LOADERS
Designed to match the power of Utilty Tractors.

Yours can do it better

With a henry.
Henry Mfg. Co. Topeka, Kansas

Hough Frank Co
Ihsy Co
John Deere Industrial Div
Koehring Co
LeTourneau-Westinghouse Co
Massey-Ferguson Industrial Div
Minneapolis-Moline Co
Oliver Corp
Ottawa Steel Div
Pitman Manufacturing Co
Preeo Inc
Roseman Tractor Equipment Co
Schwartz Mfg Co
Servis Equipment Co
Shawnee Mfg Co Dept of Parsons Co
Sherman Products Inc
Toro Mfg Co
Tractormotive Corp
Turner Mfg Co
Universal Pulleys Co Inc
Wagner Iron Works

Tractors
Alis Chalmers Mfg Const Machinery Div
Automatic Transportation Co
Barrett Cravens Co
Case J J Co
Caterpillar Tractor Co
Clark Equipment Co Indus Truck Div
Elmco Corp
Ford Motor Co Tractor & Implement Div
Hough Frank Co
International Harvester Co
John Deere Industrial Div
LeTourneau-Westinghouse Co
Lewis-Shepard Products Inc
Massey-Ferguson Industrial Div
Mead Specialties Co
Minneapolis-Moline Co
Oliver Corp
Toro Mfg Co

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AMERICAN BUILDER
Transits
(See Instruments, Surveying)
Boston-Brady Mfg Co
Goldblatt Tool Co
Knuffel & Esser Co
Barrett L. S. Co
Warren-Knight Co
White David Instrument Co

Trenchers & Ditchers
American Hoist & Derrick Co
Arpa Corp
Barber Greene Co
Charles Machine Works
Cleveland Trencher Co
Demmer Machine Co
Earth Equip Corp
Ford Motor Co Tractor & Implement Div
Gar Wood Industries Inc
John Deere Industrial Div
Kent Air Tool Co
Koehring Co
Massey-Ferguson Industrial Div
Ottawa Steel Div Yng Sprng & Wire Corp
Serva Equipment Co
Shawnee Mfg Co Dept of Parsons Co
Sherman Prods Inc
Vermeer Mfg Co
Wood Shovel & Tool Co

Trim & Casings, Metal
(See Casing, Metal)

Trim, Wood
(See Millwork & Moldings, Wood)

Trowels, Power
(See Concrete Finishing Machines)

Trucks, Fork Lift
Allis Chalmers Mfg Const Machinery Div
Automatic Transportation Co
Barrett Cravens Co
Clark Equipment Co Indus Truck Div
General Engines Co Inc
Hyster Co
John Deere Industrial Div
Koehring Co
Lewis-Shepard Products Inc
Massey-Ferguson Industrial Div
Mixermobile Manufacturers
Oliver Corp
Ottawa Steel Div Yng Sprng & Wire Corp
Sherman Prods Inc
Silent Hoist & Crane Co
Uhren Inc
Yale & Towne Mfg Co Yale Materials

Trucks, Hand & Platform
Colson Corp

Trucks, Motor
Chevrolet Motor Div Gen Motors
Diamond T Motor Truck Co
Dodge Div
Ford Motor Co
Koehring Co
LeTourneau-Westinghouse Co
Mac Truck Trac Inc
Marmon-Herrington Co Inc
Prime Mover Co
Reo Div White Motor Co
Stahl Metal Prods
Studebaker-Packard Corp
Volkswagen of America Inc
Whitney Motor Co
Willys Motors Inc

Trusses, Roof, Steel
Belson Mfg Co
Bethlehem Steel Co
Ceco Steel Prods Corp
Cuckler Steel Span Co
Haven-Bush Co
International Steel Co
Macombner Inc
Mason George L Steel Corp
Republic Steel Corp Truscon Div
Sheffield Div Armco Steel Corp

Trusses, Roof, Wood
American Roof Truss
H-Brace Inc
Independent Lumber Co
McKeown Bros Co
Prefabricated Prods Co Inc
Rilco Laminated Prods Inc
Rosboro Lumber Co
Sanford Gri-P-Late Co
Super-Structures Inc
Timber Fabricators Inc
Timber Structures Inc
Tim-Plate Inc
Unit Structures Inc

Tubing
(See Pipe & Tubing)

Tubs, Bath
(See Plumbing Fixtures)

Tubs, Laundry
(See also Plumbing Fixtures)
Active Tool & Mfg Co
American-Standard Plumbing
Cranco
Cutler Metal Prods Co
Kohler Co
Mustee E L & Sons Inc

Underlayment Flooring
(See Flooring, Underlayment)

Vanities, Lavatory

Vapor Barriers
(See also Paper, Building Sheathing)

Trucks, Fork Lift
Allis Chalmers Mfg Const Machinery Div
Automatic Transportation Co
Barrett Cravens Co
Clark Equipment Co Indus Truck Div
General Engines Co Inc
Hyster Co
John Deere Industrial Div
Koehring Co
Lewis-Shepard Products Inc
Massey-Ferguson Industrial Div
Mixermobile Manufacturers
Oliver Corp
Ottawa Steel Div Yng Sprng & Wire Corp
Sherman Prods Inc
Silent Hoist & Crane Co
Uhren Inc
Yale & Towne Mfg Co Yale Materials

Turn to Section 2—Manufacturers Directory for all addresses
Wall Coverings, Metal
Clad-Rex Div Simons Co

Wall Coverings, Fabric
Birge Co Inc
Columbus Coated Fabrics Corp
Curtiss Wright Corp Curtron Div
Dero-Wall Corp
Fabrikona Inc
Goodrich B F Industrial Products Co
Imperial Color Chemical & Paper Corp
Marsh Wall Products Inc
New Castle Products Inc
Standard Coated Fabrics Inc
Suncraft Inc
United States Plywood Corp
Werner Canvas Products Co

Wall Coverings, Plastic
Cermak Tile Co Inc
Fabrikona Inc
Polyplastex United Inc

Wall Plates, Decorator
General Electric Co Wiring Device Dept

Wall Safes
(See Safes, Wall)

Wall Tile
(See Wall, Wall)

Wallboard, Asbestos Cement
Carey Phillip Mfg Co
Fiberboard Paper Products Inc
Flintkote Co
Johns-Manville Corp
Kuehne & Mattison Co
Kochton Plywood & Veneer Co Inc
Lehohon Co
Pioneer Div Flintkote Co
Rubberoid Co
United States Plywood Corp

Wallboard, Gypsum
Allied Chemical Corp Barrett Div
Beadex Sales Inc
Bestwall Gypsum Co
Celotex Corp
Chicago Fire Brick Co
Flintboard Paper Products Inc
Flintkote Co
Grand Rapids Gypsum Co
Hartmann & Mattison Inc
Kaiser Gypsum Co Inc
National Gypsum Co
Rubberoid Co
United States Gypsum Co

Wallboard & Sheathing, Fiber
(See also Insulating Board)
Allied Chemical Corp Barrett Div
Armstrong Cork Co
Celotex Corp
Dart & Russell Inc
Flintkote Co
Forest Fiber Products Co
Hausote Co
Insuline Div Minn & Ontario Paper Co
Johns-Manville Corp
Kaiser Gypsum Co Inc
Lehohon Co
Pioneer Div Flintkote Co
Starfoster Wall Board Co
Reynolds Aluminum Supply Co
Simpson Logging Co
United States Gypsum Co
Usselco Co
Wood Convention Co

Vibrators, Concrete
(See Concrete Vibrators)

Vinyl Tile
(See Tile, Vinyl)

Wallpaper
Birge Co Inc
Buffalo Wallcraft Co Inc
Cook Paint & Varnish Co
Devoe & Reynolds Co Inc
Imperial Color Chemical & Paper Corp
Foster-Gaulbert Paint Varnish
Pittsburgh Plate Glass Co
Frazier Co Inc
Sherle-Wagner
Stanford Wallpaper Co Inc
United Wallpaper Co
Wadsworth Howland & Co
York Wall Paper Co

Washers & Dryers, Clothes
Blackstone Corp
Dexter
Easy Laundry Appliances Div
Frigidaire Div General Motors Corp
Gen Elec Co Appliance & Television Div
Hamilton Mfg Co
Hotpoint Div
Kelvinator Div American Motors Co
Maytag Co
Norge Div Borg Warner Corp
O'Neill & M. Merritt Co
Philco Corp
Speed Queen Div McGraw-Edison Co
Vaux Washer Co
Westinghouse Elec Appliance Div
Westinghouse Electric Corp
Whirlpool Corp

Water Closets
(See Plumbing Fixtures)

Water Heaters, Electric
American Radiator & Standard Sanitary
American-Standard Plumbing
Cleveland Heater Co
Crane Co
Cutler Hammer Inc
Day & Night Mfg Co
Eagle Electric Mfg Co
Frigidaire Div General Motors Corp
Gaffers & Sattler
Gen Elec Co Appliance & Television Div
Hedges M M Mfg Co Inc
Hotpoint Div
Holstrem Heater Co
Kelvinator Div American Motors Co
Koven L O & Bro Inc
Lindemann A J & Hoverson Co
Little H C Burner Co
McGraw-Edison Co
Monarch Range Co
Morgan-Wightman Co
National-US Radiator Corp
Norge Div Borg Warner Corp
Rheem Mfg Co
Smith A O Corp Permaglas Div
Thermador Mfg Co Inc
Vulcan Electric Co
Waldorf Heater Co
Waterfim Boilers
Wayne Home Equipment Co Inc
West Electric Heater Co
Westinghouse Elec Appliance Div
Westinghouse Electric Corp
White Products Corp
Wood John Co Heater & Tank Div

Water Heaters, Gas
American Radiator & Standard Sanitary
American-Standard Plumbing & Heating
Cleveland Heater Co
Crane Co
Day & Night Mfg Co

AMERICAN BUILDER
Dearborn Stove Co
Delco Appliance Div General Motors
Federal Boiler Co Inc
Gaffers & Sattler
Handley-Brown Co
Hedges M M Mfg Co Inc
Holly-General Co Div Siegler Corp
Holosteam Heater Co
Insta-Matic Heater Co
Koven L O & Bro Inc
Little H C Burner Co
McGraw-Edison Co
Monarch Range Co
Morgan-Wightman Co
Mustee E L & Sons Inc
National-US Radiator Corp
Morgan-Wightman Co
Smith A O Corp
Smith A O Corp
Smith A O Corp
Suburban Propane Gas Corp
Waterfilm Boilers
Wayne Home Equipment Co Inc
White Products Corp
Wood John C Heater & Tank Div

Water Heaters, Oil
Coleman Co Inc
Crane Co
Delco Appliance Div General Motors
Federal Boiler Co Inc
Holosteam Heater Co
Iron Fireman Mfg Co
Koven L O & Bro Inc
Kressy Mfg Co Inc
Kressy Mfg Co Inc
Rheem Mfg Co
Rheem Mfg Co
Smith A O Corp
Suburban Propane Gas Corp
Waterfilm Boilers
Wayne Home Equipment Co Inc
White Products Corp
Wood John C Heater & Tank Div

Water Softeners & Conditioners
Clayton Mark & Co
Culligan Inc
Egin Softener Corp
Modern Swimming Pool Co Inc
Myers F & Bros Co
Pennsalt Chemicals Corp
Permmit Co Div Pfaudler Permutit Inc
Red Jacket Mfg Co
Rheem Mfg Co
Scharf J H Mfg Co
Tait Mfg Co
Uniflow Mfg Co
Wayne Home Equipment Co Inc
White Products Corp

Water Supply
(Air-Tite Products Inc
All-Metal Weatherstrip Co
Asphalt Corp of America
Baltz Robert N & Co Inc
Barland Weatherstrip Material Co
Caldwell Mfg Co
Chamberlin Co of America
Chicago Metal Strip Co
Dennis J W & Co
Durafile Co
Durkee-Alwood Co
Durobor Mfg Co
Eformation Co
Goshen Sash & Door Co
Grand Rapids Hardware Co
Johns-Manville Corp
Kamler Products Co
Lamp Co Inc
Lamp Co Inc
Lee Lamp Co
Lindley Co
Livingston Lamp Co
Lumison Co
Marietta Paint & Color Co
Marsh Wall Products Inc
Masonry Waterproothing Co Inc
Master Builders Co
Meadows R W Inc
Medusa Portland Cement Co
Mimar Inc
Monaco Mfg Co
Monarch Metal Weatherstrip Co
Novo Sales Co
Pepco Inc
Penn Crest Prod Co
Permagile Corp of America
Permacit-Fontist Paint Mfg Co
Pioneer Div Flintkote Co
Pittsburgh Plate Glass Co
Plastec Corp of America
Prestige Div America-Marietta Co
Price Fire & Water Proofing Co
Protection Products Mfg Co
Quartz Mosaic Inc
Ranette Mfg Co
Reardon Co
Re-U-Bond Co
Seddon Co
Silica Chemical Corp
Silicones Div Union Carbide
Smoothing-Off Mfg Co
Sonnenborn L Sons Inc
Standard Dry Wall Products Inc
Steelcoat Mfg Co
Sullivan Co Inc
Super Concrete Emulsions
Tamco Industries Inc
Thompson E A Inc
Tosh Bros
Tru Conceal Labs Inc
Triplex Mfg Co
Tufere Co Inc
U S Protective Coating Inc
Upton Co
Waco Products Inc
Water-Dennis Corp
Water-Resoros
Whosel Sealcoat Co
X-Pando Corp

Weatherstripping
(Air-Tite Products Inc
All-Metal Weatherstrip Co
Asphalt Corp of America
Baltz Robert N & Co Inc
Barland Weatherstrip Material Co
Caldwell Mfg Co
Chamberlin Co of America
Chicago Metal Strip Co
Dennis J W & Co
Durafile Co
Durkee-Alwood Co
Durobor Mfg Co
Eformation Co
Goshen Sash & Door Co
Grand Rapids Hardware Co
Johns-Manville Corp
Kamler Products Co

Window Hardware
(See Hardware, Window)

Window Screens
(See Windows & Doors, Combination)

Window Sills
Fiberglas Plastics Co
Hartglass Corp

Window Surrounds, Metal
Ceco Steel Prod Corp
Cupco Steel & Engineering Co
Croft Metal Prod Inc
Fenestra Inc
Hopes Window Inc
Kawneer Co
Kewanee Mfg Co
Knapp Brothers Mfg Co
Knorr Bros Iron Co
One-Der Frame Corp
Royal Jalousie Co
Russel F Co
Soule Steel Co

Windows, Awning Type, Metal
Adams Engineering Co
Air Vise Products Corp
Alsyn Inc
Anderson V M & Co Inc
Berg P O Co
Bourne Products
Brown & Grice Inc
Capitol Prod Corp
Ceco Steel Prod Corp
Continental Aluminum Prod Co
Croft Metal Prod Inc
Crossley Window Corp
Fenestra Inc
Fenviron Industries Inc
Gate City Sash & Door Co
General Bronze Corp
General Window Co
Lenahan Aluminum Window Corp
Leonard J B Inc
Ludmer Corp
Maco Corp
Marnett Corp
Meuser Bros Iron Co
Metal Trims Inc
Miami Window Corp
Mickel & Pfeiffer Iron Works Inc
National Aluminum Co

Turn to Section 2—Manufacturers Directory for all addresses
National Window Corp
One-Der Frame Corp
Republic Steel Corp Truscon Div
Reynolds Aluminum Supply Co
Reynolds Metals Co
Royal Jalousie Co
Russell Windows Inc of Florida
Russell F C Co
Southern Sash Sales & Supply Co
Superior Window Co
Union Machine Co
Universal Fabricators
Universal Window Co
Valley Metal Prods Co
Vento Steel Products Co Inc
Ware Laboratories Inc
Windowmaster Corp

Windows, Awning Type, Wood
Andersen Corp
Anderson V E Mfg Co Inc
Angel Co
Blitbest Corp
Caradco Inc
Cole Mfg Co
Crestline Co
Curtis Companies Inc
Elling Window
Fabrow Mfg Co
Farley & Loetscher Mfg Co
Gate City Sash & Door Co
Goshen Sash & Door Co
Gregg & Son Inc
International Paper Co Long-Bell Div
Ludman Corp
Mall Mfg Co
Modernaire Corp
Morgan Company
Ohio Plate Glass Co
Paxton Frank Lumber Co

NOW! A full line of America's finest wood windows!
CASEMENT, AWNING—Removeable
Double-hung and Gliders. Write for full-line information—
R • O • W SALES CO.
1365 Academy, Ferndale, Michigan
Department 850 460

Reuten Fred Inc
Rock Island Millwork Co Factory Div

RIMCO "CASEMENT" WOOD WINDOW UNITS
See our insert in this issue or write...
ROCK ISLAND MILLWORK COMPANY FACTORY DIVISION
Rock Island Illins

Rockwell of Randolph Inc
Rolscreen Co
Southern Sash Sales & Supply Co
Wabash Screen Door Co
Wadsworth Millwork Corp
Western Pine Mfg Co
Wooden Corp

Windows, Basement & Utility, Metal
Andersen Corp
Angel Co
Caradco Inc
Cole Mfg Co
Crestline Co
Curtis Companies Inc
Elling Window
Fabrow Mfg Co
Farley & Loetscher Mfg Co
Goshen Sash & Door Co
Gregg & Son Inc
International Paper Co Long-Bell Div
Ludman Corp
Morgan Company
Morgan-Wightman Co
Pacific Mutual Door Co
Rock Island Millwork Co Factory Div

RIMCO "BASEMENT" WOOD WINDOW UNITS
See our insert in this issue or write...
ROCK ISLAND MILLWORK COMPANY FACTORY DIVISION
Rock Island Illins

Rockwell of Randolph Inc
Schumacher F E Co
Wabash Screen Door Co
Western Pine Mfg Co
White Pine Sash Co

Windows, Bow, Wood
Fabrow Mfg Co

Windows, Casement, Aluminum
Air Vue Products Corp
Bourne Products
Ceco Steel Products Corp
Crockett Metal Products Inc
Fuller W P & Co
Kawneer Co
Krueger Mfg Co
Maco Corp
Marseille Corp
Mesker Bros Iron Co
Michal & Pfeffer Iron Works Inc
Republic Steel Corp Truscon Div
Reynolds Aluminum Supply Co
Reynolds Metals Co
Soule Steel Co
Southern Sash Sales & Supply Co
Trimview Metal Products
Universal Fabricators
Universal Window Co
Valley Metal Prods Co
Ware Laboratories Inc
Wilke Metal Products Inc

Windows, Casement, Steel
Ceco Steel Products Corp
Crockett Metal Products Inc
Mesker Bros Iron Co
Michal & Pfeffer Iron Works Inc
Republic Steel Corp Truscon Div

Windows, Casement, Wood
Caradco Inc
Crestline Co
Curtis Companies Inc
Elling Window
Fabrow Mfg Co
Farley & Loetscher Mfg Co
Ideal Co Mfg Div Wm Cameron & Co
International Paper Co Long-Bell Div
Pulman Window Corp
R O W Sales Co
Rock Island Millwork Co Factory Div

Rolscreen Co
Southern Sash Sales & Supply Co
Wabash Screen Door Co
Western Pine Mfg Co

Windows & Doors, Combination Screen & Storm Sash, Aluminum

Adams Co
Alése Inc
Aluminum Corp of America
Aluminum Industries
Anderson V E Mfg Co Inc
Bee Gee Window Co
Bourne Products
Burrowses Corp
Capitol Products Corp
Chamberlin Co of America
Copeco Steel & Engineering Co
Windows & Doors, Combination Screen & Storm Sash, Wood

Andersen Corp
Angel Co
Bee Gee Window Co
Caradeo Inc
Crestline Co
Curtis Companies Inc
Farley & Loetscher Mfg Co
Goshen Sash & Door Co
International Paper Co Long-Bell Div
Morgan Company
Phinex Mfg Co
Rock Island Millwork Co Factory Div

RIMCO "ALUMA-WOOD" COMBINATION DOORS & UNITS
The many advantages of WOOD, plus self-storing convenience.
ROCK ISLAND MILLWORK COMPANY FACTORY DIVISION Rock Island, Ill.

Rockwell of Randolph Inc
Schumacher F E Co
Spokane Sash & Door Co
Wabash Screen Door Co
Woodco Corp

Win'ows, Double Hung, Aluminum
Air Vue Products Corp
Albritton Engineering Corp
Alsco Inc

Alsco ALUMINUM PRIME WINDOWS

Single Hung - Double Hung
Slider - Awning
Sliding Glass Doors, too.
For complete information on any or all Alsco PRIME PRODUCTS ... write
Alsco, Inc., Box AS-87, Akron 8, Ohio

Ceco Steel Prods Corp
Cole Mfg Co
Croft Metal Products Inc
Fleet of America Inc
General Bronze Corp
Humphrey Products Inc
Kawneer Co
Krueger Mfg Co
Pomeroy S H Co Inc
Remington Aluminium Window Corp
Reynolds Aluminum Supply Co
Reynolds Metals Co
Rusco Window Co Inc of Florida
Russell F C Co
Southern Sash Sales & Supply Co
Trim Slide Inc
Windalume Corp

Windows, Double Hung, Steel
Leonard R B Inc
Pomeroy S H Co Inc
Russell F C Co

Windows, Double Hung, Wood
A R B Window Sales Co

The finest in metals for removable wood windows.

ARB WINDOW SALES COMPANY
19435 JOHN R STREET
DETROIT 3, MICHIGAN

Caradeo Inc
Cole Mfg Co
Crestline Co
Curtis Companies Inc
Dierks Forests Inc
Etling Window
Fallows Mfg Inc
Farley & Loetscher Mfg Co
Ideal Co Mfg Div Wm Cameron & Co
International Paper Co Long-Bell Div
Kent Prod Inc
Mall Co
Missoula White Pine Sash Co
Morgan-Wightman Co

Turn to Section 2—Manufacturers Directory for all addresses
General Bronze Corp
Leonard R B Inc
Kewanee Mfg Co
Kreuger Mfg Co
Leonard R B Inc
Mesker Bros Iron Co
Metal Trims Inc
Milhollin & Pfeffer Iron Works Inc
National Window Corp
Reynolds Aluminum Supply Co
Rock Island Millwork Co Factory Div
Sun Valley Industries Inc
Trim Slide Inc
Whizter Industries Inc

Windows, Horizontal Gliding, Wood
(See also Doors, Sliding Glass)
A R B Window Sales Co
Curtis Companies Inc
Elling Window
Farley & Loetscher Mfg Co
Horizon Door Co
International Fager Co Long-Bell Div
Matta Mfg Co
Miller Sliding Glass Door Co Inc
Pullum Window Corp
R O W Sales Co
Rock Island Millwork Co Factory Div

Windows, Horizontal Gliding, Aluminum
Bilco Steel Prods Corp
Federal Windows Mfg Co Inc
Fenesta Inc
Metal Trims Inc
National Window Corp

Windows, Projected, Aluminum
Bilco Steel Prods Corp
Federal Windows Mfg Co Inc
Fenesta Inc
Metal Trims Inc
National Window Corp

Windows, Reeded, Wood
Petersen Window Corp
Southern Sash Sales & Supply Co
Vento Steel Products Co Inc

Windows, Security, Steel
Bilco Steel Prods Corp
Mesker Bros Iron Co
Milhollin & Pfeffer Iron Works Inc

Windows, Single Hung, Aluminum & Steel
Air Vue Products Corp
Albritton Engineering Corp
Ceco Steel Prods Corp
Crestline Co
Croft Metal Products Inc
Crossly Window Corp
General Bronze Corp
Kawneer Co
Leonard R B Inc
Metal Trims Inc
National Window Corp
Reynolds Aluminum Supply Co
Reynolds Metals Co
Russel F C Co
Southern Sash Sales & Supply Co
Windalume Corp

Windows, Single Hung, Wood
Air Vue Products Corp

Windows, Storm (See Windows & Doors, Combination)

Windows, Structural, Wood
Andersen Corp

NEW Andersen
Strutwall
Cuts window installation steps
had. Provides strongest, most
trouble-free fit
New component comes
with structural wall members
and Andersen Beauty-Line or Flexi-
vent Window factory-assembled.
To install, you simply cut two
load-bearing studs to fit under
header. Nail in place for the
strongest, most trouble-free
joining of window and wall. For
complete facts, write:
Andersen Corporation, Bayport, Minn.

Windows, Wood, Louver-Based
Wadsworth Millwork Corp

Wire
Bethlehem Steel Co
Chase Brass & Copper Inc
Continental Steel Corp
General Cable Corp
Jones & Laughlin Steel Corp
Nati Elec Div H R Porter Co Inc
Northwestern Steel & Wire Co
Pheils Dodge Copper Prods Corp
Sheffield Div Armo Steel Corp
Touch Plate Mfg Corp
Triangle Conduit & Cable Co Inc

Wiring, Concealed Telephone
American Telephone & Telegraph Co

Wiring Devices, Electrical
Bryant Electrical Co
Cable Electric Products Inc
Circle F Mfg Co
Electra Protection Co Inc
General Electric Co Wiring Device Dept
Jerrold Electronics Corp
Keystone Mfg Co
Leviton Mfg Co Inc
Mocley Electronics Inc
Murray Mfg Corp
Pass & Seymour Inc
Wakefield Co
Westinghouse Electric Corp

Wiring, Electrical, Multi Outlet
Bryant Electrical Co
Cable Electric Products Inc
Circle Wire & Cable Corp Sub
Cleveland Steel Specialty Co
General Electric Co Wiring Device Dept
Merwin Mfg Co
Murray Mfg Corp
Wakefield Co
Wilemold Co

Wiring Systems, Remote Control
Arrow Hart & Hegeman Elec Co
Bryant Electrical Co
General Electric Co Wiring Device Dept
Jerrold Electronics Corp
Murray Mfg Corp
Remcon Div Pyramid Instrument Corp
Superior Electric Co
Touch Plate Mfg Corp
Wakefield Co

Wood
(See Lumber)

Wood Paneling
(See Panelwork, Wood)

Wood Sealers
Cabot Samuel Inc
Danco Co Inc
Johnson's Wax
Lucas John & Co Inc
Marietta Paint & Color Co
Minnesota Paints Inc
Minwax Co Inc
Monroe Co Inc
United States Plywood Corp

Woodworking Machines
(See Planers, Routers, Etc.)
Every well-known brand-named product is listed in this Directory, together with its manufacturer. Section 2 will give you complete addresses of manufacturers. Brands start here, continue for 21 pages.
<table>
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<th>Company Name</th>
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<td>FOIL-GLASS</td>
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<td>FOL-BAK</td>
<td>Holcomb &amp; Hoke Mfg Co Inc</td>
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<td>Patent Scaffolding Co</td>
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<td>FOLD-A-WEIGH</td>
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<td>FOLD-BACK</td>
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<td>FOLDET</td>
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<td>Trane Co</td>
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<td>FORECAST</td>
<td>Congoleum-Nairn Inc</td>
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<td>FORELINE</td>
<td>Yoder Manufacturing Co</td>
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<tr>
<td>FORGE CRAFT</td>
<td>Penn-Akron Corp</td>
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<td>FORMBINDER</td>
<td>Gerrard A J &amp; Co</td>
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<td>FORTEX</td>
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<td>FORUM</td>
<td>Mirraplus Tile Co</td>
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<td>Masonite Corp</td>
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<td>Mirraplus Tile Co</td>
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<td>FULLER TILE</td>
<td>CARRIERS Fuller Mfg Co</td>
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<td>FUEL-DOOR</td>
<td>Handley-Brown Co</td>
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<td>Fulton Cotton Mills</td>
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<tr>
<td>FULL-VU</td>
<td>Leigh Building Products</td>
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<td>FRESH'ND-AIRE</td>
<td>Cory Corp</td>
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<td>FRATE-GATE</td>
<td>Gar Wood Industries Inc</td>
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<td>GAS-O-MATIC</td>
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<td>GAS-DE LUXE</td>
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<td>FOLD-BACK</td>
<td>Macklanburg-Duncan Co</td>
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<td>Div Spray-O-Bond Co</td>
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<td>FOYDENCE OAK</td>
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<td>Vita-Var Corp</td>
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AMERICAN BUILDER
ALABAMA
KINGSBURY HOMES CORP., Fort Payne, Alabama.
Firm distributes in 350 mi. radius. Has 38 basic plans. Sells through builders.
Dealers at prices from $1,995 to $8,272 f.o.b. Offers own financing plan. Thick
catalog and separate model guide give detailed floor plans, color drawings, fac-

ILLINOIS
CRAFT WAY INC., 850 Rathbone Ave.,
Aurora, Ill.
Firm distributes in 300 mi. radius. Has 18 basic plans. Sells through dealers or to
builders at prices from $2,800 to $8,000 f.o.b. Delivers in ten days. Offers own
financing plan. Basic package features wall panels with doors hung, windows in,
partitions and trusses assembled.

CONNECTICUT
FEDERAL HOMES CORPORATION,
Canaan, Conn.
Firm distributes in 250 mi. radius. Has 20 basic plans. Sells to builders at prices
from $2,000 to $9,000 f.o.b. Delivers in two to three weeks.

DISTRICT OF COLUMBIA
BARBER & ROSS CO., 2323 Fourth St.
N.E., Washington, D.C.
Firm distributes in four states. Has seven basic plans. Sells through dealers or
to builders at prices from $2,300 to $8,000 f.o.b. Deliver in ten days. Offers various
financing methods. Catalog describes package which includes basic mater-
ials, blueprints, foundation and erection plans. For more details: Circle No.
A461, page 19.

FLORIDA
PANELFAB PRODUCTS, INC., 2000 N. E.
146th St., N. Miami, Fla.
Firm distributes nationally, has "no limit" on number of basic plans. Sells
to builders or to builders at prices from $2,000 to $15,000 f.o.b. Delivers
one week to one month. Type of financing is arranged. Catalog describes package as featuring stressed-skin, struc-
tural sandwich panels. For complete in-
formation contained in catalog: Circle No.
A462, page 19.

INDIANA
ALLEN INDUSTRIES, INC., Bldg. 107
Bayer Field, Fort Wayne, Ind.
Firm distributes throughout Florida. Has 25 basic plans. Sells to builders at prices
from $1,650 to $4,450 f.o.b. Delivers in one week. Offers own financing plan.
Literature describes package as complete, exclusive of plumbing and electrical, and
adaptable to masonry construction. For more complete informa-

APRIL 1960

HOME MANUFACTURERS DIRECTORY

Services, models, financial set-ups of all prefab manufac-
turers are included here. Firms are listed alphabetically,
by state. For further information or literature, turn to the
reply card on page 19 and circle matching numbers.

ALABAMA
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Payne, Alabama.
Firm distributes in 350 mi. radius. Has 38 basic plans. Sells through builder-
dealers at prices from $1,995 to $8,272 f.o.b. Offers own financing plan. Thick
catalog and separate model guide give detailed floor plans, color drawings, fac-

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Literature describes package as complete, exclusive of plumbing and electrical, and
adaptable to masonry construction. For more complete informa-
PRECISION HOMES, DIVISION OF ACME BUILDING MATERIALS, INC., 5235 Winthrop Ave., Indianapolis, Ind. Firm distributes in five states. Has 14 basic plans. Sells to builders-dealers at prices from $2,599 up, f.o.b. Delivers in three to eight days. Regular methods of financing. Literature elaborates on package with precut floor framing, panelized walls, partitions, gables, siding. Circle No. A415, page 19.

RICHMOND HOMES, INC., Sheridan & N.W. St., Richmond, Ind. Firm distributes in 250 mi. radius. Has 26 basic plans. Sells through dealers at prices from $2,270 to $4,715 f.o.b. Delivers in one or two weeks. Offers own financing plan. Literature features 14 design variations, in color, of latest model, floor plans, outlines of storage wall units. Circle No. A476 on page 19.


LOUISIANA

CRAWFORD CORPORATION, P.O. Drawer E531, Baton Rouge, La. Firm distributes in South and Southeast. Has 27 basic plans. Sells to builders-dealers at prices from $3,000 to $9,399 f.o.b. Delivers in 10 days. Offers own financing plan. Literature covers housing plans, showings, packages, etc. Circle No. A479 on page 19.

MAINE

MORGAN C. ELMER, INC., Rockland, Me. Firm distributes in 500 mi. radius. Has custom fabrication to any plan. Sells through dealers and to builders at prices from $7,250 to $7,890 f.o.b. Delivers in two weeks. Literature is available on package containing complete exterior, except roof shingles, and interior struc- tured panels only. No. A481, page 19.

MARYLAND

DIXIE HOMES, Rt. 1, Box 239-A, Upper Marlboro, Md. Firm distributes in 300 mi. radius. Has 14 basic plans. Sells through dealers or to builders at prices from $2,400 to $5,500 f.o.b. Delivers 20 days from receipt of order. Uses regular financing methods. Literature consists of folders on models, with floor plans. No. A482, p. 19.

GOLDEN KEY HOMES INC., Howard County, Annapolis Junction, Md. Firm distributes in 250 mi. radius. Has 12 basic plans. Sells at prices from $2,000 to $10,000 f.o.b.Delivers in two to three weeks. Uses regular financing channels. Maryland Housing Corp., 5715 Southwestern Blvd., Baltimore 27, Md. Firm distributes in 150 mi. radius. Has eight basic plans. Sells to builders at prices from $2,500 to $5,500 f.o.b. Delivers in ten to 30 days. Uses regular financing. Catalog gives floor plans, drawings, a look at all models. Basic package consists of pre-cut floor assembly, sheathed exterior panels, roof trusses, etc. Circle No. A491, p. 19.

PRECISION QUALITY BUILT HOMES, INC., Milford Mill Rd. & W. Md. RR, Baltimore, Md. Firm distributes in 200 mi. radius. Has 100 basic plans. Sells through dealers or to builders at prices from $2,175 to $8,750 f.o.b. Delivers in about three weeks. Uses regular financing methods. Catalog sheets, punched for a looseleaf, give floor plans, drawings, elevations, features of each model. No. A484, page 19.

 MASSACHUSETTS


FRANKLIN HOMES, INC., 65 Dean St., Franklin, Mass. Firm distributes in New England states. Has 25 basic plans. Sells through dealers or to builders at prices from $1,000 to $7,600 up, f.o.b. Delivers in about three weeks. Bank does financing. Literature is available on package that consists of pre-cut joists and sub flooring, roof trusses, gables and interior partitions, etc. Circle No. A488, page 19.

HODGSON HOUSES, INC., Dover, Mass. Has 26 basic plans. Sells to builders or through dealers at prices from $3,000 to $9,900 f.o.b. Delivers in two weeks. Financing is done through bank assignment. Catalog contains sheets which illustrate design variations of model, give floor plans and check list of optional items. Circle No. A487 on page 19.

PRE-BILT CONSTRUCTION CO., INC., 585 State Rd., Rt. 6, N. Dartmouth, Mass. Firm distributes in New England states. Has 30 basic plans. Sells through dealers at prices from $2,500 to $10,000 f.o.b. Delivers in 45 days. Literature is available on package which consists of room-size exterior panels complete with siding. Circle No. A480 on page 19.


MICHIGAN

ALADDIN COMPANY, 212 Davidson Bldg., Bay City, Mich. Firm distributes nationally. Has 115 basic plans. Sells to individuals at prices from $3,000 to $8,000 f.o.b. Delivers in 10 days. Catalog describes package that features everything from foundation up, except plumbing, heating, lighting, Color drawings, floor plans, a look at many models. No. A490, p. 19.


LYTLE MODERN HOMES, INC., 7742 Green Bay Dr., Baltimore, Md. Firm distributes in 300 mi. radius. Has ten basic plans. Sells to builders at prices from $2,500 to $4,500 f.o.b. Delivers in two weeks. Assists in obtaining financing. Catalog sheets show models in color, floor plans, special features. Basic package consists of prefab wall panels, with siding, insulation and windows installed. Circle No. A492, p. 19.


MICHIGAN LUMBER FABRICATORS, INC., 613 Fisher Bldg., Detroit, Mich. Firm distributes in Michigan. Has 38 basic plans. Sells to builders at prices from $1,000 to $9,000 f.o.b. Delivers in 30 days. Offers own financing plan. Literature describes package which is complete except for electrical and rough plumbing. Circle No. A494 on page 19.


SERVICE HOME MFG. CO., 395 54th St., S.W., Grand Rapids 8, Mich. Firm distributes in two states. Has 20 basic plans. Sells through builders-dealers at prices from $2,000 to $12,000 f.o.b. Delivers in 10 days. Offers own financing plan. Catalog describes package, giving drawings and floor plans. Circle No. A496, p. 19.

UNIVERSAL HOMES, INC., 271 First St., Milan, Mich. Firm distributes in six states. Has ten basic plans. Sells through dealers or to builders at prices from $3,500 up, f.o.b. Delivers in two weeks. Catalog gives...
specifications and prices of basic package. Also features floor plans, drawings, variety of models. Circle No. A497 on page 19

MINNESOTA

NORTHERN HOMES MFG. CO., 6200 Wayzata Blvd., Minneapolis 16, Minn.
Firm distributes in 500 mi. radius. Has 30 basic plans. Sells to builders at prices from $2,500 to $5,000 f.o.b. Delivers in five days.
PACIFIC HOMES, INC., 3-Sixth Ave. South, Hopkins, Minn.
Firm distributes in 500 mi. radius. Has 97 basic plans. Sells to builders at prices from $3,430 to $6,800 f.o.b. Delivers in two weeks. Offers own financing plan. Literature describes package as a complete pre-cut operation. Circle No. A498 on page 19.

PAGE & HILL HOMES, INC., Albert Lea, Minn.
Firm distributes in 14 states. Has 50 basic plans. Sells through dealers or to builders at prices from $1,500 to $2,500 f.o.b. (Free delivery up to 200 mi.) Delivers in 14 days. Offers own financing plan. Catalog gives floor plans, drawings, photos of finished interiors and optional extras. Firm also does all plumbing, heating, wiring above foundation. Circle No. A499, p. 19.

MISSOURI

HOME BUILDING CORPORATION, 203 N. Park Ave., Sedalia, Mo.
Firm distributes in 500 mi. radius. Has ten basic plans. Sells through dealers or to builders at prices from $4,700 to $12,000 f.o.b. Delivers in seven to 10 days. Uses regular financing methods. Catalog features photos of interiors and exteriors, drawings, floor plans. Circle No. A501, p. 19.

STANDARD HOMES CO., 4400 Roe Blvd., Kansas City 3, Mo.

WILSON HOMES, INC., Box 6206, Lamberton Field, Mo.
Firm distributes in 400 mi. radius. Has ten basic plans. Sells through builder-dealers at prices from $8,000 to $30,000 f.o.b. Delivers in 15 days. Offers construction financing plan. Catalog details specifications of package all models, floor plans. Circle No. A503, p. 19.

NEBRASKA

PERMCO MFG. COMPANY, Peru, Neb.
Firm distributes in 500 mi. radius, has 24 basic plans. Sells through dealers or to builders at prices from $3,500 to $7,500 f.o.b. Deliver in three weeks. Uses regular financing methods. Package consists of pre-cut joists and floor system; roof sheathing in plywood.

NEW JERSEY

PRESIDENTIAL HOMES, INC., Pemberton, N.J.
Firm distributes in 400 mi. radius. Has 150 basic plans. Sells through dealers or to builders at average price of $3,800 f.o.b. Delivers in two to three weeks. Uses regular financing methods. Literature describes package of panelized vertical members, pre-cut horizontal members. Circle No. A505 on page 19.

NEW YORK

ALLEGHANY HOMES CORPORATION, 26 Copeland Ave., Homer, N.Y.
Firm distributes in 400 mi. radius. Has 24 basic plans. Sells through dealers or to builders at prices from $2,100 to $11,000 f.o.b. Delivers in 7 to 14 days. Uses regular financing. Literature describes package of panelized deck framing, sheathed walls, doors, windows and windows installed. Drawings, floor plans of models. No. A507, p. 19.

BUSH HOMES, INC., Second St. & Lenox Rd., Huntington Station, L.I., N.Y.

PEASE WOODWORK CO. INC., 900 Forest Ave., Hamilton, Ohio.
Firm distributes in 400 mi. radius. Has 10 basic plans. Sells through dealers or to builders at prices from $3,000 to $15,000 f.o.b. Delivers in two weeks. Uses regular financing methods. Literature elaborates on package of exterior and interior panels, roof trusses, door and window units. Circle No. A515, p. 19.

SCHOLZ HOMES, INC., 2001 N. Westwood, Toledo, Ohio.
Firm distributes nationally. Has 100 basic plans. Sells to builders at or to builders at prices from $3,000 to $15,000 f.o.b. Delivers in two weeks. Uses regular financing methods. Literature describes package of exterior and interior panels, roof trusses, door and window units. Circle No. A515, p. 19.

THE PANA HOUSE, 2716 W. 143rd St., Cleveland 11, Ohio.

THYER MFG. CORP., 2857 Wayne St., Toledo, Ohio.
Firm distributes in three states. Has 22 basic plans. Sells to builders at prices from $2,500 to $6,000 f.o.b. Delivers in seven days. Offers own financing plan. Literature stresses designs that accept almost any skims. No. A518, p. 19.

OHIO

DUNBAR INDUSTRIES, INC., 3810 Upton Ave., Toledo, Ohio.

EXPAN HOMES, INC., 15411 Chatfield, Cleveland Ohio.
Firm distributes in Ohio. Has 12 basic plans. Sells through dealers or to builders at prices from $2,600 to $7,500 f.o.b. Delivers in 10 days. Catalog presents floor plans, drawings of many models in compact form. Check list included. Circle No. A511, p. 19.

INLAND HOMES CORP., Box 915, Piqua, Ohio.
Firm distributes in 24 states. Has 48 basic plans. Sells through dealers or to builders at prices from $1,700 to $4,000 f.o.b. Delivers in seven days. Offers own financing plan and catalog gives color drawings of many models, drawings, specifications. No. A512, p. 19.

METROPOLITAN HOMES, INC., 721 W. Columbia St., Springfield, Ohio.
Firm distributes in four states. Has eight basic plans. Sells to builders at prices from $2,500 to $6,500 f.o.b. Uses conventional financing methods. Literature describes package of full wall panels, insulating sheathing or stressed skin panels. Circle No. A513 on page 19.

MIDWEST HOUSES, INC., P.O. Box 334, Mansfield, Ohio.

Use the reply card on page 19.
OKLAHOMA

SOUTHERN MILL HOMES CO., P.O. Box 1087, Tulsa, Okla.

Firm distributes in 300 mi. radius. Has 26 basic plans. Sells through dealers or to builders at prices from $5,000 to $10,000 f.o.b. Delivers in 10 days. Uses regular financing methods. Catalog shows designs, floor plans, drawings of models, gives a look at many houses. No. A529, p. 19.

Pennsylvania

ADMIRAL HOMES, INC., 149 Water St., West Newton, Pa.

Firm distributes in 300 mi. radius. Has 31 basic plans. Sells through dealers or to builders at prices from $2,200 to $12,000 f.o.b. Delivers in two weeks. Uses regular financing methods. Catalog presents floor plans, drawings, sizes of many models, describes methods of building. No. A521, p. 19.

COTTMAN PLANNED HOMES, 820 Cottman St., Philadelphia, Pa.

Firm distributes in 300 mi. radius. Has 31 basic plans. Sells through dealers or to builders at prices from $3,500 to $16,000 f.o.b. Delivers in two weeks or less. Offers own financing plan. Catalog features color photos of models, pictures of interiors, floor plans, drawings, construction methods. For more information: Circle No. A532 on page 19.

COTTWOOD HOMES CO., P.O. Box 311, Greenville, Pa.

Firm distributes in 150 mi. radius. Has 14 basic plans. Sells through dealers or to builders at prices from $1,600 to $15,000 f.o.b. Delivers in 15 days. Offers own financing plan. Catalog gives floor plans for 10' wide mobile models. Lists optional specifications. Circle No. A524, p. 19.

CANADA

AMERICAN BUILDER

Buckingham Wood Products, Inc., 931 E. North St., Rapid City, S.D.

Firm distributes in 300 mi. radius. Has 25 basic plans. Sells through dealers or to builders at prices from $3,750 to $10,000 f.o.b. Delivers in two weeks. Uses regular financing methods. Catalog gives floor plans, drawings, roof construction details, a list of specifications. For more information: Circle No. A528, p. 19.

SOUTHERN MILL HOMES CO., P.O. Box 1087, Tulsa, Okla.

Firm distributes in 300 mi. radius. Has 26 basic plans. Sells through dealers or to builders at prices from $3,000 to $7,800 f.o.b. Delivers in two weeks. Uses regular financing methods. Catalog shows designs, floor plans, drawings of models, gives a look at many houses. No. A529, p. 19.

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GET THE INSIDE STORY...

TOTAL PREFABRICATION
This is what total prefabrication could mean to you:
- More than twice the volume on the same amount of working capital
- Less than half the bookkeeping and paper work
- Less than half the interest on borrowed capital
- Less than half the crew for the same volume
- Less than one-third the building time
- Four times the direct labor control
- Less than one-fourth dependence on weather
- Year around building efficiency

TOTAL FINANCING
General Homes has always fulfilled its mortgage commitments! Our sources are well established. Here is our Total Financing program:
- Guaranteed permanent mortgage money
- 5% simple interest construction loans
- Land development financing tailored to builder's needs
- S.B.I.C. business loans to increase working capital
We offer builders of popular priced homes a complete, efficient program. Let us give you the real "Inside Story!"

CALL, WIRE OR WRITE NOW!
If you're a qualified builder with 25 or more lots within 450 miles of Ft. Wayne, get complete information from General Homes Builder-Dealer Manager or Wm. B. F. Hall, President, General Homes Division of General Industries, Inc., Ft. Wayne, Ind. PHONE: Kenmore 6221.
MR. BUILDER: Maybe you can't afford not to use HOUSE PACKAGES...

*Recent scene in Atlanta of opening of a new subdivision using house packages.

THE HMA PROFIT TEST WILL TELL!

Every year, more and more so-called “conventional” builders turn to the use of component parts, prefabrication and complete house packages. Last year more than 150,000 house packages alone were sold! Why the upsurge in building with parts instead of pieces? The answer: builders can make more money, faster, easier, with fewer headaches. Just how, and how much, depends on how you operate today as a builder. If you'll take just 100 seconds and jot down the answers to the questions below, home manufacturing experts can tell in less than a minute if you can profit by switching to house packages.

YES NO

☐ ☐ I keep a skilled architect on my staff who produces fast-selling designs.

☐ ☐ We build homes in the FHA-VA market and sometimes run into plan or engineering objections from local VA and FHA officials.

☐ ☐ There is a shortage of mortgage funds in my city.

☐ ☐ As president of my company, I have plenty of time to handle estimating, scheduling, merchandising, financing, engineering and still attend all necessary local, state and national home builder association meetings.

☐ ☐ Under my present construction system we can build all winter long.

☐ ☐ Under my present construction system we can erect a home in one day.

Now tear out just the test portion of this page and mail it—with your name, title, company and address—to: Home Manufacturers Association, 1117 Barr Building, Washington 6, D. C.

We'll send you complete information about “Profits in Packaged Homes,” as well as the names of leading home manufacturers shipping into your city (U.S. and Canada). It just makes sense to build with parts—not pieces!
$11,000 MASS MARKET

PACKAGE PRICE

$2691

(less quantity discounts)

includes

- Attached Garage.
- 12 Colonial, Contemporary, French Provincial, Ranch and New Orleans Colonial designs.
- Birch wood kitchen cabinets.
- And much more we want to tell you about.

Model home financing furnished. Inland Mortgage Corporation will supply complete construction financing for a Model Home in your subdivision ... at no cost to Builder-Dealers.

GO MUSTANG IN '60!
GET THE FACTS!

Today! Write, wire or phone (PR 3-7550).
Neal B. Welch, Jr., Vice President, Sales, Department A-4, Piqua, Ohio.

© Inland Homes Corporation 1960
FORD HOMES ARE READY FOR DECORATING

24 hours after delivery!

THAT'S RIGHT, BECAUSE . . .
- FORD LAYS THE FINISH FLOORING
- FORD APPLIES THE DRYWALL
- FORD DOES THE WIRING
- FORD APPLIES THE TRIM

Other models available in
MODERN CAPE COD RANCH
SPLIT LEVEL

For full details, write on your own letterhead to Dept. AB

Ford factory-built HOMES
Manufactured by IVON R. FORD, INC., McDonough, N. Y.

(Continued from page 118)

BRAND NAMES DIRECTORY

(Continued from page 144)
Only RICHMOND HOMES OFFER THESE FAMOUS KLOSET-WALLS

Read this... Planned storage... Increased valuation...
Factory finished mahogany... Eliminates closet framing, sheetrock, door, shelving, trim and painting... And the ladies love them!

To see these in your nearest model Richmond Home, call Ray Imperial at Richmond 8-1636.

Richmond Homes - Inc.
RICHMOND, INDIANA

APRIL 1960
"a sight better on any site"... that's the theme of the big, new USS Homes 1960 promotion designed to help you sell more Steelstyle Homes this spring. In a big, four-color ad in "The Saturday Evening Post," readers are told they'll find quality housing where they see this sign.

To make this promotion produce sales, USS Homes is providing to all its dealers a complete new Spring Promotion Kit. Here's what it offers: a colorful site sign for use at the job site; newspaper repro art, copy suggestions and radio commercials for "custom-made" advertising campaigns; and a complete "Saturday Evening Post" promotion package consisting of ad mats, a 4-color mailer of the consumer ad, and an eye-catching easel display poster—PLUS everything else needed to make this Spring promotion the best of all USS Homes promotions. To learn how U.S. Steel Homes Dealers can sell more Steelstyle Homes by promoting the theme, "A sight better on any site," send in the coupon.

United States Steel Homes
Division of United States Steel

Sales Promotion Manager
United States Steel Homes
525 William Penn Place
Pittsburgh 30, Pennsylvania

Yes, I'd like more information on how to sell USS Steelstyle Homes.

Name

Address

City Zone State
TECHNICAL DATA SECTION

Site planning
Concrete, masonry, tile, brick
Framing
Roofing, siding, insulation, sheathing
Doors, windows
Plumbing, water supply
Heating, cooling, ventilation
Electrical, wiring
Floor, wall, ceiling material
Millwork, cabinets
Hardware, building specialties
Appliances
Paints, finishes, waterproofing
Tools, equipment
## SITE PLANNING
### How to Select a Subdivision Site

### GENERAL PREPARATIONS:

The site chosen for your houses should first fit the local home market. Determining this market demand, both as to house type and price range, population growth and housing needs, is a basic precaution, particularly if you are buying in an area where land prices are high and your investment will be costly. A good deal of this market information is available from local agencies such as your Chamber of Commerce and Planning Commission, from the FHA and U.S. Bureau of Census. Much of this type of information for specific cities has been summarized by American Builder in its series of research studies, “Markets on the Move.”

Once you have decided what and for whom you are building, the choice of acreage is already narrowed down. Cost of the land, amount of grading involved, public utilities available, adjacent land use, zoning ordinances... are the next considerations. A careful check of these factors against your original market plan and cost estimate will narrow the choice once again.

It is important to remember, too, that the FHA and other loaning agencies are extremely careful of physical environment when rating a location. To establish the stability of value and desirability of a site FHA considers: protection from adverse influences, such as industry, airports, etc.; freedom from special hazards, such as high speed traffic, fire hazards; adequacy of civic, social and commercial centers; adequacy of transportation; and general appeal.

The check list below can be used to quickly evaluate a potential subdivision site and compare it with the others under consideration. You can tear this one out of the magazine or have it copied into an office form for convenient use. You may also want to add some new check points to it to cover your local problems.

### CHECK LIST:

<table>
<thead>
<tr>
<th>Site</th>
<th>Size</th>
<th>Location Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Direction from city</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class of surrounding development: high, medium, low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Distance from central business district via street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Distance from major employment centers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public Transportation: type good, fair, poor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fare to employment and center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Travel Time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automobile access: good, fair, poor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Travel time to employment and center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Type of highway approaches: good, fair, poor</td>
</tr>
</tbody>
</table>

### Presence of Community Facilities

<table>
<thead>
<tr>
<th>Existing shopping center or stores:</th>
<th>Size and type</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools:</td>
<td>Elementary</td>
<td>distance</td>
</tr>
<tr>
<td>Nursery Schools</td>
<td>distance</td>
<td></td>
</tr>
<tr>
<td>Number Denominations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreations:</td>
<td>Name</td>
<td>Distance</td>
</tr>
<tr>
<td>Parks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playgrounds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other facilities such as library, colleges, etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Environment Factors—Tract—Surrounding Area

| Zoning and Subdivision Regulations: kind good, fair, poor |
|                                                      |
| Tract abuts heavily traveled thoroughfare: Yes, No   |

<table>
<thead>
<tr>
<th>Prevailing wind</th>
<th>Industrial smoke: Yes, No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airports:</td>
<td>Distance, relation to approaches</td>
</tr>
<tr>
<td>Airports:</td>
<td>Distance, relation to approaches</td>
</tr>
</tbody>
</table>

### Site Factors

<table>
<thead>
<tr>
<th>Raw Land Price</th>
<th>per acre, Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Water Supply Connections: yes, no</td>
<td></td>
</tr>
<tr>
<td>Will require—Independent system</td>
<td></td>
</tr>
<tr>
<td>Individual wells</td>
<td></td>
</tr>
<tr>
<td>Public Sewer—connections: yes, no</td>
<td></td>
</tr>
<tr>
<td>Will require—Independent system</td>
<td></td>
</tr>
<tr>
<td>Septic tanks</td>
<td></td>
</tr>
<tr>
<td>Topography: hilly, level, rolling</td>
<td></td>
</tr>
<tr>
<td>Elevation of site: Highest point, Lowest point, Average elevation</td>
<td></td>
</tr>
<tr>
<td>Estimated amount of land over 8%</td>
<td></td>
</tr>
<tr>
<td>Elevation with relation to existing streets: above grade, below grade</td>
<td></td>
</tr>
<tr>
<td>Heavy grading needed: for streets, for lots,</td>
<td></td>
</tr>
<tr>
<td>Type of soil</td>
<td></td>
</tr>
<tr>
<td>Rock outcrop or depth of soil cap</td>
<td></td>
</tr>
<tr>
<td>Heavy woods: scrub, open</td>
<td></td>
</tr>
<tr>
<td>Type of development indicated by check list: Single Family Detached, Group Row, Garden apartments, Small Shopping Center, Other</td>
<td></td>
</tr>
<tr>
<td>Large Lots required—estimated size</td>
<td></td>
</tr>
<tr>
<td>Price range indicated by survey</td>
<td></td>
</tr>
<tr>
<td>Current Market Demand</td>
<td></td>
</tr>
<tr>
<td>Rating of site for various uses:</td>
<td></td>
</tr>
<tr>
<td>Are indicated uses permitted by zoning or covenants?</td>
<td></td>
</tr>
<tr>
<td>Remarks:</td>
<td></td>
</tr>
</tbody>
</table>


124 AMERICAN BUILDER
How to Lay Out a Building

FIG. 1
HOW TO USE A TRANSIT

(Fig. 1): Using the plumb bob, suspended from the hook under the spindle, locate the station mark or corner of the lot or building to be laid out. Center the instrument directly over this point by shifting the legs of the tripod so that the plumb bob hangs directly over the station point. To bring plumb bob to this position, loosen leveling screws and shift instrument until the plumb bob points to center. Level up the instrument by tightening the leveling screws.

Street line in the illustration is XX. The corner of the proposed building is L, distance from the street line PL. Then a distance RT should be measured from the street, equal to PL, at a point determining the length of the proposed building. Now the line LT is parallel with the street. And LT represents the two front corners of the building.

To get the line at right angles to LT, leave the sights on the stake at T and turn the eyepiece end of the telescope to the left until the vernier has turned a right angle, or 90°. A sight along this new position will give the line LM, on which the necessary distance is measured off to determine the corner M. Now move level to T, and go through same operation to determine corner N.

To prove the correctness of the survey, check the distance MN, to see that it is the same as the distance LT.

FIG. 2
WHEN A BUILDING IS NOT A RECTANGLE (Fig. 2): In such a case, proceed as previously explained. However, additional points must be arranged for, and in that respect small errors are likely to creep in. In all cases, first lay out a large rectangle, along the outside extremities of the proposed building. This is represented by ABCD. These points established, the remaining portion of the layout will consist of small rectangles. Each of these can be laid out and proved separately. In the illustration (Fig. 2) these other rectangles are represented by EFGH, IJKL, and MNOPQ.

ESTABLISHING LEVELS WITH A TRANSIT: Set up the instrument where points may be seen through the telescope. Level up the transit and take a reading where cross-hair cuts on the measuring rod. The rod is then moved to the second point to be established. Then rod is raised or lowered until the original reading is located. The bottom of the rod is then on the same level with the original point.

MEASURING DIFFERENCE IN ELEVATION (Figs. 3 and 4): If the instrument has been properly leveled and is not out of adjustment, the line of sight set up by the telescope when locked in the level position is horizontal in any direction. To obtain the difference in elevation between two points, such as points A and B (Fig. 3) set up and level the instrument at an intermediate point, adjusting the tripod to any convenient height. Sight on a rod held over point A, note the reading where the horizontal cross-hair of the telescope cuts the graduation on the rod. Then, with the rod held on point B, rotate the telescope in a horizontal plane, again sight on the rod and note where the horizontal cross-hair cuts the graduation on the rod. The difference between the reading at A (5 ft.) and the reading at B (6 1/2 ft.) will give the difference in elevation between the two points. Point B is 1/2 ft. lower than point A. In making these readings, the telescope must be carefully focused on the rod or other object on which it is sighted.

When, for any reason such as irregularity of the ground or a large difference in elevation, the two points whose difference in elevation is to be determined cannot be sighted from a single point, "intermediate points" must be used, as shown in Fig. 4.

FIG. 3
RIGHT TRIANGLE METHODS FOR LAYING OUT A BUILDING

Establish a base line to mark out one end or side of a building. Erect stakes A and B at ends of line and drive a nail in the center of each stake to locate accurately the corners. Next drive a stake along line AB exactly 6' from A. Then drive another stake in at a point B' from the center of stake A, and 10' from the center of stake F. EAF is then a right triangle. All extended the proper distance to point D establishes the third point of the building. Set stakes and batter boards at corners beyond corners A, B, C, and D at some convenient height—usually top of foundation wall. Attach strings to batter boards and level. Strings must cross at corners of building. Nails should be driven in the batters where strings are fastened, so that if strings are broken or removed, they can be replaced accurately. Other corners of the building should be located similarly.

A and B can be any corners of a building. Along AB measure a distance of 40' with a steel tape. Approximately at right angles to A, measure a distance of 30' to a point C. From C, measure a distance of 50'. When points C and D are exactly 50' apart, angle CAD becomes a right angle.
### Driveway Design

#### Front Entrance Garage

- **Driveway Design**: Front entrance garage with maximum wheelbase dimensions.

#### Side Entrance Garages

- **Driveway Design**: Side entrance garages with maximum dimensions.

#### Semi-Circular Driveway

- **Driveway Design**: Semi-circular driveway with maximum dimensions.

#### 1959 Automobiles

<table>
<thead>
<tr>
<th>Automobile</th>
<th>Length</th>
<th>Width</th>
<th>Wheelbase</th>
<th>Overhang</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rambler American</td>
<td>178.3&quot;</td>
<td>73&quot;</td>
<td>100&quot;</td>
<td>31&quot;</td>
</tr>
<tr>
<td>Cadillac Special</td>
<td>225&quot;</td>
<td>80.2&quot;</td>
<td>130&quot;</td>
<td>35.6&quot;</td>
</tr>
</tbody>
</table>

#### Driveway Entrances from Street

- **Driveway Design**: Driveway entrances from street with average width concrete runways.

#### Retaining Wall

- **Driveway Design**: Low retaining wall with compacted soil or crushed stone.

#### Concrete Curbs

- **Driveway Design**: Concrete curbs with average width concrete runways.
SITE PLANNING

Block Grading; Exterior Steps. Ramps; Soil Data

Block Grading — Ridge Along Rear Lot Line
- Protective slopes
- Rear drainage swales
- Side swale or channel
- Street

Minimum length at landing M:
Tread gradient: max. %9" per ft. (2%)
Min. 6" per foot (1%)
Minimum treads 12" in flights of rise greater than 30"
1/8" pitch for drainage
Maximum 5' rise in single flight
Continuous handrail required on one side
with rise greater than 30"
Maximum riser 6" in flights of rise greater than 30"

Block Grading — Gentle Cross Slope
- Protective slopes
- Rear drainage swales
- Drainage divide
- Street

Block Grading — Steep Cross Slope
- Protective slopes
- Rear drainage swales
- Side swale or channel
- Drainage divide

Block Grading — Valley Along Rear Lot Lines
- Protective slopes
- Rear drainage swales
- Front drainage swales
- Drainage divide
- Street

Percentage of Difficulty of Excavation
Maximum output figure assumes ideal conditions with skilled operator, no loading delays, in moist loam or light sandy clay. For other soils reduce calculations as follows: sand, gravel: 95%; ordinary earth: 80-85%; hard clay: 50-70%; wall blasted rock: 45-55%; earth with roots and rocks: 35-45%; wet sticky clay: 30-40%; poorly blasted rock: 15-30%.

For a rise of 30" or less, maximum riser 7½"; minimum tread 11½"; width not less than that of walk 2" setback from sidewalk
Minimum width of main walk 3'; Service walk 2'

FHA Minimum Property Standards

APRIL 1960
Newest Additions to the Milcor Building Products Line

Prompt deliveries from your local Milcor dealer's stock. One call orders all — saves you time and paperwork.

**MILCOR BASEMENT AND UTILITY WINDOWS**

BASEMENT WINDOWS — Easy to install. Large flanges on frame insure secure, dustless connection in wall opening. Nailing holes in top flange for attaching to wood plate. Available in Steel or Aluminum — with one or two lights. Two light can be furnished with cork gaskets for puttyless glazing.

MASONRY OPENINGS: 32 1/2" x 14 1/2" to 36 1/2" x 27 1/2".

GLASS SIZES: 2-light — 15" x 12" to 15" x 20"; 1-light — 30 1/2" x 12" to 30 1/2" x 20".

PACKING: Steel — 6 per bundle; Aluminum — 6 per carton.

UTILITY WINDOWS — Available in Steel or Aluminum — in single vent style with four or six lights, or double-vent style with four lights.

MASONRY OPENINGS: 32 1/2" x 47 1/2" to 48" x 47 1/2".

GLASS SIZES: 12" x 20" and 15" x 20".

PACKING: Steel — 4 per bundle; Aluminum — 4 per carton.

**MILCOR AREAWALLS**

Round and Straight styles. Deep corrugated design and bright galvanized finish provide rigidly and maximum light reflection into basement. Made from Ti-Co Galvanized Steel for maximum corrosion resistance with formed rounded bead at top edge.

DIMENSIONS: 32" wide; 12" to 48" high in 6" increments. Round style has 16" projection; Straight style has 12" projection.

PACKING: 12", 18", and 24" — 6 per bundle; 30" and 36" — 4 per bundle; 42" and 48" — 3 per bundle. Foundation Grille Areawalls also available — 17" wide x 12" high x 4" projection — not corrugated. Packed 6 per bundle.

**MILCOR LINTELS**

Roll-formed, ribbed design provides engineered strength, allows proper space for uniform, solid bed of mortar. No tuck-pointing required, no deep-grooving of cement block. Lintels lie flat — no twisting, bending, or warping. Prime roll-formed steel. Baked-on, rust-inhibitive prime paint coating.

LENGTHS: Brick lintels — 2'-0" to 7'-6". Block lintels for 6" and 8" block — 5'-4" to 9'-0".

PACKING: 6, 4, or 3 per bundle, dependent on size.

**MILCOR FIREPLACE DOME DAMPERS**

Simple design provides lasting, trouble-free operation. Ample masonry flange facilitates laying of brick. Damper equipped with either chain or rocker catch. Made of rust-resistant, heat-resistant Steel — damper leaf won’t warp. Baked-on, rust-inhibitive paint coating.

SIZES: For fireplace-opening widths of 30", 32", 36", 42", and 48". Overall width of damper is 3" more than fireplace opening; overall depth, 11"; overall height, 8 1/2".

PACKING: 2 per bundle.

**MILCOR CRAWL SPACE DOORS**

Provide ready access to crawl spaces under basementless houses. Heavy-gauge Steel with ample flanges for secure installation.

NOMINAL SIZES: 32" x 12"; 33" x 16"; 33" x 20".

PACKING: 32" x 20" — 3 per carton. Others — 6 per carton.

**MILCOR FOUNDATION GRILLES**

For any type of masonry construction. Fit openings the size of one concrete block. With screen and adjustable shutter, or with screen only. Available in Ti-Co Galvanized Steel or heavy gauge Aluminum.

SIZE: 16" x 8"

PACKING: 12 per carton.

**MILCOR ASH DUMPS**

Installed in bottom of fireplace to facilitate ash removal. Extra-wide flanges simplify installation. Stamped from hot-rolled steel.

SIZE: Double-leof unit with 4" x 8" opening.

PACKING: 12 per carton.

Write for price list and Catalog No. 260.

INLAND STEEL PRODUCTS COMPANY
Member of the <Steel> Family

DEPT. D, 4025 WEST BURNHAM STREET * MILWAUKEE 1, WISCONSIN
BALTIMORE, BUFFALO, CHICAGO, CINCINNATI, CLEVELAND
DETROIT, KANSAS CITY, LOS ANGELES, MILWAUKEE, MINNEAPOLIS,
NEW ORLEANS, NEW YORK, ST. LOUIS.

AMERICAN BUILDER
### NOMINAL LENGTH OF CONCRETE MASONRY WALLS BY STRETCHERS

(Based on units 15/8" long and half units 7/8" long with 3/4" thick morter joints)

<table>
<thead>
<tr>
<th>LENGTH OF WALL</th>
<th>NO. OF UNITS</th>
<th>LENGTH OF WALL</th>
<th>NO. OF UNITS</th>
<th>LENGTH OF WALL</th>
<th>NO. OF UNITS</th>
<th>LENGTH OF WALL</th>
<th>NO. OF UNITS</th>
<th>LENGTH OF WALL</th>
<th>NO. OF UNITS</th>
<th>LENGTH OF WALL</th>
<th>NO. OF UNITS</th>
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</thead>
<tbody>
<tr>
<td>0'-8&quot;</td>
<td>.5</td>
<td>20'-8&quot;</td>
<td>15/8</td>
<td>40'-8&quot;</td>
<td>30/8</td>
<td>60'-8&quot;</td>
<td>45/8</td>
<td>80'-8&quot;</td>
<td>60/8</td>
<td>100'-8&quot;</td>
<td>75/8</td>
</tr>
<tr>
<td>1'-4&quot;</td>
<td>1</td>
<td>21'-4&quot;</td>
<td>16</td>
<td>41'-4&quot;</td>
<td>31</td>
<td>61'-4&quot;</td>
<td>46</td>
<td>81'-4&quot;</td>
<td>61</td>
<td>101'-4&quot;</td>
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<tr>
<td>2'-0&quot;</td>
<td>2</td>
<td>22'-0&quot;</td>
<td>17</td>
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<td>31 1/2</td>
<td>62'-0&quot;</td>
<td>46 1/2</td>
<td>82'-0&quot;</td>
<td>61 1/2</td>
<td>102'-0&quot;</td>
<td>76 1/2</td>
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<tr>
<td>2'-8&quot;</td>
<td>3</td>
<td>23'-8&quot;</td>
<td>17 1/2</td>
<td>43'-8&quot;</td>
<td>32 1/2</td>
<td>63'-4&quot;</td>
<td>47 1/2</td>
<td>83'-4&quot;</td>
<td>62 1/2</td>
<td>103'-4&quot;</td>
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<td>66'-0&quot;</td>
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<td>28'-0&quot;</td>
<td>22</td>
<td>48'-0&quot;</td>
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<td>83 1/2</td>
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<td>78'-0&quot;</td>
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<td>118'-0&quot;</td>
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<td>80'-0&quot;</td>
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<td>100'-0&quot;</td>
<td>78 1/2</td>
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### NOMINAL HEIGHT OF CONCRETE MASONRY WALLS BY COURSES

(Based on units 7/8" high and 3/4" thick morter joints)

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<tr>
<th>HEIGHT OF WALL</th>
<th>NO. OF UNITS</th>
<th>HEIGHT OF WALL</th>
<th>NO. OF UNITS</th>
<th>HEIGHT OF WALL</th>
<th>NO. OF UNITS</th>
<th>HEIGHT OF WALL</th>
<th>NO. OF UNITS</th>
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<td>36</td>
<td>32'-0&quot;</td>
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### CUBIC YARD CONTENTS OF WALLS AND SLABS

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<tr>
<th>Thickness of Wall in Inches</th>
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<th>6&quot;</th>
<th>8&quot;</th>
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<th>12&quot;</th>
<th>14&quot;</th>
<th>16&quot;</th>
<th>18&quot;</th>
<th>20&quot;</th>
<th>22&quot;</th>
<th>24&quot;</th>
</tr>
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<tbody>
<tr>
<td>3&quot;</td>
<td>0.006</td>
<td>0.012</td>
<td>0.018</td>
<td>0.024</td>
<td>0.030</td>
<td>0.037</td>
<td>0.043</td>
<td>0.049</td>
<td>0.055</td>
<td>0.062</td>
<td>0.068</td>
<td>0.074</td>
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<td>4&quot;</td>
<td>0.024</td>
<td>0.049</td>
<td>0.074</td>
<td>0.099</td>
<td>0.124</td>
<td>0.148</td>
<td>0.173</td>
<td>0.197</td>
<td>0.222</td>
<td>0.246</td>
<td>0.271</td>
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<td>0.062</td>
<td>0.092</td>
<td>0.123</td>
<td>0.150</td>
<td>0.185</td>
<td>0.216</td>
<td>0.247</td>
<td>0.277</td>
<td>0.308</td>
<td>0.339</td>
<td>0.370</td>
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<td>0.222</td>
<td>0.259</td>
<td>0.296</td>
<td>0.333</td>
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<td>0.407</td>
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<td>0.215</td>
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<td>0.431</td>
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<td>0.140</td>
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<td>0.246</td>
<td>0.296</td>
<td>0.345</td>
<td>0.395</td>
<td>0.444</td>
<td>0.493</td>
<td>0.542</td>
<td>0.592</td>
</tr>
</tbody>
</table>

**HOW TO USE THIS TABLE**

This table gives the cubic yard factors to use in estimating quantities of concrete required for walls, slabs, walks or drives when the square footage is known.

Example: Find the number of cubic yards of concrete required for the walls of a foundation 24' x 30' x 8' — 10" thick.

1. \(2 \times (24 + 30) \times 8 = 1080 \text{ sq. ft.}\)
2. Use factors from the table for 10" wall thickness:
   - 800 sq. ft. = 24.64 cu. yds.
   - 60 sq. ft. = 1.848 cu. yds.
   - 4 sq. ft. = 0.123 cu. yds.

Total:

\[24.64 + 1.848 + 0.123 = 26.611 \text{ cu. yds.}\]

**CONCRETE FOOTING QUANTITY FACTORS**

<table>
<thead>
<tr>
<th>Width of Footing in Inches</th>
<th>6&quot;</th>
<th>8&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
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<th>18&quot;</th>
<th>20&quot;</th>
<th>22&quot;</th>
<th>24&quot;</th>
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<tbody>
<tr>
<td>2&quot;</td>
<td>0.093</td>
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<td>0.154</td>
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<td>0.217</td>
<td>0.248</td>
<td>0.278</td>
<td>0.308</td>
<td>0.340</td>
<td>0.370</td>
</tr>
<tr>
<td>4&quot;</td>
<td>0.124</td>
<td>0.165</td>
<td>0.205</td>
<td>0.247</td>
<td>0.289</td>
<td>0.330</td>
<td>0.370</td>
<td>0.410</td>
<td>0.451</td>
<td>0.494</td>
</tr>
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<td>0.360</td>
<td>0.412</td>
<td>0.462</td>
<td>0.512</td>
<td>0.564</td>
<td>0.616</td>
</tr>
<tr>
<td>8&quot;</td>
<td>0.185</td>
<td>0.247</td>
<td>0.308</td>
<td>0.370</td>
<td>0.432</td>
<td>0.494</td>
<td>0.555</td>
<td>0.616</td>
<td>0.678</td>
<td>0.740</td>
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<td>0.360</td>
<td>0.432</td>
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<td>0.576</td>
<td>0.648</td>
<td>0.720</td>
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<td>0.555</td>
<td>0.648</td>
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<td>0.924</td>
<td>1.017</td>
<td>1.110</td>
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<td>0.924</td>
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<td>0.791</td>
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<td>0.740</td>
<td>0.854</td>
<td>0.988</td>
<td>1.110</td>
<td>1.232</td>
<td>1.360</td>
<td>1.480</td>
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</table>

**HOW TO USE THIS TABLE**

This table gives the cubic yard factors to use in estimating quantities of concrete required for footings when the total length is known.

Example: Find the number of cubic yards of concrete required for a footing 18" wide, 10" thick for a foundation wall 24' x 30'.

1. \(2 \times (24 + 30) = 108 \text{ lin. ft.}\)
2. From the table it is found that 10 lin. ft. of 18" wide footing contains .462 cu. yds. (or .0462 for 1 lin. ft.)

**NOTE:** This table is also useful in estimating the quantity of earth to be removed from footing excavations. Follow the same procedure as outlined above.
### TABLE 1

**FOUR-INCH MODULAR-BRICK FACING WALLS**

**RUNNING BOND**

<table>
<thead>
<tr>
<th>Nominal Size of Brick</th>
<th>Number of Brick per Sq. Ft.</th>
<th>Cu. Ft. of Mortar per Sq. Ft. of Wall</th>
<th>Cu. Ft. of Mortar per 1000 Brick</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4( ^{1/4} ) Joint</td>
<td>6( ^{1/4} ) Joint</td>
<td>8( ^{1/4} ) Joint</td>
</tr>
<tr>
<td>2-2/3x4x8</td>
<td>6.75 0.0608</td>
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<td>0.071</td>
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<td>0.09</td>
<td>11.30 15.00</td>
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<td>0.052</td>
<td>13.00 17.30</td>
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</table>

*Actual size plus thickness of one joint
**10% added for waste

### TABLE 2

**EIGHT- AND TWELVE-INCH BRICK BACKUP WALLS**

**IN RUNNING BOND**

<table>
<thead>
<tr>
<th>Nominal Size of Brick</th>
<th>Number of Brick</th>
<th>Cu. Ft. of Mortar per 8&quot; Wall</th>
<th>Cu. Ft. of Mortar per 12&quot; Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4( ^{1/4} ) Joint</td>
<td>6( ^{1/4} ) Joint</td>
<td>8( ^{1/4} ) Joint</td>
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<tr>
<td>2-2/3x4x8</td>
<td>13.50 0.1544</td>
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<tr>
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<td>9.00 0.1210</td>
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<td>13.00 0.1984</td>
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</tbody>
</table>

*Actual size plus thickness of one joint
**10% added for waste

### TABLE 3

**NON-MODULAR SOLID-BRICK WALLS**

**IN RUNNING BOND**

<table>
<thead>
<tr>
<th>WALL AREA</th>
<th>4-IN. WALL</th>
<th>8-IN. WALL</th>
<th>12-IN. WALL</th>
<th>16-IN. WALL</th>
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</thead>
<tbody>
<tr>
<td>SQ. FT.</td>
<td>No. OF BRICK</td>
<td>CU. FT. MORTAR</td>
<td>No. OF BRICK</td>
<td>CU. FT. MORTAR</td>
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<tr>
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<td>62 0.721</td>
<td>124 1.86</td>
<td>185 3</td>
<td>247 4.2</td>
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<td>370 6</td>
<td>493 8.3</td>
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<td>370 5.6</td>
<td>555 9</td>
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<td>6160 92.90</td>
<td>9240 150</td>
<td>12320 207</td>
</tr>
<tr>
<td>1000</td>
<td>6160 72.1</td>
<td>12320 185.8</td>
<td>18480 300</td>
<td>24640 413.2</td>
</tr>
</tbody>
</table>

*1/8" joints completely filled, including vertical interior joints of 8-in., 12-in. and 16-in. walls. For estimating number of facing and backup brick in any particular type of bonds use correction factor Table 4.

### TABLE 4

**CORRECTION FACTORS TO BE APPLIED TO 4-INCH WALL QUANTITIES FOR ESTIMATING THE REQUIRED NUMBER OF FACING BRICK IN VARIOUS BONDS**

<table>
<thead>
<tr>
<th>TYPE OF BOND</th>
<th>CORRECTION FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common bond with full header every 5th course</td>
<td>20% or 1/5</td>
</tr>
<tr>
<td>Common bond with full header every 4th course</td>
<td>16.7% or 1/6</td>
</tr>
<tr>
<td>Common bond with full header every 7th course</td>
<td>14.3% or 1/7</td>
</tr>
<tr>
<td>English bond, alternate stretchers and full headers every course</td>
<td>50% or 1/2</td>
</tr>
<tr>
<td>English or Dutch bond with full headers every 6th course and blind headers in intermediate courses</td>
<td>16.7% or 1/6</td>
</tr>
<tr>
<td>Flemish bond, alternate stretchers and full headers every course</td>
<td>33.3% or 1/3</td>
</tr>
<tr>
<td>Flemish bond, with stretchers and full headers every 6th course, intermediate courses with blind headers</td>
<td>5.6% or 1/8</td>
</tr>
<tr>
<td>Flemish cross bond, alternate courses with stretchers and headers</td>
<td>16.7% or 1/6</td>
</tr>
<tr>
<td>Double header and stretcher every 6th course</td>
<td>8.3% or 1/12</td>
</tr>
<tr>
<td>Double header and stretcher every 5th course</td>
<td>10% or 1/10</td>
</tr>
</tbody>
</table>
RECOMMENDED MIXES FOR SEVERAL CLASSES OF SMALL-HOUSE CONSTRUCTION

<table>
<thead>
<tr>
<th>Kind of Work</th>
<th>U. S. gallons of water to add to each 1-sack batch</th>
<th>Trial mixture for first batch</th>
<th>Maximum aggregate size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Damp sand &amp; coarse aggregate</td>
<td>Wet sand &amp; coarse aggregate</td>
<td>Very wet sand &amp; coarse agg.</td>
</tr>
<tr>
<td>Foundation walls which need not be water-tight, mass concrete for footings, retaining walls, garden walls, etc.</td>
<td>6½</td>
<td>Average sand</td>
<td>5½</td>
</tr>
<tr>
<td>Wet sand &amp; coarse aggregate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very wet sand &amp; coarse aggregate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet sand &amp; coarse aggregate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very wet sand &amp; coarse aggregate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cement</td>
<td>sacks</td>
<td>cu. ft.</td>
<td>cu. ft.</td>
</tr>
<tr>
<td>Sand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coarse Aggregate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: National Association of Home Builders Research Institute

HOW TO LAY CONCRETE IN COLD WEATHER

1. Heat the Materials
   a. Have concrete temperatures between 50 and 70° for slabs and building frames.
   b. For air temperatures between 30° and 40° F., heat the mixing water.
   c. For air temperatures below 30° F., heat mixing water and sand or both sand and coarse aggregate.
   d. Avoid frozen aggregate lumps in concrete at time it leaves the mixer.
   e. Don’t overheat. It may result in flash set.
   f. Don’t use more than 2 lb. of calcium chloride per sack of cement to hasten hardening.
   g. Don’t use any chemicals to prevent freezing.
   h. Don’t use calcium chloride with other mixtures which accelerate hardening.

2. Use Accelerators Carefully
   a. Don’t use more than 2 lb. of calcium chloride per sack of cement to hasten hardening.
   b. Don’t depend on any chemicals to prevent freezing.
   c. Don’t use calcium chloride with other mixtures which accelerate hardening.

3. Provide Suitable Curing Temperatures
   a. Maintain temperature of concrete at 70° or above for three days or 50° or above for five days.
   b. Maintain temperature of high-early-strength concrete at 70° or above for two days or 50° or above for three days.
   c. Do not allow concrete to freeze during next four days.
   d. Cool concrete gradually at rate of one to two degrees per hour.

4. Protect the Concrete
   a. Insulation without artificial heat is often sufficient protection for slabs on ground and heavy sections.
   b. At lower temperatures, housing and artificial heat are necessary.
   c. Raise heating units above floor to avoid rapid drying of concrete underneath.
   d. Keep concrete moist, especially near heating units.

5. Remove Forms at Proper Time
   a. Allow ample time for concrete to attain required strength.

COLD-WEATHER CONCRETE-MASONRY CONSTRUCTION

If the air temperature is:

Below 40 Deg. F. But Above Freezing
All masonry materials should be covered and properly stored to prevent them from becoming wet from rain, ice or snow. The mixing water should be heated, but not over 160 deg. F. Temperature of mortar when placed in the wall should not exceed 100 deg. F. or be less than 70 deg. F. Protective coverings should be placed over the newly laid masonry walls.

Below Freezing But Above 0 Deg. F.
In addition to the preceding requirements the sand should be heated. The working area should be enclosed with protective coverings and artificial heat should be provided by salamanders or portable heaters. When the temperature falls below 20 deg. F. all concrete-masonry units (hollow and solid) should be heated to at least 50 deg. F.

Below 0 Deg. F.
Concrete-masonry construction should be stopped unless for emergencies, when great care must be taken to insure complete and tight enclosures plus all the preceding requirements.
Concrete Admixtures

Admixtures are any materials other than water, aggregates, or cement added to concrete before or during mixing to make the concrete more suitable to a particular type of work. They will retard the concrete's setting time or accelerate it, and will entrain air or gas to help it withstand frost action or gas to counteract shrinkage and bleeding. They will increase concrete's workability and its resistance to corrosion. They will dampproof the concrete, make it water repellent, hasten or retard its flowability, and control shrinkage. Handled with reasonable caution—they sometimes alter the normal strength of concrete—admixtures give concrete new dimensions.

To accelerate set time:

Agents such as calcium chloride added up to 2% of the weight of portland cement will increase the rate of early hardening. This permits early removal of forms, creates a shorter curing period, advances the time when the concrete structure can be put in service, compensates for the retarding effect of other admixtures.

To retard set time:

Retarders are added to concrete in hot weather to prevent false set and to permit placing concrete in difficult positions. Builders sometimes place them on the inside of form faces to retard setting of the outside face of the concrete. This permits the builder to later brush away the laitance and expose the aggregate, creating a textural effect. Common retarders include stearates, or cellulose products, sugars and acids, or salts of acids that contain one or more hydroxl groups. They must be added to concrete in very small amounts.

To resist freezing:

Air entraining agents added to concrete incorporate small amounts of air in minute bubbles to help the concrete resist frost action. Air entraining also makes the concrete lightweight, and increases its plasticity and workability. Air entraining agents include natural wood resins, fats, various sulfonated compounds, and oils.

To counteract shrinkage:

Gas-forming agents will reduce shrinkage and bleeding in plastic concrete. Gas dispersed in concrete by generating agents also improves its resistance to frost but to a lesser degree than air—and produces a lighter weight concrete or mortar. Aluminum powder added at a ratio of 1 teaspoonful to each sack of cement reacts with the hydroxides in the hydrating concrete to produce minute bubbles of hydrogen. Adding the powder at a rate of 1/3 lb. to a sack of cement makes the concrete lightweight. Other gas-forming agents include zinc and magnesium powder, hydrogen peroxide and bleaching powder.

To increase workability:

Cementitious agents substituted for 10 to 25% of the weight of portland cement increase the concrete's workability, decrease bleeding and heat of hydration. A drawback is that they decrease the concrete's strength and must be added with care. The group includes natural cements, hydraulic lime, slag cement, and the pozzolans.

To reduce permeability:

Pozzolans substituted for part of the cement factor reduce concrete's permeability and increase its resistance to sulfates and the corrosive action of sea water. Pozzolans also add to concrete's workability. This group of admixtures includes fly ash, volcanic ash, heat-treated diatomaceous earths, and either heat-treated or raw shales and clays.

To dampproof:

Agents that dampproof concrete and reduce its permeability generally are classified as "soaps." They are inorganic salts of fatty acids such as calcium or ammonium stearate, or oleate. These soaps also increase the workability of the plastic concrete. Heavy mineral oil will make concrete water repellent. But it should not contain vegetable or mineral components and should have a viscosity of about SAE 60. Asphalt cutback oils and asphalt emulsions will also serve the purpose.

To add plasticity:

These agents will increase concrete's workability, a vital factor when concrete must be placed around closely spaced reinforcing, must be pumped, or chuted long distances. This group includes the powdered admixtures such as hydrated lime, diatomaceous earth, bentonite, fly ash. These admixtures generally are added to the concrete during batching, though sometimes they are premixed with dry cement. Large quantities of finely powdered admixtures in concrete tend to require a higher water-cement ratio than normal. Unless proper adjustments are made in the mix, some adverse effect can be expected in the concrete's strength, durability, and drying shrinkage. Air and gas entrainment also increase concrete's workability.

To hasten or retard grout set:

Calcium chloride or triethanolamine added to grout will hasten its set when it must work as a plugging agent. Mucic acid and other patented chemicals will retard its set to increase its pumpability and flow. Grout retarders include fly ash, bentonite, pumicite, and diatomaceous earth.

To offset shrinkage:

Expanding agents are made by burning a mixture of gypsum, bauxite, and limestone to create a sulfoaluminous cement which, added to concrete, offsets shrinkage. Powdered iron and an oxidizing agent added to portland cement also make a non-shrinking concrete.

Other admixtures:

A variety of admixtures on the market will improve concrete's wear resistance, make it harder or softer (asphalt), foam it, make it easy to saw, and add color. Lumber yards and building material supply stores carry virtual chemical plants on their shelves.
CONCRETE, MASONRY, TILE, BRICK
Fireplace Design

DIRECTIONS

In the fireplace illustrations the open angle N hatching indicates the materials installed when the chimney is built and the close and cross hatching shows that part installed with the finished fireplace. The generally accepted practice is to complete the rough brickwork of the fireplace from ash pit footings to chimney top before undertaking the installation of the finished interior and front. There is an alternate method by which both rough masonry and the finished front and interior are built up together. The second is presumed to save some of the cost, but it also results in more faulty fireplaces, and corrective work is more difficult and costly.

The illustrations of Plan, Elevation and Section have letters shown in the dimension spaces. These letters will be found at top of the columns in the Table of Dimensions below, where figures are given for the parts, corresponding to the letters, of 12 typical sizes of fireplaces.

First select the width of your fireplace opening, found in the left-hand column. The next column to the right gives an appropriate height. Following to the right are the dimensions of the other parts and also the necessary equipment.

NOTE A — The back flange of the damper must be protected from intense heat by being fully supported and shielded by the back wall masonry. Also, the damper and lintel angles should not be built in solidly at the ends but given freedom to expand with heat, as shown in the front elevation view at left, above.

NOTE B — The drawing indicates thickness of brick fireplace front as 4". No dimensions can be given for this because of various materials used, such as marble, stone, tile, etc., all of which have varying thicknesses.

NOTE C — These hollow spaces should be filled to form solid backing. If desirable to include a furnace flue in either space, outside dimensions should be increased. The illustration above shows a rotary control damper installed.

Smoke Chamber — At damper level, the enclosure narrows to form the smoke chamber. It is important that the slope of its two sides be identical, the flue taking off from the center. Where the upright flue is not directly over the center make the upward sloping connection with no reduction in area and not more than 7" sideways to each 12" of rise. A form consisting of two boards with connecting braces helps to give the brick a proper slope and assists in providing the important smooth surface which assists in discharge of smoke.

TABLE OF FIREPLACE DIMENSIONS

<table>
<thead>
<tr>
<th>Finished Fireplace Opening</th>
<th>Rough Brick Work and Flue Size</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>24</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>26</td>
<td>24</td>
<td>16</td>
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<tr>
<td>28</td>
<td>24</td>
<td>16</td>
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<td>40</td>
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<td>42</td>
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<td>44</td>
<td>32</td>
<td>16</td>
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<tr>
<td>46</td>
<td>32</td>
<td>16</td>
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<tr>
<td>48</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>50</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>52</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>54</td>
<td>32</td>
<td>16</td>
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<tr>
<td>56</td>
<td>32</td>
<td>16</td>
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<tr>
<td>58</td>
<td>32</td>
<td>16</td>
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<tr>
<td>60</td>
<td>34</td>
<td>16</td>
</tr>
<tr>
<td>62</td>
<td>34</td>
<td>16</td>
</tr>
<tr>
<td>64</td>
<td>34</td>
<td>16</td>
</tr>
<tr>
<td>66</td>
<td>34</td>
<td>16</td>
</tr>
</tbody>
</table>

NOTES: *Angle Sizes: A = 3x3x3, B = 3 1/2x3 1/2
**New Flue Sizes—Conform to new modular dimensional system. Sizes shown are nominal. Actual size is 1/16 in. less each dimension.

Two sets of flue lining dimensions appear in the table above, one for the old standard sizes and another for the nominal sizes of those conforming to the new, modular standard. Round sizes are also shown. By "nominal" size is meant actual size plus half an inch for each dimension as joint space. The modular movement seeks to reduce all sizes of installed materials to multiples or derivatives of a four inch "module".

APRIL 1960
CONCRETE, MASONRY, TILE, BRICK

Selected Wire Reinforcement Details

**TYPICAL FOUNDATION WALL WITHOUT SPREAD FOOTING**

- Anchor Bolts 1/2" x 9"—8" O.C.
- 26 Ga. Termite Shield
- 1" Parimeter Insulation
- 55 Ga. Ground Cover
- 4" Washed Gravel
- Welded Wire Fabric Reinforcement 66-66 or as required

**TYPICAL PIER AND BEAM FOUNDATION**

- 4" Concrete Slab
- Insulation or Expansion Strip
- 6" Washed Gravel
- 1/2" Dowel
- Scale: 1/2" = 1'-0"

CONCRETE SLAB AND BEAM FOUNDATION

- 12" Wide
- 10" Dia.
- Min. 1/2"  
- 6" Washed Gravel
- Welded Wire Fabric Reinforcement 66-66 or as required

**RECOMMENDED STYLES OF WELDED WIRE FABRIC FOR VARIOUS REINFORCED CONCRETE PROJECTS**

<table>
<thead>
<tr>
<th>TYPE OF CONSTRUCTION</th>
<th>RECOMMENDED STYLE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARBECUE FOUNDATION SLAB</td>
<td>6x6-6/6</td>
<td>Use heavier fabric for heavier, more massive fireplaces or barbecue pits.</td>
</tr>
<tr>
<td>BASEMENT FLOORS</td>
<td>6x6-10/10 or 6x6-6/6</td>
<td>For small areas (15' maximum dimension) use 6x6-10/10. As a rule of thumb, the larger the area, the poorer the sub-soil, the heavier the gauge. Fabric must not pass through joints.</td>
</tr>
<tr>
<td>DRIVEWAYS</td>
<td>6x6-6/6</td>
<td>Continuous reinforcement between 25 to 30 foot contraction joints, 1/3 inch clearance at sides and joints.</td>
</tr>
<tr>
<td>FOUNDATION SLABS (Residential only)</td>
<td>6x6-10/10</td>
<td>Use heavier gauge over poorly drained sub-soil, when maximum dimension is greater than 15 feet, or when heating ducts are embedded.</td>
</tr>
<tr>
<td>GARAGE FLOORS</td>
<td>6x6-6/6</td>
<td>Fabric must not pass through joints.</td>
</tr>
<tr>
<td>PATIOS &amp; TERRACES</td>
<td>6x6-10/10</td>
<td>Use 6x6-6/6 if sub-soil is poorly drained.</td>
</tr>
<tr>
<td>PORCH FLOOR</td>
<td>6x6-6/6</td>
<td>Position on nails or blocks one inch from bottom form to resist tensile stresses.</td>
</tr>
<tr>
<td>PORCH FLOOR (Residential only)</td>
<td>6x6-6/6</td>
<td>Use heavier style if more than 5 risers. Position fabric 1 inch from bottom form.</td>
</tr>
<tr>
<td>STEPS (Free span)</td>
<td>6x6-6/6</td>
<td>Use heavier style if more than 5 risers. Position fabric 1 inch from bottom form.</td>
</tr>
<tr>
<td>STEPS (On the ground)</td>
<td>6x6-6/6</td>
<td></td>
</tr>
</tbody>
</table>

WELDED WIRE FABRIC SHOULD BE LAPPED AS INDICATED TO SECURE MAXIMUM REINFORCEMENT

For basement slab on ordinary soil, use reinforcement 66-66 in wall and 66-68 in slab.

4" Concrete Slab
2" Concrete Base
Membrane Waterproofing
BASEMENT SLAB FOR POORLY DRAINED SOIL

Drain Tile

Scale: 1/2" = 1'-0"

Courtesy Wire Reinforcement Institute, Inc.
**GENERAL DATA**

Resistance to the flow of heat through insulation installed in a wall, roof or slab is so much greater than that of other elements in the construction of a building that condensation may result in this insulation. Most insulations block heat but pass vapor. A simple prevention to condensation is to stop the flow of water vapor with some surface material that is impervious to moisture. Such a surface is called a vapor barrier. Vapor barriers are made from a variety of materials. They should be installed on the warm or interior side of walls and roofs; and they should be next to or part of the insulation. Since vapor behaves as a gas, the barrier should be airtight or as nearly so as possible. Permeability of vapor barriers is measured in Perms. A Perm equals the grains per sq. ft. per hr. per in. of mercury difference in vapor pressure at standard test conditions.

**VENTILATION AND BARRIER REQUIREMENTS TO PREVENT CONDENSATION**

<table>
<thead>
<tr>
<th>Condensation Zones</th>
<th>Type of Roof</th>
<th>Free Area of Ventilation</th>
<th>Vapor Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>Flat Roof</td>
<td>Uniformly distributed at eaves.</td>
<td>Required on warm side in top story ceiling.</td>
</tr>
<tr>
<td></td>
<td>Cable Roof</td>
<td>At least 2 louvers on opposite sides near ridge.</td>
<td>Required on warm side in top story ceiling.</td>
</tr>
<tr>
<td></td>
<td>Hip Roof</td>
<td>1/600 uniformly distributed at eaves &amp; 1/400 at ridge with all spaces interconnected.</td>
<td>Considered unnecessary.</td>
</tr>
<tr>
<td></td>
<td>Gable Roof</td>
<td>Full story ceiling.</td>
<td>Considered unnecessary.</td>
</tr>
<tr>
<td></td>
<td>Hipped Roof</td>
<td></td>
<td>Considered unnecessary if insulation is omitted.</td>
</tr>
</tbody>
</table>

*The figure given indicates that the clear opening of vents totaled should be 1/300 of the bldg. area at eave line. Only 10% of given figure is necessary if bsmt. has slab, or crawl space earth covered with 55 sq. ft. lapped 2'.

**MATERIAL PERMEABILITY DATA**

Forest Products Laboratory lists, in Perms, the water vapor permeability of various building materials as follows:

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>WV Transmission Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheathing and Roofing Products</td>
<td>2.555</td>
<td>3.847</td>
</tr>
<tr>
<td>15-lb. sheathing paper</td>
<td>1.560</td>
<td>4.055</td>
</tr>
<tr>
<td>15-lb. tar felt</td>
<td>33.304</td>
<td></td>
</tr>
<tr>
<td>15-lb. asphalt felt</td>
<td>.360</td>
<td>2.007</td>
</tr>
<tr>
<td>30-lb. asphalt felt</td>
<td>.498</td>
<td>3.022</td>
</tr>
<tr>
<td>Asphalt-coated paper</td>
<td>.146</td>
<td>.287</td>
</tr>
<tr>
<td>55-lb. roll roofing</td>
<td>.030</td>
<td>.081</td>
</tr>
<tr>
<td>Polyethylene Film</td>
<td>.0002 in. thick</td>
<td>.108</td>
</tr>
<tr>
<td>.0004 in. thick</td>
<td>.097</td>
<td></td>
</tr>
<tr>
<td>Insulation Back-up Paper</td>
<td>.133</td>
<td>.237</td>
</tr>
<tr>
<td>Paraffin coating, 1 side</td>
<td>.433</td>
<td>.583</td>
</tr>
<tr>
<td>Single infused</td>
<td>.162</td>
<td>.232</td>
</tr>
<tr>
<td>Single infused, ribbed</td>
<td>.327</td>
<td>.377</td>
</tr>
<tr>
<td>Asphalt saturated, one side glossy</td>
<td>.447</td>
<td>1.081</td>
</tr>
<tr>
<td>Duplex or Laminated Products, Asphalt Laminae</td>
<td>.527</td>
<td></td>
</tr>
<tr>
<td>30-30-30 untreated</td>
<td>.520</td>
<td></td>
</tr>
<tr>
<td>30-30-30 untreated, creped</td>
<td>.583</td>
<td>1.812</td>
</tr>
<tr>
<td>30-30-30 untreated, reinforced</td>
<td>.305</td>
<td></td>
</tr>
</tbody>
</table>
Assistant: The proportions of the new addition to the Fontainebleau are immense. For example, a ballroom that is 200 x 140 feet, the largest in the world. A theater-banquet room that will seat 4,000 at a dinner. Set up for a performance, it will seat 6,000. A new building with 400 hotel rooms is going up right alongside. A little over three miles of Keywall is being used as a masonry reinforcement in the new addition.
BUILT TO STAY YOUNG WITH

KEYWALL

galvanized masonry reinforcement

You can’t be leaning over the shoulder of each mason all the time to make sure he uses the reinforcement right. Yet proper use of the reinforcement makes the difference between a building that stays young and one that ages fast. But what can you do?

Here’s one man’s answer. Masonry Contractor Hugh Kirkland says, “Lapping is the key to proper masonry reinforcement. Here’s what I mean. Some masonry reinforcement is hard to lap. Too thick. By thick I mean an \( \frac{3}{8} \) inch in diameter. Lapped, that’s a quarter inch. So, with a \( \frac{3}{8} \) inch mortar joint, you get little mortar around the wire. That means poor bond, poor embedment. So what happens? Most of the time reinforcement is butted, not lapped. That’s even worse.

“We simply avoid the problem. We use Keywall. It comes in 200 foot rolls, not short lengths. So you very seldom have to lap it. And when you do, it’s easy... easier than butting it. So of course, my men lap it. And when Keywall is lapped, there’s still plenty of room for mortar.

“Keywall is a lot easier for my men to handle because it comes in rolls. It’s easier to cut, too.

“But it’s not only a matter of my men liking it. Keywall reduces shrinkage very effectively. And it’s economical. What could be better than Keywall?”

KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

KEYWALL • KEYMESH® • KEYCORNER • KEYDECK • WELDED WIRE FABRIC • NAILS

Just unroll it and you’re ready to go. Joe Kuntz, Superintendent for the Masonry Contractor, Hugh Kirkland, shows how easy Keywall is to work with for the benefit of mason Fred Kinnaird. Keywall is made for wall thicknesses of 4”, 6”, 8”, 10”, and 12".
Long live the beauty of block!  
— with Dur-o-wal to make it  
more than twice as strong!

When reinforced every second course with Standard  
Dur-o-wal, the flexural strength of a masonry wall  
increases 71 per cent—comparable to other types of  
reinforcement used every course. But Dur-o-wal can  
do even better. When Extra Heavy Dur-o-wal is used  
every course with Class A mortar, flexural strength  
increases a mighty 261 per cent!

Those are solid facts, established by independent  
engineering tests and research.

Builders everywhere are relying on Dur-o-wal’s  
trussed design, butt-welded construction, scientific-  
ally deformed rods, to give good-looking modern  
masonry extra years of life. Nationally wanted,  
Dur-o-wal is nationally distributed. Wherever you  
build a masonry wall, you can get Dur-o-wal. See us  
in Sweet’s Catalog.

Two engineered products that meet a need. Dur-o-wal reinforcement, shown at left,  
and Rapid Control Joint, right. Weatherproof neoprene flanges on the latter flux  
with the joint, simplify the caulking problem.

DUR-O-WAL®  
Masonry Wall Reinforcement and Rapid Control Joint

RIGID BACKBONE OF STEEL FOR EVERY MASONRY WALL

Here’s your chance to own  
the Greatest Handbook of  
BUILDING FACTS AND METHODS  
Ever Published...  
At a fantastic price savings!!!  
SAVE TIME • SAVE MONEY • AVOID MISTAKES

RICHEY’S REFERENCE  
HANDBOOK

for Builders • Carpenters  
Architects • Engineers • Contractors • Etcetera

HERE is the greatest collection of drawings, tables, and  
practical building and construction data ever assem-  
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It is a giant, 1,640 page volume packed with thousands  
upon thousands of facts, figures, tables, formulas,  
and illustrations covering the ENTIRE CONSTRUCTION  
FIELD:

No matter what branch of the building profession you’re  
in, this huge handbook tells you what to use and how to  
do it. It gives you, not building theory, but up-to-date  
building FACTS. On every kind of construction operation,  
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methods that years of experience have proved sound and  
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best results.

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BUILDING KNOW-HOW ON:

Carpentry • Woodworking • Hardware • Wood Fastenings  
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AMERICAN BUILDER
BRIXMENT provides the ideal balance of 9 essential characteristics

Some mortars may be very strong, but lack other important properties such as workability, etc. Other mortars may be very plastic, yet lack necessary qualities such as durability, etc. For good masonry construction at lowest cost, mortar must have a proper balance of all the essential characteristics shown below.

Brixment mortar does combine these characteristics, to a higher degree than any other mortar. It is this combination of advantages that makes Brixment superior to any mixture of portland cement and lime—and which also accounts for the fact that Brixment has been the leading masonry cement for over 40 years.

PLASTICITY. Mix a batch of Brixment mortar, and a batch of 1-1-6 portland cement-and-lime mortar. Test each mortar by bedding a few bricks. You will find that the Brixment mortar is much more workable.

LOW EFFLORESCENCE. Cap one brick with Brixment mortar, and another with cement-and-lime mortar. Let cure, then place in pan of shallow water. After a few days you will see that Brixment helps prevent efflorescence.

DURABILITY. Make a cylinder of Brixment mortar and a cylinder of 50-50 cement-and-lime mortar—cure for 30 days—place cylinders in pan with \( \frac{1}{4} \)" of water and freeze and thaw. After a number of cycles, you will see that Brixment mortar is far more durable.

SOUNDNESS. Brixment meets the requirements of the ASTM and Federal specifications for autoclave soundness. This test proves that Brixment mortar does not expand after long exposure to weather.

BOND. Brixment mortar's great plasticity and high water retaining capacity permit a more complete bedding of the brick, with greater area of contact between brick and mortar—hence tighter bond.

YIELD. Measure out 1 cu. ft. of sand (80 lbs.) and \( \frac{1}{2} \) bag of Brixment (23\% lbs.). Also measure out the same amount of sand and \( \frac{1}{2} \) bag of hydrated lime (81\% lbs.) and \( \frac{1}{4} \) bag of portland cement (15\% lbs.). Make a workable mortar from each batch, then place each batch into a box holding 1 cu. ft. You will find that Brixment mortar gives from 5% to 15% greater yield.

STRENGTH. Brixment exceeds the requirements of the ASTM and Federal specifications for Type II masonry cement. Brixment mortar also meets the requirements of the ASTM specifications for Type N mortar.

WATER RETENTION. Place a dab of Brixment mortar and a dab of 50-50 cement-and-lime mortar on a brick or concrete block. Wait a minute, then feel each mortar. High water retention makes Brixment mortar stay plastic longer.

IMPERMEABILITY. Prepare a slab of Brixment mortar, and one with ordinary cement-and-lime mortar. After they have hardened, wax-seal a lamp chimney to each slab, and fill with water. After 24 hours you will see that much less water has gone into or through the Brixment slab.

LOUISVILLE CEMENT COMPANY, LOUISVILLE 2, KENTUCKY
Cement Manufacturers Since 1830

APRIL 1960

141
When you use USS American Welded Wire Fabric for all concrete areas for the homes you build, you give them a definite sales advantage over houses without this important quality feature. Walks, patios, driveways and basement slabs will wear better, look better, and last longer when they’re reinforced with USS American Welded Wire Fabric. And your customers know this... they know to ask before they buy “is it reinforced?”

Put this sales-pulling advantage to work for you. Use USS American Welded Wire Fabric in all your concrete work. Tell your prospects it costs only about a penny a day on the mortgage life to insure protection and appearance of concrete around the average home... that reinforced concrete will be in good condition even after the mortgage is paid. USS American Welded Wire Fabric adds 30% to the strength of concrete. It is made of cold-drawn steel wire and is prefabricated for quick, easy installation. It’s available in a wide variety of styles and sizes. For more information, see your building supply dealer, or write to American Steel & Wire, Dept. 0156, 614 Superior Avenue, N.W., Cleveland 13, Ohio.

USS and American are registered trademarks
and this

Fabric for concrete reinforcement

Buyers will ask, "is it Reinforced"

American Steel & Wire
Division of
United States Steel

Columbia-Geneva Steel Division, San Francisco, Pacific Coast Distributors
Tennessee Coal & Iron Division, Fairfield, Ala., Southern Distributors
United States Steel Export Company, Distributors Abroad

APRIL 1960
You can pour better walls—
FASTER and CHEAPER with...

Now ROCFORM offers two great systems to meet every contractor's wall form needs in residential, industrial, commercial and institutional work.

THE ORIGINAL ROCFORM SYSTEM—
Metal walers are permanently built into forms. Sections lock together with wedge-action clamps which eliminate nailing and make as many as 200 to 400 pours. Tapered steel tie rods automatically give desired wall thickness and can be used continuously. Inside round corner form and adjustable outside corner clamps allow for 3-inch variable and eliminate filler strips.

NEW ROCFORM ADAPT-A-CLAMP SYSTEM—Offers extreme flexibility of application. Use the complete Adapt-A-Clamp System or convert your present panels. Use permanent tie-rods or snapties as you prefer. With Adapt-A-Clamp hardware you can "tailor-make" a system suited to the exact requirements of any job and at the same time benefit from all the advantages of time-tested ROCFORM methods.

Only ROCFORM systems offer all the features, all the advantages wanted by concrete wall contractors today!

- ELIMINATES WOOD WALERS and 90% of bracing
- FASTER SETUP TIME, because of simplification
- FASTER STRIPPING TIME, proven against the clock
- LONGER FORM LIFE, eliminates nailing

You can pour better walls:
- FASTER STRIPPING TIME, proven against the clock
- LONGER FORM LIFE, eliminates nailing

ROCFORM ALWAYS FORMS A BETTER WALL, FASTER!

LOAD LIFTER Manning Maxwell & Moore Inc Shaw-Box Crane & Hit Div
LO-BOY Airtemp Div Chrysler Corp
LOCKE HOUSETIME GUARANTEED Locke Manufacturing Co
LOCKPRIME Pennsalt Chemicals Corp
LOCK-TITE Lockhart Mfg Corp
LOCK-TITE Oregon-Washington Plywd
LOCKWOOD Cloud Oak Flooring Co
LODE-STAR Klise Mfg Co
LOGAN Logan Clay Prods Co
LOGAN-LOCK Logan Clay Prods Co
LOGMASTER Remington Arms Co Inc
LOGATONE Edwards Co Inc
LOKD BAR Hopes Windows Inc
LOK-FLANGE Reed Cromeex Corp
LOK-FRAME Inland Steel Products Co
LO-K INSULATION Lockport Mills Inc
LUK-ON Certain-Teed Sales Corp
LOK-RIB Inland Steel Products Co
LOK-RIB Leigh Building Products Div
LOK-RIB Ruberoid Co
LOKTITE U S Expansion Bolt Co
LO-LOSS National Electric Div
LONE STAR Lone Star Cement Corp
LONE-STAR Binswanger Glass Co
LONG BOY Wonder Brush Co
LONG LIFE Goodall Rubber Co Inc
LOOK-ALUMINUM Russel F C Co
LOS RANCHOS Midland Brick & Tile Co
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LUX-RIGHT Saint Paul Corrugating Co
LUXSTART Certesit Waterproofing Corp
LUXSTONE Minnesota Paints Inc
LUXTROL LIGHT CONTROL Superior Electric Company
LYDIAI Luxor Carpet Co

(Continued on page 146)
modern concrete
gives homes the special features that really spark sales!

There's practically no limit to the ways concrete can stimulate homebuyer interest and excitement. Cast-in-place, shaped, assembled, colored, polished—concrete fits the most imaginative ideas.

From striking masonry walls to unusual patios and yard accents, concrete adds that vital fresh appeal.

Today magazines and newspapers are giving increasing editorial emphasis to this versatile material. Special PCA advertising in top "home" publications—Better Homes & Gardens, House Beautiful, and Living for Young Homemakers—is adding to public interest in concrete and concrete masonry...in new-type living concrete!

Of course, concrete is your sure way to say "quality." Low on care, long on life, it promises sound investment. Idea literature is free to you on request. (U.S. and Canada only.)

PORTLAND CEMENT ASSOCIATION
Dept. 4-3, 33 W. Grand Ave., Chicago 10, Ill.
A national organization to improve and extend the uses of concrete

A FEW WAYS CONCRETE CAN CREATE EXTRA BUYER APPEAL
1. Concrete slab floor of gleaming terrazzo.
2. Patio of cast-in-place concrete with exposed aggregate.
3. Driveway in bright, clean concrete.
5. Garden wall of concrete masonry grille block.
6. Tree curbing of concrete masonry split block.
7. Carport screen of 3-D concrete masonry units.
POURING BASEMENTS
CAN BRING EXTRA PROFITS and
STRONGER FOUNDATIONS

SIMPLEX makes it easy...it is a fast and
flexible forming system

SET FASTER

Now finish a complete foundation in
16-24 man hours with only 3 men!
Simplex Forms go up with ease. Inner
and outer forms are "keyed" for speed
...are set simultaneously. Tie rods
are quickly positioned ...patented
locking levers are tapped in place; ex-
clusive cam action draws panels tight.

POUR FASTER

Simplex Forms are strong! Their rigid
assembly permits fast pouring. Pour
at one corner or four corners at a time.
Vibrating concrete won't shift or
loosen forms as they are locked firmly
in place. Each panel automatically
adjusts to the condition of the footing.

STRIP AND MOVE FASTER

Simplex Forms are 1 1/4" plastic-
impregnated (9-ply) plyglaze. This
insulates in winter ...easier to handle
than steel in summer. Forms are un-
locked by tapping levers upward ...forms
are easy to lift (2' x 8' forms
weigh only about 65 lbs.). Because
locking hardware is bolted to each
form there are fewer man-hours re-
quired to strip and move. A com-
plete set of forms and accessories can
be moved on a 12-foot bed truck! One
trip between jobs.

SMOOTH, ACCURATE WALLS

Simplex Forms produce walls with the
look of architectural concrete. Be-
cause panels are drawn together snug-
ly, seam marks are minimized ...positive
wall dimension is assured! This
means accuracy that counts in
customer-satisfaction, home sala-
bility, and surer erecting — especially
of pre-fabs.

Send for Complete Details
Enclose your foundation sketches for estimate!

SIMPLEX FORMS SYSTEM, INC.
5619 Industrial Avenue
Rockford (Loves Park) Illinois

(Continued from page 144)
LYFALUM Lyf-Alum Inc
LYN-NUS Price Fire & Water Proofing Co
LYN-NUS FR-1 Price Fire & Water Proofing Co
LYN-TON Fabrikona Inc
LYT-ALL Pratt & Lambert Inc
M-D Macklanburg-Duncan Co
M-DECK Mahon R C Co
M-HEART DOOR Morgan Company
MACK Mack Trucks Inc
MACO-CRAFT Maco Corp
MADE-RITE Anson & Gilkey Co
MADUCO Macklanburg-Duncan Co
MAESTRO COLORS Pittsburgh Plate
Glass Co
MAGIC LINK Modernaire Corp
MAGICFOLD Closures Sales Corp
MAGICFOLD DOOR Conceal Corp
MAGI-GREEN Lockrey Co
MAGIKOTER Wooster Brush Co
MAGNA-LINE Skyline Industries Sales
MAGNALITE (Level) Graham John H
MAGNELITE Scharf J H Mfg Co
MAGNESITE UNDERLAYMENT Thomas
Moulding Floor Co Inc
MAGNOLIA Southern Cement Co
MAGNOLIA (Carpert) Lazar Carpet Co
MAG-O-CRETE Camp Co Inc
MAID-MATIC DISHWASHER James
Manufacturing Company Inc
MAID OF ATHENS Athens Stove Works
MAINLINER Aurora Pump Div
MAJOR LINE Major Line Prods Co Inc
MAKE YOUR OWN Larson Chas O Co
MAL-LEAD BOLT ANCHOR Arro Ex-
pansion Bolt Co
MAL-T-A-GLIDE Malta Mfg Co
MAL-T-AMATIC Malta Mfg Co
MALTA TOWN AND COUNTRY Malta
Manufacturing Co
MAL-T-A-VENT Malta Mfg Co
MALTESE CROSS BRAND Seattle Cedar
Lumber Mfg Co
MANHATTAN Raybestos-Manhattan Inc
MARAUDER Ottawa Steel Div
MAR-COL United Gilsonite Laboratories
MARB-L-COTE National Chemical & Mfg
MARBLE FLAIR Wallace Mfg Co
MARBLETRED Thomas Moulding Floor
MARCO FOLDING STAIRWAYS Fabri-
con Company
MARDI-GRAS United States Plywood
MARICOLD Heilig Bros Co
MARINITE John-Manville Corp
MARKWA Vermont Marble Co
MARLITE BLOCK Marsh Wall Prods Inc
MARLITE CELESTIAL Marsh Wall Prods
MARLITE HI GLOSS Marsh Wall Prods
MARLITE KORELOCK Marsh Wall
MARLITE MARBLE PANEL Marsh Wall
MARLITE PEG-BOARD Marsh Wall
MARLITE PLANK Marsh Wall Prods Inc
MARLITE POLISH Marsh Wall Prods Inc
MARLITE RANDOM PLANK Marsh Wall
MARLITE TRENDWOODS Marsh Wall
MAR-M-IT Raybestos Products Inc
MARSHCKE Grinding & Polishing Mach
MARSH MOULDINGS Marsh Wall Prods
MARTHA WASHINGTON Gray & Dudley
MARVAIR Muncie Gear Co
MARWAPA TAPE Martin Corp
MARVEL Marvel Equipment Co
MARVEL ADJUSTABLE TRESTLE Mar-
vel Equipment Co
MARVEL A-JUSTO FRAME Marvel
Equipment Company
MARVEL JR LIGHT-WEIGHT Marvel
Equipment Company
MARVEL-LIFT Crawford Door Co
MARVELWITE Sonneborn L Sons Inc

(Continued on page 180)
**PERMALITE CONCRETE**

*in Light Construction*

- **INSULATING**
  20 times the insulation of ordinary concrete. 2" of insulating concrete offers more insulation than 1" of most insulation boards. Slope to drain and insulate in one operation.

- **LIGHT IN WEIGHT**
  Concrete mixed with Permalite expanded perlite aggregate weighs from 22 to 36 lbs/cu.ft., with compressive strengths of 95 to 440 psi. Permalite-sand blends offer strengths in excess of 1,000 psi.

- **COST SAVING**
  Permalite concrete combines roof deck and insulation in one easy-to-place slab. Low deadload permits lighter beams and joists, incombustible deck offers insurance savings.

- **OTHER ADVANTAGES**
  Fire safe. Can't rot or decay. Termite-proof and vermin-proof. Not damaged by water. Can be job-mixed, transit-mixed or precast. Easy placement on flat, curved or pitched surfaces. Drill, nail or saw with carpenter's tools.

  Permalite expanded perlite offers many advantages in insulating core fill, in acoustical plaster and in lightweight plaster. See your franchisee.

  - Permalite expanded perlite aggregate is produced only by licensed franchisees from ore supplied by Great Lakes Carbon Corporation.

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Call your nearest Permalite Franchisee or send coupon to

**Permalite**

Perlite Dept.,

GREAT LAKES CARBON CORPORATION

612 So. Flower Street, Los Angeles 17, Calif

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**Fill Over Corrugated Steel Deck**

Permalite insulating concrete, poured monolithically over galvanized corrugated steel sheet welded to structural supports. Low in cost, exceptionally strong and well-insulated. Suitable where wide spans or high load carrying capacity are required.

**Floor Deck Over Metal or Wire Lath**

Low cost solutions combining light structural strength, insulation and permanence, where joist or sub-purlin spacing does not exceed 36" on centers.

**Roof Deck Over Formboard**

Offers weight savings up to 4 lbs/sq. ft. over many other poured-in-place decks of comparable insulating value.

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- [ ] Lightweight Plaster
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**COLORADO** Permalite Products, Inc., Denver 4 FLORIDA Airlite Processing Corp. of Florida, Vero Beach ILLINOIS Silibeto Corp., Chicago 38.

Banish cellar floor dampness complaints. Use GER-PAK Polyethylene Sheeting—the low cost water vapor barrier that provides positive protection under concrete slabs. Meets, by a wide margin, the requirements of F.H.A., Corps of Engineers standards, and complies with U.S. Dept. of Commerce CS-227-59 standards. GER-PAK eliminates splices and overlaps because it comes in SEAMLESS widths up to 40 feet! GER-PAK's easy-to-work-with nature lets you do your job exactly as specified on your blueprints—quickly, efficiently, perfectly!

Low-cost GER-PAK's versatility works with you many other ways. Gives superior dust and water vapor sealing between floors; protects materials and equipment from weather; in side walls prevents water vapor damage; plus dozens of other on-the-job uses.

You'll find tough, lightweight, dependable GER-PAK available in CLEAR, BLACK or opaque WHITE in the broadest range of seamless widths and stock thicknesses up to 10 mil. For truly superior polyethylene sheeting, specify GER-PAK to your dealer! Send for free samples.
watch
that water!

For quality concrete... don't add extra water!

Ready-mixed concrete is designed for the job and delivered with all the water needed. Adding more can only cause trouble—cracking, spalling, dusting.

Reminding crews of this is important to your reputation for quality work. Do it easily by displaying the special poster (pictured at right) prepared by PCA.

It's one of a set of 4 posters reminding workers to safeguard quality by protecting concrete against heat, wind and freezing. A set is yours for the asking. (Free in U.S. and Canada only.) Just send the coupon.

FREE...SEND FOR YOUR POSTERS TODAY!

PORTLAND CEMENT ASSOCIATION
Dept. 4-3, 33 W. Grand Ave., Chicago 10, Illinois
A national organization to improve and extend the uses of concrete

Please send a free set of Quality Reminder posters.
I could also make use of ( ) additional sets.

COMPANY NAME_____________________________________________
YOUR NAME_______________________________________________
ADDRESS_____________________________________________________________________
CITY____________________STATE_____________________

Quality Reminder posters,
22" x17", 3 colors.
Sets of 4 are free.
Here's another example of fast, economical construction with Laclede Open Web Steel Joists. In the new Monticello Plaza Shopping Center, Godfrey, Ill., more than 60,000 square feet of roof area is spanned efficiently with 65 tons of Laclede joists.

These lightweight, high strength structural members are quickly and easily set in place...bolted...stabilized horizontally with continuous horizontal bridging...and covered with steel deck...a fast, simple form of modern construction.

Architects and engineers for the Monticello Plaza Shopping Center are S. T. Pabst and Associates. General contractor is Wolff Construction Co.
FRAMING
Lumber

Calculator — Board

Feet

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533%
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FRAMING

Steel Beam & Column Design

Fiber Stress — 18,000#

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<td>30.0</td>
<td>32.5</td>
<td>35.0</td>
<td>37.5</td>
<td>40.0</td>
<td>42.5</td>
<td>45.0</td>
<td>47.5</td>
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</tr>
<tr>
<td>7&quot;</td>
<td>15.0</td>
<td>17.5</td>
<td>20.0</td>
<td>22.5</td>
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<td>42.5</td>
<td>45.0</td>
<td>47.5</td>
<td>50.0</td>
<td>52.5</td>
<td></td>
</tr>
<tr>
<td>8&quot;</td>
<td>17.5</td>
<td>20.0</td>
<td>22.5</td>
<td>25.0</td>
<td>27.5</td>
<td>30.0</td>
<td>32.5</td>
<td>35.0</td>
<td>37.5</td>
<td>40.0</td>
<td>42.5</td>
<td>45.0</td>
<td>47.5</td>
<td>50.0</td>
<td>52.5</td>
<td>55.0</td>
<td></td>
</tr>
<tr>
<td>9&quot;</td>
<td>20.0</td>
<td>22.5</td>
<td>25.0</td>
<td>27.5</td>
<td>30.0</td>
<td>32.5</td>
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<tr>
<td>10&quot;</td>
<td>22.5</td>
<td>25.0</td>
<td>27.5</td>
<td>30.0</td>
<td>32.5</td>
<td>35.0</td>
<td>37.5</td>
<td>40.0</td>
<td>42.5</td>
<td>45.0</td>
<td>47.5</td>
<td>50.0</td>
<td>52.5</td>
<td>55.0</td>
<td>57.5</td>
<td>60.0</td>
<td></td>
</tr>
</tbody>
</table>

The loads are given in kips, a kip being 1,000 lbs.

**SAFE LOADS FOR STEEL PIPE COLUMNS IN KIPS**

<table>
<thead>
<tr>
<th>NOMINAL SIZE in INCHES</th>
<th>ACTUAL DIAMETER in INCHES</th>
<th>WEIGHT in LBS. per FT.</th>
<th>LENGTH IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2½</td>
<td>3.65</td>
<td>12.2 10.6 9.0 7.4 6.6 5.8 5.0 4.1 3.3</td>
</tr>
<tr>
<td>2½</td>
<td>2½</td>
<td>5.79</td>
<td>21.6 19.4 17.3 15.1 12.9 11.4 10.3 9.2 8.1 7.0</td>
</tr>
<tr>
<td>3</td>
<td>3½</td>
<td>7.38</td>
<td>29.0 28.6 26.3 24.0 21.7 19.4 17.1 15.2 14.0 12.9</td>
</tr>
<tr>
<td>3½</td>
<td>4</td>
<td>9.11</td>
<td>34.8 34.8 34.1 31.7 29.3 26.9 24.5 22.1 19.7 18.0</td>
</tr>
<tr>
<td>4</td>
<td>4½</td>
<td>10.79</td>
<td>41.2 41.2 41.2 37.6 35.1 32.6 30.0 27.5 25.0</td>
</tr>
<tr>
<td>4½</td>
<td>5</td>
<td>12.54</td>
<td>48.0 48.0 48.0 48.0 46.4 43.8 41.2 38.5 35.9 33.3</td>
</tr>
<tr>
<td>5</td>
<td>5½</td>
<td>14.62</td>
<td>55.9 55.9 55.9 55.9 54.2 51.5 48.7 46.0 43.2</td>
</tr>
<tr>
<td>6</td>
<td>6½</td>
<td>18.97</td>
<td>72.5 72.5 72.5 72.5 72.5 72.5 70.2 67.3 64.3</td>
</tr>
</tbody>
</table>

*The loads are given in kips, a kip being 1,000 lbs.

**SAFE LOADS FOR I-BEAM COLUMNS IN KIPS**

<table>
<thead>
<tr>
<th>DEPTH in INCHES</th>
<th>AREA LBS. in SQ. IN. per SQ. FT.</th>
<th>LENGTH IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1.64</td>
<td>23.5 20.3 17.2 14.6 12.3 10.5</td>
</tr>
<tr>
<td>4</td>
<td>2.21</td>
<td>32.0 29.1 25.3 21.8 18.7 16.1 13.9</td>
</tr>
<tr>
<td>5</td>
<td>2.87</td>
<td>41.3 39.7 35.1 30.7 26.8 23.4 20.4 17.9</td>
</tr>
<tr>
<td>6</td>
<td>3.61</td>
<td>54.2 52.1 46.9 41.8 37.0 32.7 28.9 25.5 22.6 20.2</td>
</tr>
<tr>
<td>7</td>
<td>4.43</td>
<td>66.5 65.9 60.0 54.1 48.5 43.3 38.6 34.5 30.8 27.6 24.7</td>
</tr>
<tr>
<td>8</td>
<td>5.34</td>
<td>80.1 80.1 74.9 68.3 61.8 55.7 50.1 45.0 40.5 36.5 33.0 29.8</td>
</tr>
<tr>
<td>9</td>
<td>6.32</td>
<td>94.8 94.8 91.2 85.9 76.7 69.7 63.2 57.2 51.8 47.0 42.6 38.7</td>
</tr>
<tr>
<td>10</td>
<td>7.38</td>
<td>110.7 110.7 109.5 101.7 93.8 86.0 78.7 71.8 65.6 59.7 54.3 48.8</td>
</tr>
</tbody>
</table>

*The loads are given in kips, a kip being 1,000 lbs.*
The plank or post and beam system for the construction of floors and roofs in today's houses is uniquely adaptable to the modern design trends toward one-story structures, large glass areas, modular coordination, open-space planning, and, if desired, "natural finish" materials.

It is characterized by the concentration of structural loads on fewer and larger sized pieces than in conventional construction, resulting in rapid site assembly with fewer man-hours. Dual function of materials and the use of planks continuous over two or more spans result in further economy. Adapted from heavy timber construction, the system is used for floors and roofs in combination with ordinary wood stud or masonry walls, or curtain wall construction with skeleton frame.

There are limitations to the system. There is less freedom in placing interior partitions. Insulation may be slightly more expensive, and wiring will have to be planned differently than in conventional construction.

Don't be unduly disturbed by these problems. Usually they can be solved without too much trouble. Nevertheless, because of the load concentration and the exposed structural members, a well-engineered design, good material, and good workmanship are vitally important in a post and beam house.

If you are planning to build a post and beam house and want design information, or if you are simply curious about the system, a fine manual has been published by the Housing and Home Finance Agency, Washington 25, D.C., called Plank-and-Beam System for Residential Construction.
Typical glue-nail truss specifications

3/12 W-truss

<table>
<thead>
<tr>
<th>SPAN</th>
<th>24&quot;</th>
<th>26&quot;</th>
<th>28&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom Chords</td>
<td>Uncut Length</td>
<td>12'-0&quot;</td>
<td>12'-4&quot;</td>
</tr>
<tr>
<td>Top Chords</td>
<td>Member</td>
<td>&quot;C&quot;</td>
<td>&quot;D&quot;</td>
</tr>
<tr>
<td>Short Diagonal</td>
<td>&quot;D&quot;</td>
<td>22&quot;</td>
<td>23&quot;</td>
</tr>
<tr>
<td>Long Diagonal</td>
<td>Use Material Left After Cutting Short Diagonals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom-Chord Splice Plates</td>
<td>Two Pieces</td>
<td>1&quot; x 4&quot; x 24&quot;</td>
<td></td>
</tr>
<tr>
<td>Scabs</td>
<td>Two Pieces 1&quot; x 4&quot; x 8&quot;; One Piece</td>
<td>1&quot; x 4&quot; x 16&quot;</td>
<td></td>
</tr>
<tr>
<td>Height (Inside Dimension)</td>
<td>&quot;H&quot;</td>
<td>36&quot;</td>
<td>36½&quot;</td>
</tr>
<tr>
<td>Extension</td>
<td>&quot;E&quot;</td>
<td>43½&quot;</td>
<td>41½&quot;</td>
</tr>
<tr>
<td>Overhang</td>
<td>&quot;O&quot;</td>
<td>42½&quot;</td>
<td>40½&quot;</td>
</tr>
<tr>
<td>Dimension</td>
<td>&quot;A&quot;</td>
<td>7'-4&quot;</td>
<td>7'-8&quot;</td>
</tr>
<tr>
<td>Bottom-Chord Splice Plates</td>
<td>14'-0&quot;</td>
<td>12'-4&quot;</td>
<td>12'-8&quot;</td>
</tr>
</tbody>
</table>

3/12, 4/12, 5/12 King post truss

<table>
<thead>
<tr>
<th>SPAN</th>
<th>26&quot;</th>
<th>28&quot;</th>
<th>30&quot;</th>
<th>32&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Chords</td>
<td>Length</td>
<td>&quot;A&quot;</td>
<td>16'-0&quot;</td>
<td>20'-0&quot;</td>
</tr>
<tr>
<td>Overhang</td>
<td>&quot;B&quot;</td>
<td>2/12</td>
<td>31½&quot;</td>
<td>29½&quot;</td>
</tr>
<tr>
<td>3/12</td>
<td>30½&quot;</td>
<td>28½&quot;</td>
<td>42½&quot;</td>
<td>38½&quot;</td>
</tr>
<tr>
<td>4/12</td>
<td>26½&quot;</td>
<td>24½&quot;</td>
<td>32½&quot;</td>
<td>24½&quot;</td>
</tr>
<tr>
<td>Bottom Chords</td>
<td>&quot;C&quot;</td>
<td>14'-0&quot;</td>
<td>12'-4&quot;</td>
<td>12'-8&quot;</td>
</tr>
<tr>
<td>Splice Plates — Length</td>
<td>28&quot;</td>
<td>24&quot;</td>
<td>20&quot;</td>
<td>20&quot;</td>
</tr>
<tr>
<td>Post Length</td>
<td>Square-Cut on Bottom Chord</td>
<td>2/12</td>
<td>25½&quot;</td>
<td>26½&quot;</td>
</tr>
<tr>
<td>3/12</td>
<td>38½&quot;</td>
<td>39½&quot;</td>
<td>41½&quot;</td>
<td>42½&quot;</td>
</tr>
<tr>
<td>4/12</td>
<td>51½&quot;</td>
<td>52½&quot;</td>
<td>55½&quot;</td>
<td>56½&quot;</td>
</tr>
</tbody>
</table>

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## Trussed Rafter Designs

### Dead Load + Live Load on Roof

- Dead load framing: 35° 30' dead load framing
- Spacing: 2'-0" O.C.
- Minimum: 6'-0"
- Width: 12'-0"
- Ceiling: 5-1/2'

### 2" x 4" for All Spans with Drywall Ceiling

- 2" x 6" for spans up to 26' with plaster ceilings
- 2" x 6" for spans over 26' with plaster ceilings

### Anchorage Detail

- 1-1/2" bolt
- 2-1/2" split ring

### Lumber

**Pitch and Length of Span**

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Length of Span</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>20' 22' 24' 30'</td>
</tr>
<tr>
<td>5</td>
<td>20' 22' 24' 28'</td>
</tr>
<tr>
<td>6</td>
<td>20' 22' 24' 28'</td>
</tr>
</tbody>
</table>

### Dimensions

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Length of Span</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>20' 22' 24' 30'</td>
</tr>
<tr>
<td>5</td>
<td>20' 22' 24' 28'</td>
</tr>
<tr>
<td>6</td>
<td>20' 22' 24' 28'</td>
</tr>
</tbody>
</table>

### F.B.M. Lumber

<table>
<thead>
<tr>
<th>Span</th>
<th>2&quot; x 8&quot;</th>
<th>2&quot; x 6&quot;</th>
<th>2&quot; x 4&quot;</th>
<th>F.B.M. Drywall Ceiling</th>
<th>F.B.M. Plaster Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>20'-0&quot;</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>51</td>
</tr>
<tr>
<td>22'-0&quot;</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>61</td>
</tr>
<tr>
<td>24'-0&quot;</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>61</td>
</tr>
<tr>
<td>26'-0&quot;</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>68</td>
</tr>
<tr>
<td>28'-0&quot;</td>
<td>2(2)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>30'-0&quot;</td>
<td>2(2)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>88</td>
</tr>
<tr>
<td>32'-0&quot;</td>
<td>2(2)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

### Note

- Pieces in parentheses ( ) are used in place of equal length 2x4's when plaster ceiling is used.

**April 1960**
WHAT ARE THEY?

Curtain walls generally are defined as non-bearing exterior walls supported at each floor by the structural framework of the building. Mass production methods have made available modular components, or panels in a wide variety of materials, forms, colors and textures. They are classified in this way:

1. TRADITIONAL WALL—Fenestration and glass above spandrel of masonry, metal or other materials.
   a. Sash with all fixed glass.
   b. Sash with some fixed, some operating glass.
   c. Sash with all operating glass.

2. ALL GLASS WALL—May be all transparent, or transparent above spandrel of opaque or translucent glass.

3. WINDOWLESS WALL—Materials from which curtain wall panels are made cover all the metals, plastics, glass, concrete, stone and burned clay, ceramic-coated materials and combinations of these.
"We specify and use UTILITY grade West Coast framing lumber for quality construction. Properly used, it saves $200.00 on every job," report builders Lyons and McDonell.

Here is a building partnership which has discovered a short cut to bigger profit with “Utility” grade West Coast dimension and boards. Lyons and McDonell’s solid reputation for quality construction has never varied, yet these progressive builders have achieved lower total job costs regularly by using “Utility” grade lumber in specified applications. *

You, too, will find “Utility” grade is a money-maker for One and Two Living Unit-construction. And you will have the plus-value of the consistent quality of West Coast lumber.

*When used in accordance with FHA Minimum Property Standards for One and Two Living Units, FHA Bulletin No. 300.

WEST COAST LUMBERMEN’S ASSOCIATION

1410 S. W. Morrison Street, Portland 5, Oregon
## TYPICAL SHAPES

<table>
<thead>
<tr>
<th>TYPICAL SHAPES</th>
<th>USES</th>
<th>SPANS</th>
<th>CENTER-TO-CENTER SPACING</th>
<th>ADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANGENT ARCHES</td>
<td>Churches, Gymnasiums, Chapels, Theaters</td>
<td>24' to 100'</td>
<td>8' to 20'</td>
<td>Arch and laminated purlins give unsurpassed beauty, without expensive veneering. Fire resistant. Made of kiln-dried Douglas Fir selected for strength and appearance.</td>
</tr>
<tr>
<td>RADIAL ARCHES</td>
<td>Gymnasiums, Hangars, Auditoriums, Armories, Skating Rinks, Bowling Alleys</td>
<td>40' to 120'</td>
<td>8' to 20'</td>
<td>Graceful arches have the clean, natural beauty of fine wood. Wide, clear spans give large unobstructed space without unsightly framework. Fire resistant. Efficient design makes a building that is economical to erect.</td>
</tr>
<tr>
<td>STRAIGHT</td>
<td>Churches, Gymnasiums, Industrial Buildings</td>
<td>20' to 60'</td>
<td>6' to 20'</td>
<td>Resists checking and warping and other seasoning defects common to solid timber. Fire resistant. Combines structural and decorative advantages for economy.</td>
</tr>
<tr>
<td>ARCHED-PITCHED LAMINATED WOOD BEAMS</td>
<td>Gymnasiums, Offices, Residences, Warehouses, Factories</td>
<td>24' to 200'</td>
<td>8' to 20'</td>
<td>Well adapted to wide, clear-span construction. Economical. Designed for specific requirements such as concentrated loads, hoists, etc.</td>
</tr>
<tr>
<td>BOWSTRING TRUSSES</td>
<td>Stores, Factories, Theaters, Warehouses, Gymnasiums</td>
<td>24' to 65'</td>
<td>8' to 20'</td>
<td>Light enough to erect without special equipment. One inch roof sheathing can be nailed to top of arch with ceiling material nailed directly to lower tie.</td>
</tr>
<tr>
<td>TIED ARCHES</td>
<td>Small Hangars, Warehouses, Gymnasiums, Theaters, Community Buildings</td>
<td>28' to 80'</td>
<td>2' to 20'</td>
<td>Easy to plan. Economical. Combines sidewall and roof in one piece for easy erection. Requires no costly field assembly. Any type of roofing can be applied over sheathing.</td>
</tr>
<tr>
<td>UTILITY ARCHES</td>
<td>Bridges, Buildings, Bulkheads, Culverts, Docks, Falsework, Floats, Grandstands, Ramps, Outdoor Theater Screens, Retaining Walls, Shipways</td>
<td></td>
<td></td>
<td>Designed for specific loads, precision manufactured by skilled workmen of structural timber. Cut to exact lengths, holes bored for all connections — bolts and hardware furnished. Delivered when promised for erection by local crews.</td>
</tr>
<tr>
<td>ALL TYPES STRUCTURAL ASSEMBLIES</td>
<td>Churchs, Gymnasiums, Schools, Auditoriums, Stores, Offices, Homes, Industrial Buildings</td>
<td></td>
<td></td>
<td>Laminated of Inland Red Cedar or Idaho White Pine kiln dried to average 10% moisture content for dimensional stability and uniform appearance. End matched, Husky tongues and grooves. Face ply is of full 1&quot; nominal thickness to eliminate chipping of facing material. Faster to install, requires no horizontal nailing.</td>
</tr>
</tbody>
</table>

Also all types of farm rafters.

---

**RILCO LAMINATED PRODUCTS**

W811 First National Bank Building, St. Paul 1, Minnesota

Please send me information on:

- [ ] Tangent Arches
- [ ] Radial Arches
- [ ] Trusses
- [ ] Tied Arches
- [ ] Utility Arches
- [ ] Farm Rafters
- [ ] Beams
- [ ] Rilco Deck

**Name**

**Address**

**City**

**Zone**

**State**
Asphalt Roofing Guide

Entry:

**Asphalt Roofing Guide**

### Typical Nails for Asphalt Roofing

<table>
<thead>
<tr>
<th>Nails Per Shingle</th>
<th>Nails Per Square</th>
<th>Length of Nail</th>
<th>Lbs. Per Square (Approx)</th>
<th>Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>12 GA</td>
<td>11 GA</td>
<td></td>
</tr>
<tr>
<td>Roll Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On New Deck</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over Old Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19&quot; Selvage Over Old Shingles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Tab Square Butt New</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Tab Square Butt Reroofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hex Strip Reroofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giant American</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giant Dutch Lap</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Hex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Length of nail should always be sufficient to penetrate at least 3/4" into sound wood deck lumber. Nails should show little, if any, below underside of deck lumber.*

---

COURTESY OF THE ASPHALT ROOFING INDUSTRY BUREAU
ROOFING, SIDING, INSULATION, SHEATHING
Red Cedar Shingles

- Red Cedar Shingles
- Spaced or solid wood sheathing should be 1 1/2", 1 3/4", or 1 5/8" thick.
- Spacing should be at least 1" from edge, 1 1/2" above butt line of next course.
- Two nails for each shingle from edge, 1 1/2" from edge.
- Butt line of next course.
- For quarter pitch and steeper, use 5", 5 3/4", and 7 5/8" exposures, respectively.
- For flatter pitches, use 3", 4", 5 1/4" exposures.
- Alternate course joints should not align first course double or tripled.
- Two nails for each shingle from edge, 1/4" from edge.
- Butt line of next course
- For quarter pitch and steeper, use 5", 5 3/4", 7 5/8", 9 1/8" for 16". 18", 24" shingles, respectively.
- For flatter pitches, use 3", 4", 5 1/4" exposures.
- Choose shingles of uniform width: 3" to 5".
- Alternate overlap.
- Inside corner.
- Walls.
- Roofs.
- Ridge.
- Valley.
- Cornice and gable.
- Hip.
Asbestos-Cement Roof shingles may be applied on roofs having a slope of 5" in 12" or greater. Using the low slope application methods shown here, they may be applied on slopes as low as 2" in 12'.

Low-slope application method for American Method Individual shingles.

**Application Method for American Method Multiple-Unit shingles.**

Asbestos-Cement Roof shingles are manufactured with holes properly located and pre-punched to receive COPPER SHEETS diamond pointed with heads approximately ⅜" dia. Underlayment and interlayment must be 15 lb. asphalt-saturated organic felt.

**Basic Types of Asbestos Cement Roof shingles**

<table>
<thead>
<tr>
<th>Type</th>
<th>Width</th>
<th>Height</th>
<th>Thickness</th>
<th>Exposure</th>
<th>Approx. Shipping wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Method</td>
<td>8&quot;</td>
<td>16&quot;</td>
<td>⅝&quot;</td>
<td>7&quot;</td>
<td>350 lbs.</td>
</tr>
<tr>
<td>Individual Unit</td>
<td>9&quot;</td>
<td>18&quot;</td>
<td>⅞&quot;</td>
<td>8&quot;</td>
<td>585 lbs.</td>
</tr>
<tr>
<td>American Method</td>
<td>24&quot;</td>
<td>14&quot;</td>
<td>1½&quot;</td>
<td>6&quot;</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Multiple Unit</td>
<td>30&quot;</td>
<td>15½&quot;</td>
<td>2½&quot;</td>
<td>8&quot;</td>
<td>440 lbs.</td>
</tr>
<tr>
<td>Dutch Lap</td>
<td>16&quot;</td>
<td>16&quot;</td>
<td>¾&quot; x 12&quot;</td>
<td>265 lbs.</td>
<td></td>
</tr>
<tr>
<td>Ranch Design</td>
<td>24&quot;</td>
<td>12&quot;</td>
<td>½&quot; x 9&quot;</td>
<td>255 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

Ridge Roll used on Ridge as alternate to Ridge shingles.
### WALL SHEATHING

<table>
<thead>
<tr>
<th>Product</th>
<th>Suggested Thickness</th>
<th>Maximum Stud Spacing (O.C.)</th>
<th>Nail Size and Type</th>
<th>Nail Spacing (Panel Edge)</th>
<th>Nail Spacing (Intermediate)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fir Plywood</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4&quot;x8'</td>
<td>6&quot;</td>
<td>6d Common</td>
<td>6&quot;</td>
<td>12&quot;</td>
<td>Apply with face grain perpendicular to studs.</td>
<td></td>
</tr>
<tr>
<td>4&quot;x8'</td>
<td>5&quot;/6&quot;</td>
<td>6d Common</td>
<td>6&quot;</td>
<td>12&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4&quot;x8'</td>
<td>6&quot;</td>
<td>8d Common</td>
<td>6&quot;</td>
<td>12&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fiberboard (Vertical Application)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4&quot;x8'-4&quot;x9'</td>
<td>6&quot;/7&quot;</td>
<td>16&quot; or 24&quot;</td>
<td>1½&quot; 12 ga. Galvanized Rtg. Nails 1½&quot; head</td>
<td>3&quot;</td>
<td>6&quot;</td>
<td>Drive nails until head is flush with sheathing surface.</td>
</tr>
<tr>
<td>4&quot;x10'-4&quot;x12'</td>
<td>6&quot;/7&quot;</td>
<td>16&quot;</td>
<td>1½&quot; 12 ga. Galvanized Rtg. Nails 1½&quot; head</td>
<td>3&quot;</td>
<td>6&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Fiberboard (Horizontal Application)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&quot;x8'</td>
<td>6&quot;</td>
<td>16&quot;</td>
<td>1½&quot; 12 ga. Galvanized Rtg. Nails 1½&quot; head</td>
<td>4½&quot;</td>
<td>8&quot;</td>
<td>Stagger end joints in successive courses.</td>
</tr>
<tr>
<td>2&quot;x8'</td>
<td>6&quot;</td>
<td>16&quot;</td>
<td>1½&quot; 12 ga. Galvanized Rtg. Nails 1½&quot; head</td>
<td>4½&quot;</td>
<td>8&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Gypsum Board (Horizontal Only)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&quot;x8'</td>
<td>6&quot;</td>
<td>16&quot;</td>
<td>1½&quot; 11 ga. Galvanized Rtg. Nails 1½&quot; head</td>
<td>4&quot;</td>
<td>8&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Wood (Diagonal or Horizontal Application)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1&quot;x4' to 1&quot;x8'</td>
<td>16&quot;</td>
<td>8d Common</td>
<td>2 Nails at all Bearings</td>
<td>Joints in adjacent boards separated by 2 stud spaces.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 1&quot;x8'</td>
<td>16&quot;</td>
<td>8d Common</td>
<td>3 Nails at all Bearings</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### STAPLE APPLICATION SPECIFICATIONS

<table>
<thead>
<tr>
<th>Product</th>
<th>Thickness of Fiberboard</th>
<th>Maximum Stud Spacing</th>
<th>Gauge of Staple</th>
<th>Minimum Crown of Staple</th>
<th>Minimum Length of Staple</th>
<th>Spacing of Staples on Framing Members</th>
<th>Spacing at Intermediate Members</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiberboard Wall Sheathing (with Diagonal Bracing)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>½&quot;</td>
<td>16&quot;</td>
<td>16&quot;</td>
<td>3&quot;</td>
<td>1½&quot;</td>
<td>4&quot;</td>
<td>6&quot;</td>
<td></td>
<td>1. ½&quot; Fiberboard shall be special dense type.</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>16&quot;</td>
<td>14&quot;</td>
<td>3&quot;</td>
<td>1½&quot;</td>
<td>4&quot;</td>
<td>6&quot;</td>
<td></td>
<td>2. Unless engineering analysis of racking resistance is submitted for FHA determination, each wall shall contain at least one eight foot or three four foot wall sections without openings.</td>
</tr>
<tr>
<td>½&quot;</td>
<td>24&quot;</td>
<td>16&quot;</td>
<td>3&quot;</td>
<td>1½&quot;</td>
<td>4&quot;</td>
<td>6&quot;</td>
<td></td>
<td>3. Panel must be nailed around entire perimeter.</td>
</tr>
<tr>
<td><strong>Fiberboard Wall Sheathing (without Diagonal Bracing)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>½&quot;</td>
<td>16&quot;</td>
<td>16&quot;</td>
<td>3&quot;</td>
<td>1½&quot;</td>
<td>3&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Thickness</th>
<th>Maximum Stud or Joist Spacing</th>
<th>Minimum Gauge of Staple</th>
<th>Minimum Crown of Staple</th>
<th>Minimum Length of Staple</th>
<th>Maximum Spacing of Staples on Framing Members</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gypsum Lath</strong></td>
<td>3/16&quot;</td>
<td>16&quot;</td>
<td>16&quot;</td>
<td>3/16&quot;</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>¼&quot;</td>
<td>16&quot;</td>
<td>16&quot;</td>
<td>3/16&quot;</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¼&quot;</td>
<td>24&quot;</td>
<td>16&quot;</td>
<td>3/16&quot;</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gypsum Wall Sheathing (with diagonal Bracing)</strong></td>
<td>3/16&quot;</td>
<td>16&quot;</td>
<td>16&quot;</td>
<td>3/16&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¼&quot;</td>
<td>24&quot;</td>
<td>16&quot;</td>
<td>3/16&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>First Ply Only of Two-Ply System Gypsum Dry-Wall Interior Finish</strong></td>
<td>3/16&quot;</td>
<td>16&quot;</td>
<td>16&quot;</td>
<td>11/16&quot;</td>
<td>5&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¼&quot;</td>
<td>24&quot;</td>
<td>16&quot;</td>
<td>11/16&quot;</td>
<td>5&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For Gypsum Lath, staples shall be driven with the crown parallel to the long dimension of the framing member, using not less than 4 staples per 16" width of lath per framing member and not more than 5" o.c., in such a manner that the crown bears tightly against the lath but does not cut into the face paper. The legs of the staples shall be no less than 3/8" from the ends and edges of the lath. For Gypsum Wall Sheathing: no less than 3 staples per 24" width of sheathing per framing member and not more than 6" o.c., and for First Ply, etc., not more than 5" o.c. on ceilings and 6" o.c. on sidewalls.
**ROOFING, SIDING, INSULATION, SHEATHING**

**Insulation Guide**

**BETWEEN BRIDGING**
- Make diag cut to fit insul. above and below bridging.
- Adj. insul. to be fitted similarly.

**BETWEEN CEILING JOISTS**
- Either vapor permeable asph. felt, wood strips or lacing wire.

**IN WALLS**
- Fasten flanges to studs.

**IN RAFTERS**
- Allow air space for free air circulation between insul. & sheathing.

**IN FLAT ROOFS**
- Install furring and screen as shown if free air circulation parallel to rafters cannot be provided.

**IN CRAWL SPACES**
- Wire mesh to support batts.

**AROUND PIPES**
- Wedge insul. and vapor barrier behind water pipes.

**BLANKET SIZES**

<table>
<thead>
<tr>
<th>Widths</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1'6&quot;</td>
<td>Widths between studs or joists - 16&quot; O.C.</td>
</tr>
<tr>
<td>1'8&quot;</td>
<td>Widths between studs or joists - 20&quot; O.C.</td>
</tr>
<tr>
<td>2'0&quot;</td>
<td>Widths between studs or joists - 24&quot; O.C.</td>
</tr>
</tbody>
</table>

**ALWAYS USE THE C-3-2 RULE:**
6" Batts as blankets between rafters or joists, 3" batts between studs and 2" batts below floors.

**NAILING:**
6" maximum spacing.

**REFLECTIVE INSULATION**
- Alum is asphalt laminated to heavy craft paper one or both sides.
- Type A used alone or with type B, space eg divided 2', 3', 4' widths.
- Economical for wall & crawl spaces.

**FIBER OR ASB SEPARATORS**
- Available in 1" x 16" x 24" widths.
- Heavy weight foil in 16" x 24" widths.

**THIN COAT OF ALUM BONDED**
- To kraft paper.

**VAPOR BARRIER PAPER**
- Economical for wall & crawl spaces.
- Available in 12", 16", 20" and 24" widths.

**WRAPUP:**
- April 1960.
ROOFING, SIDING, INSULATION, SHEATHING

**Rigid Insulation**

**HORIZONTAL PERIMETER INSULATION**

**VERTICAL PERIMETER INSULATION**

**PERIMETER HEATING INSULATION**

**SLAB INSULATION FOR USE WITH RADIANT HEAT AND FOR MINIMUM HEAT LOSS**

**INSULATION**

**CAVITY WALL**

**PORTLAND CEMENT FORMULAS**

<table>
<thead>
<tr>
<th>PORTLAND CEMENT</th>
<th>1 PART BY VOLUME</th>
<th>2 PARTS BY VOLUME</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASON'S SAND</td>
<td>3 TO 4 PARTS</td>
<td>3 TO 4 PARTS</td>
</tr>
<tr>
<td>HYDRATED LIME</td>
<td>3 TO 4 PARTS</td>
<td>3 TO 4 PARTS</td>
</tr>
</tbody>
</table>

**PACKAGED STYROFOAM**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>BD. FT PIECE</th>
<th>PIECES</th>
<th>BD. FT BOX</th>
<th>BOX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; x 10&quot;</td>
<td>2.5</td>
<td>48</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>1&quot; x 12&quot;</td>
<td>3</td>
<td>37</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>1½&quot; x 10&quot;</td>
<td>3.75</td>
<td>32</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>1½&quot; x 12&quot;</td>
<td>4.5</td>
<td>26</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>2&quot; x 10&quot;</td>
<td>5</td>
<td>20</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>2&quot; x 12&quot;</td>
<td>6</td>
<td>14</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>3&quot; x 10&quot;</td>
<td>7.5</td>
<td>16</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>3&quot; x 12&quot;</td>
<td>9</td>
<td>12</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>4&quot; x 10&quot;</td>
<td>10</td>
<td>12</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>4&quot; x 12&quot;</td>
<td>12</td>
<td>10</td>
<td>120</td>
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<tr>
<td>5&quot; x 12&quot;</td>
<td>15</td>
<td>8</td>
<td>120</td>
<td></td>
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</tbody>
</table>

**UNPACKAGED STYROFOAM**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>BD. FT PIECE</th>
<th>SIZE</th>
<th>BD. FT PIECE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; x 10&quot;</td>
<td>7.5</td>
<td>3&quot; x 10&quot;</td>
<td>22.5</td>
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<tr>
<td>1&quot; x 12&quot;</td>
<td>9</td>
<td>3&quot; x 12&quot;</td>
<td>27</td>
</tr>
<tr>
<td>1½&quot; x 10&quot;</td>
<td>11.25</td>
<td>4&quot; x 10&quot;</td>
<td>30</td>
</tr>
<tr>
<td>1½&quot; x 12&quot;</td>
<td>13.5</td>
<td>4&quot; x 12&quot;</td>
<td>36</td>
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<tr>
<td>2&quot; x 10&quot;</td>
<td>15</td>
<td>5&quot; x 12&quot;</td>
<td>45</td>
</tr>
<tr>
<td>2&quot; x 12&quot;</td>
<td>18</td>
<td>2½&quot; x 10&quot;</td>
<td>18.75</td>
</tr>
<tr>
<td>2½&quot; x 12&quot;</td>
<td>22.5</td>
<td>2½&quot; x 12&quot;</td>
<td>22.5</td>
</tr>
</tbody>
</table>

**SHIPPED IN CARLOAD OR TRUCK LOTS IN STOCK SIZES LISTED IN 9'-0" LENGTHS.**

**SHIPPED IN CONTAINERS MEASURING 10' x 24' x 36" IN STOCK SIZES LISTED IN 3'-0" LENGTHS.**

**AMERICAN BUILDER**
Your Barrett representative can take orders today for the complete line of Alcoa Siding. Prompt, dependable delivery is assured from seven conveniently located Barrett warehouses. And you can top off your next order of Barrett building materials with Alcoa Siding. Just call your Barrett representative, or contact us direct.

DISTRICT SALES OFFICES: BIRMINGHAM 8, Ala.—1327 Erin St.; CHARLOTTE 1, North Carolina—1125 East Morehead St.; CHICAGO 54, Ill.—Merchandise Mart; CLEVELAND 15, Ohio—3121 Euclid Ave.; HOUSTON 11, Texas—323 South 67th St.; MALDEN 48, Mass. — 378 Commercial St.; NEW YORK 16, N. Y.—261 Madison Ave.; PHILADELPHIA 46, Pa.—36th and Grays Ferry Ave.; ST. PAUL, Minn. — 764 Vandalia St.
NOW!
THE FIRST AND ONLY
ALUMINUM SIDING
MADE BY ALCOA

New! Horizontal and vertical siding, insulated and noninsulated—all Alcoa-made for home modernization and new construction!

NATIONWIDE PROMOTION REAPS PROFITS FOR YOU!
- NETWORK TELEVISION—Alcoa Theatre, NBC-TV, Alcoa Presents, ABC-TV, 50,000,000 impressions.
- NATIONAL MAGAZINES—Full-color advertisements total 32,000,000 impressions.
- FULL-PAGE NEWSPAPER ADVERTISEMENTS—Commanding announcements in 176 major markets for 90,000,000 impressions.
- PROMOTION SUPPORT—Brochures, stuffers, mats—all you need.

With 396 years of building products experience among them, these great names chose to distribute Alcoa® Siding.

BARRETT DIVISION OF ALLIED CHEMICAL CORP., 40 Rector Street, New York 6, N. Y.
BIRD & SON, INC., East Walpole, Mass.
THE PHILIP CAREY MANUFACTURING CO., Lockland, Cincinnati 15, Ohio
THE FLINTKOTE CO., 30 Rockefeller Plaza, New York 20, N. Y.
MASTIC CORP., 131 S. Taylor Street, P. O. Box 65, South Bend, Ind.

Now available from stock, nationwide... call your distributor today!

SPECIFY THE SIDING THE EXPERTS CHOOSE!

ALCOA SIDING ACCESSORIES FOR HORIZONTAL AND VERTICAL IN MATCHING COLORS:
Window and door trim, starter strip, undersill and general-purpose trim, window head flashing, inside corner post, outside corner post, vertical base flashing.

ALCOA HORIZONTAL SIDING
for popular clapboard effect, traditional or contemporary styling

ALCOA VERTICAL SIDING
for modern board-and-batten effect, individual styling

8 OUT OF 10 KNOW IT... TRUST IT!
Sell the Alcoa label: known at sight to 80 per cent of America as the sign of aluminum quality! It marks every inch of new Alcoa Siding—first and only siding made by Aluminum Company of America, world’s leading producer of aluminum!

NEW ALCOA SIDING IS SIX WAYS BETTER!
1. New, stronger Alcoa Aluminum alloy used for the first time in siding!
2. Special clad laminated metal coat for lifelong corrosion resistance!
3. Bonded surface grips paint, defies chipping and peeling!
4. Specially developed Alcoa Alumalure® finish gives maximum protection for outdoor exposure conditions.
5. New factory-applied foam insulates against heat and cold!
6. Alcoa reflective foil backing retains 95 per cent of furnace radiant heat!

ALUMINUM COMPANY OF AMERICA • PITTSBURGH 19, PA.
APRIL 1960
SUNLINE SURVIVES THE HAMMER TEST! Where other sidings yield under hammer blows, Masonite hardboard comes through undaunted—undented!

Shadowvent®. A horizontal siding featuring a 3/4" shadow line, concealed nailing, vented courses. Easy alignment, fast application, factory-primed.
Newest thing beneath the sun:
Board’n batten all in one!

SUNLINE SIDING

Give your homes the charm of this original new siding treatment. With Sunline siding your homes have a vertical accent built right in—the raised ribs every 8" are an integral part of the siding itself. Sunline goes up in handy 4' x 8' to 4' x 16' panels. No wasteful cutting necessary—your first cost is your last cost.

How handsome new Sunline looks as the smooth, rounded ribs catch the play of sun and shadow—truly a new exterior appeal! How lasting, too! Like all Masonite® hardboard sidings, Sunline is virtually dent-proof...won't split, splinter or check...holds paint better and longer. See for yourself...use Sunline in your homes along with these other popular Masonite sidings.


Panelgroove®. A panel siding 4' wide, lengths to 16' with vertical grooves every 4", 8" or random. Comes factory-primed.

Ridgegroove®. Similar to Panelgroove with the addition of a fine combed surface between the grooves. Prime-coated.

Ridgeline®. A 4'-wide panel in lengths to 16'. Continuous combed surface gives pleasing effect. Prime-coated.

Get Sunline and other Masonite sidings through your lumber dealer or Masonite salesman. Or write Masonite Corporation, Dept. AB-4, Box 777, Chicago 90, Ill.

MASONITE CORPORATION

®Masonite Corporation—manufacturer of quality panel products for building and industry.
Nu-Loc is made of selected pieces of scientifically kiln-dried lumber, carefully machined for precision fit. The pieces are end-glued or end- and edge-glued together with a light-color waterproof exterior glue, then finished to uniform smoothness. Lumber to be used for Nu-Loc is cut thicker than regular stock to allow for surfacing after gluing. In order to minimize differences in color and grain, the pieces are sorted and matched into as many as five groups (depending on species) before gluing. Melamine urea resin adhesive is used because it creates a strong bond that is both waterproof and colorless.

Principal Advantages
Nu-Loc improves appearance by presenting a smooth, even surface with snug fitting joints. It takes and holds paint or varnish extremely well. Nu-Loc cuts labor costs by minimizing cutting, fitting, and handling time. It speeds construction by covering more area faster, and reduces waste because you order it in the lengths and widths you need. Made only of kiln-dried lumber, it has good dimensional stability, lays flat, resists cupping and warping.

Principal uses of NU-LOC
Nu-Loc is interchangeable with regular lumber in all non-structural uses. Nu-Loc is offered in American Lumber Standard and in West Coast Industry sizes. It is made in clear grades of Douglas Fir, Western Red Cedar, West Coast Hemlock, Ponderosa Pine, Idaho White Pine, Inland Red Cedar and Larch... and is also available in common grades of Idaho White Pine, Inland Red Cedar and Larch/Douglas Fir.

Nu-Loc exterior wall coverings—drop siding, vertical patterns, board and batten—are available in lengths to 22', widths to 12'—bevel siding in lengths to 16'. Nu-Loc casing and base, and Nu-Loc mouldings are available in standard patterns, and in specified or random lengths. Nu-Loc door jamb sets are made in many sizes and patterns. Wide Nu-Loc Lumber can be ordered in lengths to 20', widths to 28'. Nu-Loc Lumber is also ideal for window frames, cornices, rake trim, soffits, fascias, porch ceilings, signs, cabinet faces, shelving, drawer sides, drawer fronts, stair trim, valances, and bay window sills.

Fully Accepted
The combination of modern equipment, carefully trained operators, and strict quality controls assure consistent uniformity and durability. Nu-Loc is backed by over 20 years of research, testing, and development. It is produced in accordance with grading rules of the West Coast Lumber Inspection Bureau or Western Pine Association.

Summary
Advantages in wider widths: Gluing up of narrow pieces tends to stabilize wide widths by reducing cup and twist. Nu-Loc provides wider widths than available in regular lumber.

Advantages in long lengths: Long lengths of Nu-Loc require fewer end-fitted joints to give better appearance and save labor. Both specified and fractional lengths are available in quantity.

For additional information write: Weyerhaeuser Company, Lumber and Plywood Division, First National Bank Building, St. Paul 1, Minn.
Save man hours—improve appearance—
with made-to-measure NU-LOC

Weyerhaeuser's Nu-Loc is manufactured lumber, produced to meet your needs in both extra wide and/or extra long length boards. Unlike many new building products, Nu-Loc can give you savings on every job, large or small. It makes cutting and fitting time a minor cost factor, speeds construction, reduces waste—all this on top of improving appearance. It is ideal for such uses as soffits, fascias, door jambs, mouldings, shelvings, cornices, and stair trim... and for bevel, board-and-batten, board-on-board, and drop siding. Weyerhaeuser Nu-Loc, a 4-Square Product, is precision manufactured from scientifically kiln-dried lumber. You can depend on its quality. The opposite page gives additional information on its use and performance. Your Weyerhaeuser 4-Square Lumber Dealer will be glad to show you samples and quote on specific applications so that you can see the savings Nu-Loc offers you.

Weyerhaeuser Company
Lumber and Plywood Division
Flintkote salesman
P. J. Keigher tells why...

Flintkote's line of strip shingles are the greatest buy in roofing!

"Take our 12" Tapered Strips, for example. They pack 25-35% more weight at the exposed tab. This extra weight—up to 60 lbs more per square than in other premium shingles—makes Tapered Strips the most dependable protection you can give a roof."

"Our Seal Tabs," continues Phil, "have a special adhesive applied to the underside of the butt. The sun's heat bonds the Seal Tabs together so that not even hurricane winds can lift them."

"The 12" Thikbut shingles give you two shingles to sell for the price of one. They're double thick at the butt—the place where the sun hits and breaks down ordinary roofing."

For particulars, literature on Flintkote's complete line of roofing, see your Flintkote representative. You will find him a great guy to work with...and he knows his stuff in building materials.

"America's broadest line of building products"

The Flintkote Company, 30 Rockefeller Plaza, New York 20, N. Y.
The original multiple layer aluminum foil insulation, ALFOL is the natural adjunct to modern electric heating. Scientifically designed to resist all known forms of heat loss (beginning with radiation), the patented ALFOL blanket helps get the utmost in operating economy out of every electric heating system.

8 reasons why ALFOL is the ideal insulation for electrically-heated homes

High thermal efficiency. In electrically-heated homes, effective insulation is doubly important. By resisting all 3 forms of heat loss, ALFOL delivers exceptional insulating value...holds annual heat costs to the practical minimum.

Complete condensation control. To cope with the problem of high inside humidity, ALFOL affords superior condensation protection. That's because ALFOL provides a separate vapor barrier that is positive and continuous. (It's applied in unbroken lengths.)

"Plus" summer value. To go along with the extra winter comfort afforded by electric heating, ALFOL gives you superior summer comfort as well. In the famous Bureau of Standards summer comfort tests, for example, it took only two layers of aluminum foil to surpass the down-heat efficiency of full-thick bulk insulation.

Instant thermal action. Instead of "soaking up" heat, ALFOL reflects it...instantly, continuously. This low heat storage capacity means faster heating in winter, faster cooling in summer.

Positive application. ALFOL application is simple, positive, virtually foolproof. All you do is staple the flanges—the multiple aluminum foil layers space themselves automatically!

Clean, permanent, dust-free. ALFOL is as clean, permanent and odorless as electric heat itself! Made of pure aluminum foil, there's no dust or dirt...no fibers to sift through walls, etc.

Wind-resistance. Applied in continuous and unbroken lengths, the ALFOL insulated panel is completely sealed, top to bottom or wall to wall. No infiltration of wind, no drafts.

Low installed cost. For comparable efficiency (as calculated by NEMA specifications), ALFOL usually costs less in place than any bulk-type insulation you can buy! Savings on handling, storage and application make this amazing economy possible.
In interiors, too, wood combines an essential structural function with decorative effects—saving builders the cost of additional interior finishing. Wood paneling is one of the most popular extras, helps make any house more salable.
Because wood makes individuality practical at any price...

built of WOOD means built to sell

Today, more and more buyers are in the market for a home that is completely their own... unique in styling, taking full advantage of site orientation, planned around their own special family needs and way of life. But how to build a house with that one-of-a-kind look without going overboard on cost? Wood is helping builders find the answer.

No other material is so adaptable to such a wide range of size and cost specifications. No other material conforms so readily to any architectural style, yet allows for economical variations on the basic design. Luxury touches such as hardwood floors, paneling, exposed posts and beams do a double job. They are structurally important and decorative. These customized features go a long way toward creating a feeling of value... a receptive buying atmosphere that helps you sell more houses and make more profit on each sale.

For more information on better homes of wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION
Wood Information Center, 1319 18th St., N.W., Washington 6, D. C.

For built-in sales appeal, nothing takes the place of wood.

Additions to homes are economically practical thanks to wood's availability and the ease with which it can be handled by workmen. And wood is traditionally right for so many home styles.

Wood is equal to any site problem as witnessed by this home perched on a California hillside. Wood's easy portability makes economical construction possible on the most difficult terrain.

A fine example of how wood construction can help the builder translate even the most advanced designs into reality. Readily-available wood framing used imaginatively makes practical this dramatic expanse of glass. A deep wood overhang shields window areas from both sun and rain.
Dow's pre-scored perimeter insulation now meets new FHA-MPS minimums for both widths and thicknesses.

Dow, first with a pre-scored perimeter insulation, has re-designed Scorbord to help you follow these new standards quickly and economically. Scorbord, expanded polystyrene insulation board, eliminates up to 80% of on-the-job cutting and fitting. Each 24” board breaks readily into 12” or 18” widths for horizontal placement and into 4”, 6” and 12” sections for vertical edging. The nominal thicknesses of Scorbord also meet FHA-MPS requirements for “R” values.

Scorbord saves money on materials, too, because it serves as its own moisture barrier. It’s lightweight, easy to carry and handle . . . has plenty of compressive strength to support a concrete slab.
MEETS NEW FHA-MPS

For more information about Scorboard, contact the Dow sales office near you or write to us. THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics Sales Department 1611D4.

POLYFILM®—Dow's top quality polyethylene film is now available nationally in all standard widths and thicknesses.

Dow Building Products at work

STYROFOAM®—Permanent insulation for cavity walls; replaces furring and lath as an insulation-plasterbase. Rigid, low "K" factor, resistant to water and water vapor.

ROOFMATE®—Rigid insulation for built-up roofs serves as its own moisture barrier. Reduces blistering, resultant leaks.

SARALOY® 400—Elastic thermoplastic sheet flashing conforms to almost any shape, adheres to most building materials. Expands, contracts with other materials.

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

APRIL 1960
ZONOLITE® WATER-REPELLENT MASONRY FILL INSULATION

FASTER...LOWER COST WAY TO INSULATE BLOCK AND CAVITY WALLS!

Builders Hail Seven Benefits of New Water-Repellent Insulation!

Faster: High-speed installations (as pictured) cuts costs as much as 60%.
Cut Heat Loss: Up to 50% savings because it doubles wall insulation values.
Stays Dry: Patented process insures against water damage to insulation.
Reduces Cooling Costs: Saves up to 25% in cooling costs, permits use of smaller units.
Non-Settling: Retains its uniform, tamper-proof density.
Economical: Lower initial cost, less expensive to install. (As little as 1/2 to 1/3 the costs of insulation heretofore applied to inner wall surfaces.)

Increases Comfort: Minimizes condensation, keeps inner walls warmer in cold weather, insures your client's last-ing satisfaction.

With all these advantages, it's no wonder more and more builders across the country are using ZONOLITE Water-Repellent Masonry Fill Insulation for block and cavity walls. To learn how you can insulate masonry walls faster and more economically, mail the coupon today.

Mail Coupon For FREE DATA

ZONOLITE COMPANY—Dept. AB-40, 135 South LaSalle St., Chicago, Ill.
Please send me free literature telling me more about new Zonolite water-repellent Masonry Fill Insulation.

Name

Firm

Address

City

State

Zone

Title

178

AMERICAN BUILDER
Two ways to say quality

Your prospects can tell a great deal about a home—and its builder—by the level of quality they see used on the exterior. That’s one of the reasons so many fine new homes feature cedar shingle roofs and cedar shake walls. Cedar says quality. Those three, long-lasting layers of cedar shingles on the roof... the unmistakable thickness of a double-coursed cedar shake wall... make a lasting impression on quality-conscious customers.

This is the season to put the quality of genuine cedar on your selling team!

For complete application details, see your Sweet’s File, or write...

RED CEDAR SHINGLE BUREAU
5510 White Building, Seattle 1, Washington
550 Burrard Street, Vancouver 1, B. C.
Our wonderful world of...

COLOR and COMFORT

Certain-tees presents
- Dynamic Builder Services
- Superior Building Products
...for the 60's
Certain-teed®

Color and Comfort Conditioned

You can sell more homes in the 60's with this sales-powered trio

Color Styling Service—Features free exterior home color styling by Beatrice West, one of America's foremost color consultants.

Complete Merchandising Program—Features a variety of Color Tuned and Comfort Conditioned promotional tools to help you sell more homes . . . and sell them faster.

Color-and-Comfort Promoted Products—Performance proven! Inside or outside . . . Certain-teed products offer all the qualities every home owner wants.
YOU OFFER CUSTOMERS A WORLD OF COLOR with Color Tuned Quality Asphalt Shingles. Tough, weather-resistant, they're color styled by Beatrice West to achieve exterior color harmony . . . from a single home to an entire community! What a beautiful way to protect your prospects' homes. Insulating Sidings and Asbestos Sidings are designed to blend with any Certain-teed roof. To acquire an exciting new sense of depth and beauty, Asbestos Siding can be applied directly over Certain-teed Shingle Backer.

YOU OFFER CUSTOMERS A WORLD OF COMFORT with a Comfort Conditioned Home. Start with Full Insulation. Certain-teed Fiberglas Building Insulation, made by Owens-Corning and promoted nationally through the Comfort Conditioned Home Program, is your assurance of customer satisfaction. For smart ceilings, insist on Certain-teed Decorative Insulation Tile. You offer decoration, insulation and sound control . . . all in a single comfort-crafted tile. Wrap every home in comfort with Certain-teed Insulating Sheathing. Designed specially for superior racking strength, the new Hi-Strength ½" and the standard ⅛" completely eliminate the need for corner bracing when applied according to manufacturer's specifications. It also offers high resistance against moisture plus excellent insulating qualities.

Services offer you 3 big advantages
GET GREATER SALES POWER from Certain-teed Color Tuned Roofing Systems Program, featuring the free Color Styling service of Beatrice West. Under the auspices of Certain-teed, Beatrice West will completely custom Color Style your entire development from your architectural drawings, bill of materials list and plot plans. Over 30,000 homes have received this free service!

Idea-packed Builder Kit includes:
- “Exclusively Yours” home opening folder
- Beatrice West Color Styled job signs
- suggested newspaper ads
- power-packed radio and TV commercials
- publicity Blue Print

ALL OF THE ABOVE, PLUS the advantages of Owens-Corning Comfort Conditioned Home Program!

featuring:
- consumer ads and listings in Life magazine
- Stan Edge sound-slide film, “Selling on Purpose”, for training new home salesmen
- Comfort Conditioned Home Site signs with panels
- pennants
- builder’s merchandising kit
- decals for sample homes and builder trucks
- sample home insulation, display

For more information and planning help, consult your Certain-teed representative, or write direct to Certain-teed Products Corporation.
FHA accepted singlewall construction eliminates sheathing costs and labor. Combine this new technique with CreZon overlaid lap, bevel or panel siding and you'll save at least 30% in material and labor costs on installations of comparable quality.

**CUT LABOR COSTS...** CreZon overlaid siding goes up quickly, easily, cuts cleanly, requires fewer nails for application.

**CUT PAINT COSTS...** CreZon is easy to paint. Two coats do the job of three. You save one-third the cost of paint and labor.

**EXTRA DURABILITY...** CreZon is a permanent wood fiber, resin-fused overlay that eliminates cracking, checking and grain rise in exterior plywood. Paint lasts twice as long. Write: Crown Zellerbach CreZon Sales, One Bush Street, San Francisco 19, California.

These leading plywood manufacturers produce the highest quality overlaid plywood by bonding CreZon to DFPA Tested exterior grade plywood:

- Anacortes Veneer, Inc.
- Diamond Lumber Corp.
- Evans Products Company
- Georgia Pacific Corp.
- International Paper Company (Long-Bell Division)
- Roseburg Lumber Company
- Simpson Logging Company
- St. Paul & Tacoma Lumber Company
- United States Plywood Company
- Washington Plywood Company, Inc.
- Canadian Western Lumber Co.
- MacMillan & Bloedel, Ltd.
- Western Plywood Co., Ltd.

FHA ACCEPTED. Singlewall construction with CreZon saves 30% plus.
Rugged Insulite Sheathing was also used on Hillside Apartments. Easy to nail, easy to saw, the Insulite panels cut application time, saved waste.

Strong, easily supports workmen. Insulite Roof Deck is made in 2' x 8' tongue and groove panels; 1 1/2, 2 and 3" thick. 18,000 ft. of 3" type used on the job.

Four-in-one: decking, insulation, vapor barrier and finished ceiling are installed in one operation!

Architects: Bailey A. Swenson & H. William Linnstaedter, A.I.A.
Houston luxury apartment uses Insulite Roof Deck for structural strength, ceiling beauty

It's roof decking, insulation, vapor barrier and pre-finished ceiling—all in one cost-saving package!

Builders Jerry McCall and Henry Hodell chose Insulite Roof Deck and Insulite Sheathing in creating this truly luxurious Hillside apartment on Houston's Memorial Drive.

The exceptional decorative and functional characteristics of Insulite Roof Deck blend perfectly with the overall plan. The open beams provide a striking contrast against the gleaming white surface. Insulite Roof Deck's 4-in-1 functional advantage economically provides a strong, durable roof decking...efficient insulation...a continuous vapor barrier...an attractive, finished ceiling that can be "scrubbed" with soap and water—all in one simple application.

Save money, add beauty like this to your homes, apartments, commercial buildings—with Insulite Roof Deck. Contact your building materials dealer, or write Insulite, Minneapolis 2, Minnesota.

build better with INSULITE
Roof Deck
Mr. Builder:
Stop 'em...
Sell 'em...

Weyerhaeuser exterior hardboards will help you do the job

You can stop 'em (the discriminating home buyer) with distinctive exteriors of tempered Weytex hardboard. Here is a tasteful blending of decorative striated and grooved Weytex panels...just one of the pleasing hardboard combinations you can use in your homes for siding, accent areas, soffits, gable ends, porch decking and fencing. Large panels go up fast...reducing labor costs and giving your buyer more house for the money.

You can sell 'em (the value and quality minded) on the all-season weatherability, durability and practicability of tempered Weytex hardboards. These panels have a built-in strength and toughness that resists splitting, marring and denting. When finished with paints or stains panels retain their fresh beauty for the lifetime of the home. And every hardboard panel is backed by the quality reputation Weyerhaeuser has earned over 55 years in the building products field.

"U" Grooved Weytex panels feature a modified shiplap edge which hides panel joints and maintains a continuous groove pattern. Battens or special joint treatments are not required. Panels are 4' wide and up to 16' long. Grooves are 3/8" wide and 1/10" deep, available in 4" o.c., 8" o.c. or random spacing.

Tempered Weytex hardboards now available factory primed...ready for finishing.


Weyerhaeuser Company
Silvatek Division

Manufacturers of Versabord and Versaflake particle boards and Ply-Veneer kraft-overlaid veneer
LEO CHMIL, C & C HOME BUILDERS, INC., SOMERVILLE, NEW JERSEY: "The right combination of quality, color-styled roofing and siding adds extra value to new homes in the minds of prospects. This is one good reason why, for the past seven years, we have made RUBEROID products standard for the exteriors of our houses. RUBEROID roofing and siding add 'curb appeal' to our designs. We know our buyers will be satisfied. There is no question about it—RUBEROID products help us build attractive new homes and new home sales."

RUBEROID
500 FIFTH AVENUE • NEW YORK 36, N. Y.
(Continued from page 180)

NEOPREEN ALL SEAL Stay-Tite Prods
NEOWOOD New Castle Products Inc
NEU-TONE Martin-Senour Co
NEVAMAR Nevamar Carefree Kitchens
NEVAMAR National Plastic Products Co
NEVER-STAIN Nichols Wire & Alum Co
NEW DIMENSION Sterling Faucet Co
NEW HOME Brown Stove Works Inc
NEW LONDONER Curtis Companies Inc
NEWPORT Hoover Bathroom Accessories
NEWPORT Webster Warren & Co
NEW STANDARD Extension Drawer Support Co
NIAGARA Niagara Furnace Division
NIAGARA MASONRY BLADES Carbordum Company
NICALUN American Abrasive Metals Co
NI-CLAD Lufkin Rule Co
NICHOLSON Nicholson File Co
NO DRIP Behr-Manning Co
NO-FIL Behr-Manning Co
NOECC Lock-Joint Window Co
NON CON DUX Wilson Grant
NORDAHL FEATHER-GLIDE Nordahl Sliding Door Frames
NORDAHL FEATHER-TOUCH Nordahl Sliding Door Frames
NORDAHL SPACEMAKER Nordahl Sliding Door Frames
NUAIR General Hardware Mfg Co Inc
NU-FOAM Klingspor Mfg Co
NU-FOAM Lock-Joint Window Co
NU-FOAM Sliding Door Frames
NU-FOAM Spacemaker Nordahl Sliding Door Frames
NORMAN Sheridan Press Brick & Tile
NORMANS North Western Castings
NORTHERN-AIRE Great Northern Mfg Corp
NORTHERN ALUMINUM Corp
NORTHERN WIND Emerson Electric Mfg Co
NORTON Behr-Manning Co
NORMEC Lock-Joint Window Co
NOSIL M. Silber Co
NO STAIN Modern Swimming Pool Co
NUTAPOLY New England Plywood Corp
NULAP Protective Products Co
NUT-COLA Macklinburg-Duncan Co
NU-C-MENT Allied Compositions Co Inc
NU-DOR TOR Air Placement Equipment
NUDUCUT Heller Tool Co
NUGARD Macklinburg-Duncan Co
NU-GLAZE Macklinburg-Duncan Co
NU-HUE Martin-Senour Co
NU-LAP Protective Products Co
NU-LUME Macklinburg-Duncan Co
NULATEAL Macklinburg-Duncan Co
NU-PRESENT MIDWEST HARDWARE Midwest Plywood Company
NU-RAIL Holland Mfg Co
NU-RALIN Hollander Manufacturing Co
NU-RALIN Hollander Manufacturing Co
NU-WALL Nu-Wall Mfg Co
NU-WAY Macklinburg-Duncan Co
NU-WOOD Wood Conversion Co
NYLO Metzgar Conveyor Co
NYMORSTED TWEED TILE American Mat
OAKWELD Harris Mfg Co
O-E Arro Expansion Bolt Co
OHIO AUTOCLAVED Ohio Lime Co
OHIO CABINETS Ohio Stamping Prods
OHIO CABINETS Ohio Stamping Prods
OHIO EVER-READY Ohio Lime Co
OHIO SANLIME Ohio Lime Co
OHIO WHITE-OHIO Lime Co
OIL DELUXE Williamson Co
OILMASTER Thatcher Furnace Co
OIL-OMATIC Williams Oil-O-Matic Heating Co
OILSAVER Williamson Co
OIL STAMPED Williams Co
OIL-SUPER Williamson Co
OIL-TEE Seidritz Paint & Varnish Co
O N K PRECISION BLOCKS O'Kelley-Eccles
OLD VIRGINIA WHITE Cabot Samuel
OLER Gladding McBean & Co
OLSON LINE Olson Mfg Co
OMARTE Omark Industries Inc
OMARK GRAHAM STUD DRIVER Omark Industries Incorporated
OMEGA Tilley John S Ladders Co Inc
ON-GARD Macklinburg-Duncan Co
ONDOR Plus Stanley Tools
OPEN SESAME Lancaster Pump & Mfg
ORANGE Eagle-Picher Co
ORANGE Virginia Metal Products Inc

“How NU-HOME ALUMINUM SIDING gave me the ‘eye-catcher’ I needed to make sales!”

Mr. Herbert Rosner, vice-president in charge of construction, A. Siegler and Sons Builders, Inc., Cleveland.

This is the story of how one successful builder uses Hastings NU-HOME Aluminum Siding to build better homes for less money — and sell them faster! Mr. Rosner tells us that NU-HOME is less expensive to apply. There is less waste; work can go on in any weather. Projects look much neater and public acceptance is so good that they quickly sell out their last projects. And, because they can close sales faster, the company gets its money out that much sooner.

One more important fact: Nu-Home Aluminum Siding is sold to builders only through building supply firms. For the complete story, fill out and mail the coupon. No cost, of course, and no obligation.

HASTINGS ALUMINUM PRODUCTS, INC., Hastings, Michigan

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HASTINGS ALUMINUM PRODUCTS, INC., Hastings, Michigan
**NOMENCLATURE AND DEFINITIONS**

- **Bar** — A bar extends the extreme width or length of the glass opening and may be either vertical or horizontal between glass.
- **Coped construction** — The ends of rails, mullions, muntins, or bars so shaped that they will cover and fit the contour of the sticking.
- **Core** — The innermost layer in veneered-door construction.
- **Crossbanding** — The veneer that may be used in the construction of flush doors, which is placed between the core and face veneers with the direction of the grain at right angles to that of the face veneer.
- **Door, flush** — Made up of core, crossbanding, and face veneers, or of core and face veneers only.
- **Door, panel** — Made up of stiles, rails, and one or more panels; the stiles and rails are in the frame around the panel.
- **Door, panel — Same as panel door, except that one or more panels are replaced by glass.
- **Kiln-dried** — Dried in a closed chamber in which the removal of moisture is controlled by artificial heat and usually by relative humidity.
- **Mullion** — An upright, or vertical, member between panels.
- **Muntin** — Any short bar, either vertical or horizontal, between glass, and not extending the extreme width or length of the glass opening.
- **Pitch** — A minor imperfection, parallel to the grain, which is filled with pitch.
- **Rail, bottom** — The bottom cross, or horizontal, rail of a door at lock height.
- **Rail, lock** — The wide cross, or horizontal, rail of a door at lock height.
- **Rail, top** — The top cross, or horizontal, piece of a door.
- **Sticking** — A mold which is worked on the edges of stiles, rails, mullions, muntins, or bars, adjacent to panels or glass.
- **Stiles** — The upright, or vertical, outside pieces of a door.
- **Veneered door** — Made up of core and face veneers (may include crossbanding in flush doors).
## DOORS & WINDOWS

### Interior, Garage, and Sliding Doors

#### PANEL DOORS

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Options</th>
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<tbody>
<tr>
<td>1 1/2&quot; x 5'6&quot;</td>
<td>2'-0&quot; x 6'-0&quot;, 6'-6&quot;</td>
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<tr>
<td>1 1/2&quot; and 1 1/4&quot;</td>
<td>2'-6&quot; x 6'-0&quot;, 6'-6&quot;</td>
</tr>
<tr>
<td>2'-0&quot; x 7'-0&quot;, 7'-6&quot;</td>
<td>6'-0&quot; and 7'-0&quot;</td>
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#### HINGE GARAGE DOORS

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<tr>
<td>2'-6&quot; x 7'-0&quot;, 7'-6&quot;</td>
<td>6'-0&quot; and 7'-0&quot;</td>
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#### BLIND OR SUMMER DOORS

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<td>2'-0&quot;, 2'-4&quot;, 2'-6&quot; and 2'-8&quot;</td>
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<tr>
<td>2'-6&quot; x 6'-0&quot;, 6'-6&quot;</td>
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#### SWINGUP GARAGE DOORS

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<tr>
<th>Dimensions</th>
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<tbody>
<tr>
<td>1 1/2&quot;</td>
<td>8'-0&quot; x 6'-6&quot;, 7'-0&quot;</td>
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#### FLUSH DOORS

<table>
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<th>Dimensions</th>
<th>Options</th>
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<tbody>
<tr>
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<tr>
<td>1'-8&quot;</td>
<td>6'-8&quot; and 7'-0&quot;</td>
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#### ROLLUP GARAGE DOORS

<table>
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<th>Dimensions</th>
<th>Options</th>
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<tbody>
<tr>
<td>1 1/4&quot; x 8'-0&quot;, 9'-0&quot;</td>
<td>7'-0&quot;</td>
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#### FRENCH OR CASEMENT DOORS

<table>
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<th>Options</th>
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<tr>
<td>1 3/8&quot;</td>
<td>1'-6&quot; x 6'-0&quot;, 6'-6&quot;</td>
</tr>
<tr>
<td>1'-8&quot;</td>
<td>7'-0&quot;</td>
</tr>
</tbody>
</table>

#### SCREEN DOORS

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 3/8&quot;</td>
<td>1'-6&quot; x 6'-0&quot;, 6'-6&quot;</td>
</tr>
<tr>
<td>1'-8&quot;</td>
<td>7'-0&quot;</td>
</tr>
</tbody>
</table>

#### SLIDING DOORS

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>XOX</td>
<td>1'-6&quot; x 6'-0&quot;, 6'-6&quot;</td>
</tr>
<tr>
<td>XOXO</td>
<td>2'-0&quot;, 2'-4&quot;, 2'-6&quot;, 2'-8&quot;</td>
</tr>
<tr>
<td>XOXOX</td>
<td>3'-0&quot;, 3'-4&quot;, 3'-8&quot;, 3'-12&quot;</td>
</tr>
</tbody>
</table>

### NOMENCLATURE

The nomenclature for stock door sizes with immediate delivery by most manufacturers includes:

- "X" designates sliding panel.
- "O" indicates stationary panel.
- "P" indicates pocket.

Included in standard dimensions are steel, aluminum frames. Custom doors furnished to meet individual requirements.

**OUTSIDE LOOKING IN.**

---

192 AMERICAN BUILDER
Windows in more than one wall give more effective light distribution throughout the room. Strip or clerestory windows furnish light and ventilation with maximum privacy.

One large opening is more desirable than several small windows. Not only does the former provide a better distribution of light but dark areas between smaller openings are eliminated as well as undesirable contrasts in brightness.

Consideration should be given in the placing of windows so that sills and horizontal muntins or rails do not interfere with vision either seated or standing. The sketches show the eye-level range for persons sitting and standing. Avoid horizontal window divisions within these levels. Dimensions are based on persons from 5'-0" to 6'-4" tall as well as the usual window head and sill heights as determined by furniture.

**Dining Room**

Window shapes may be selected to give any desired distribution of light within the room. This diagram shows graphically how the sun's rays entering a room at a 45° angle give various patterns of light depending upon the shape of the opening. The closer the head of the window is to the ceiling, the greater the depth of penetration, as shown in openings 1 and 2. Opening 3, placed lower in the wall creates a much shorter light pattern. Strip windows, opening 1 are desirable where it is preferable to have the area beneath in shadow such as a bedroom. This diagram also illustrates why it is desirable to use windows in more than one wall for better distribution of daylight.

**Bedroom**

**Kitchen**

**Living Room**

**Dining Room**

**Window Planning Principles**

**DOORS & WINDOWS**

*Courtesy: Small Homes Council, University of Illinois*
### Wood Window Standards

**CHECK RAIL WINDOWS 1 1/4" — POPULAR SIZES AND DESIGNS**

<table>
<thead>
<tr>
<th>Stiles</th>
<th>Prefit</th>
<th>Face</th>
<th>Measuremnts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-8 x 3-2</td>
<td>4-6</td>
<td>3-10</td>
<td>20</td>
</tr>
<tr>
<td>3-6</td>
<td>20</td>
<td>16 x 6 1/4</td>
<td></td>
</tr>
<tr>
<td>4-6</td>
<td>24</td>
<td>16 x 11 1/2</td>
<td></td>
</tr>
<tr>
<td>2-0 x 2-10</td>
<td>2</td>
<td>3-2</td>
<td>16</td>
</tr>
<tr>
<td>3-6</td>
<td>18</td>
<td>10 x 7 1/4</td>
<td></td>
</tr>
<tr>
<td>4-2</td>
<td>20</td>
<td>10 x 8 1/4</td>
<td></td>
</tr>
<tr>
<td>4-6</td>
<td>24</td>
<td>11 x 11 1/2</td>
<td></td>
</tr>
<tr>
<td>4-10</td>
<td>26</td>
<td>12 x 12 1/4</td>
<td></td>
</tr>
<tr>
<td>5-2</td>
<td>28</td>
<td>13 x 13 1/4</td>
<td></td>
</tr>
<tr>
<td>2-4 x 2-10</td>
<td>24 x 14</td>
<td>7 3/4 x 14</td>
<td></td>
</tr>
<tr>
<td>7/4 x 14</td>
<td>28 x 8 1/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 3/4 x 14</td>
<td>32 x 10 1/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/4 x 14</td>
<td>32 x 12 1/4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Designs and Sizes of Stock Windows and Sash Available**

No attempt has been made in this catalogue to illustrate or list all of the designs and sizes of Ponderosa Pine Stock Windows and Sash that are available. On this and the following page are shown those that are most popular. For a complete listing of all standard sizes and designs, including one light sash, transoms and porch sash, write The National Woodwork Manufacturers Association.
**WOOD WINDOW STANDARDS**

### CASEMENT SASH 1 3/4"

<table>
<thead>
<tr>
<th>Prefit Face Measurements</th>
<th>Stiles 1 3/4&quot;</th>
<th>Top Rail 1 3/4&quot;</th>
<th>Bottom Rail 3&quot;</th>
<th>Vertical Bar 3/8&quot;</th>
<th>Mullin 1/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 lt.</td>
<td>12x33</td>
<td>12x10 7/8</td>
<td>5 1/4 x 10 1/4</td>
<td>12 1/4</td>
<td>5 1/4 x 10 1/4</td>
</tr>
<tr>
<td>3 lt. h.</td>
<td>41</td>
<td>13 3/4</td>
<td>12 1/4</td>
<td>13 3/4</td>
<td>12 1/4</td>
</tr>
<tr>
<td>4 lt. h.</td>
<td>49</td>
<td>12 1/4</td>
<td>5 1/4 x 10 1/4</td>
<td>12 1/4</td>
<td>5 1/4 x 10 1/4</td>
</tr>
<tr>
<td>6 lt. 2 w.</td>
<td>16x33</td>
<td>16x10 7/8</td>
<td>7 1/4 x 10 1/4</td>
<td>13 3/4</td>
<td>7 1/4 x 10 1/4</td>
</tr>
<tr>
<td>8 lt. 2 w.</td>
<td>49</td>
<td>12 1/4</td>
<td>5 1/4 x 10 1/4</td>
<td>12 1/4</td>
<td>5 1/4 x 10 1/4</td>
</tr>
</tbody>
</table>

Sash are made 3/4" narrower and 3/4" shorter than opening sizes given below.

### STORM SASH and SCREENS 1 3/4"

<table>
<thead>
<tr>
<th>Prefit Face Measurements</th>
<th>Storm Sash St. 1 3/4&quot;</th>
<th>T.R. 1 3/4&quot;</th>
<th>B.R. 4 7/8&quot;</th>
<th>C.R. 5 5/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 lt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 lt. h.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 lt. h.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 lt. 2 w.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storm Sash Screens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Storm Sash and Screens are available for all Standard Windows. The more popular sizes conform to the window sizes shown on the preceding page.

### CELLAR SASH 1 1/2" and 1 3/4"

<table>
<thead>
<tr>
<th>Prefit Face Measurements</th>
<th>Storm Sash St. 1 3/4&quot;</th>
<th>T.R. 1 3/4&quot;</th>
<th>B.R. 4 7/8&quot;</th>
<th>C.R. 5 5/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 lt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 lt. h.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 lt. h.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 lt. 2 w.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sash are made 3/4" narrower and 1/2" shorter than opening sizes given below.

### PLAIN RAIL WINDOWS 1 1/2"

<table>
<thead>
<tr>
<th>Prefit Face Measurements</th>
<th>8 lt.</th>
<th>12 lt.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 x 10</td>
<td>8 x 12</td>
</tr>
<tr>
<td>T.R.</td>
<td>8 x 10</td>
<td>8 x 12</td>
</tr>
<tr>
<td>B.R.</td>
<td>10 x 12</td>
<td>10 x 12</td>
</tr>
<tr>
<td>M.R.</td>
<td>10 x 12</td>
<td>10 x 12</td>
</tr>
<tr>
<td>V.B.</td>
<td>10 x 12</td>
<td>10 x 12</td>
</tr>
</tbody>
</table>

Windows are made 3/4" narrower and 1/2" shorter than opening sizes shown below.

### BARN or UTILITY SASH 1 1/2" and 1 3/4"

<table>
<thead>
<tr>
<th>Prefit Face Measurements—Stiles 1 1/2&quot;</th>
<th>Top Rail 1 3/4&quot;</th>
<th>Bottom Rail 3&quot;</th>
<th>&quot;Vertical Bar 3/8&quot; or 7/16&quot;</th>
<th>Mullin 1/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 lt.</td>
<td>10x10</td>
<td>10x10</td>
<td>12x10 5/8</td>
<td>12x10 5/8</td>
</tr>
<tr>
<td>6 lt. 2 w.</td>
<td>2-1x11</td>
<td>2-1x11</td>
<td>7x9</td>
<td>7x9</td>
</tr>
<tr>
<td>6 lt. 3 w.</td>
<td>2-3x11</td>
<td>2-3x11</td>
<td>8x10</td>
<td>8x10</td>
</tr>
<tr>
<td>9 lt. 3 w.</td>
<td>2-3x11</td>
<td>2-3x11</td>
<td>12x10</td>
<td>12x10</td>
</tr>
<tr>
<td>12 lt. 3 w.</td>
<td>2-3x11</td>
<td>2-3x11</td>
<td>10x12</td>
<td>10x12</td>
</tr>
</tbody>
</table>

Sash are made 3/4" narrower and 1/4" shorter than opening sizes given below.

### BARN or UTILITY SASH 1 1/2" and 1 3/4"

<table>
<thead>
<tr>
<th>Prefit Face Measurements—Stiles 1 1/2&quot;</th>
<th>Top Rail 1 3/4&quot;</th>
<th>Bottom Rail 3&quot;</th>
<th>&quot;Vertical Bar 3/8&quot; or 7/16&quot;</th>
<th>Mullin 1/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 lt.</td>
<td>10x10</td>
<td>10x10</td>
<td>12x10 5/8</td>
<td>12x10 5/8</td>
</tr>
<tr>
<td>6 lt. 2 w.</td>
<td>2-1x11</td>
<td>2-1x11</td>
<td>7x9</td>
<td>7x9</td>
</tr>
<tr>
<td>6 lt. 3 w.</td>
<td>2-3x11</td>
<td>2-3x11</td>
<td>8x10</td>
<td>8x10</td>
</tr>
<tr>
<td>9 lt. 3 w.</td>
<td>2-3x11</td>
<td>2-3x11</td>
<td>12x10</td>
<td>12x10</td>
</tr>
<tr>
<td>12 lt. 3 w.</td>
<td>2-3x11</td>
<td>2-3x11</td>
<td>10x12</td>
<td>10x12</td>
</tr>
</tbody>
</table>

Sash are made 3/4" narrower and 1/4" shorter than opening sizes given below.

*Courtesy National Wood Work Manufacturers Association*

APRIL 1960
### Aluminum Window Standards (Residential)

#### A.W.M.A. STANDARD

<table>
<thead>
<tr>
<th>1'-7½&quot;</th>
<th>3'-1&quot;</th>
<th>4'-5½&quot;</th>
<th>5'-9½&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>102 x 014</td>
<td>303 x 014</td>
<td>404 x 014</td>
<td>505 x 014</td>
</tr>
</tbody>
</table>

C-A1 CASEMENT WINDOWS for residential-type buildings.

Units with single ventilator may be hinged either right or left.

Fixed types furnished for all sizes shown.

#### WESTERN—TYPE X

<table>
<thead>
<tr>
<th>1'-8&quot;</th>
<th>3'-4&quot;</th>
<th>4'-8&quot;</th>
<th>6'-8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>151 x 014</td>
<td>351 x 014</td>
<td>451 x 014</td>
<td>551 x 014</td>
</tr>
</tbody>
</table>

#### A-A1 AWNING WINDOWS

for residential-type buildings.

#### MODULAR SIZES

<table>
<thead>
<tr>
<th>1'-8&quot;</th>
<th>3'-4&quot;</th>
<th>4'-0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>91 x 014</td>
<td>291 x 014</td>
<td>391 x 014</td>
</tr>
</tbody>
</table>

#### PICTURE OF PANORAMA WINDOWS

Most manufacturers of aluminum double-hung, casement, projected and awning windows offer picture or panorama windows in heights and widths that complement their standard sizes. These windows accommodate either 1/4" plate glass or 1" double glass of the "Thermopane" or "Twindow" type. See manufacturers' catalogs for available sizes.

#### WESTERN—TYPE XW

<table>
<thead>
<tr>
<th>3'-0½&quot;</th>
<th>4'-0&quot;</th>
<th>4'-5&quot;</th>
<th>5'-0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>151 x 014</td>
<td>351 x 014</td>
<td>451 x 014</td>
<td>551 x 014</td>
</tr>
</tbody>
</table>

P-A1 PROJECTED WINDOWS for residential-type buildings

Dimensions shown are window dimensions.
**DOORS & WINDOWS**

**Steel Window Standards (Residential)**

### STEEL CASEMENTS

<table>
<thead>
<tr>
<th>Size</th>
<th>1'7½&quot;</th>
<th>2'2&quot;</th>
<th>3'1&quot;</th>
<th>3'1½&quot;</th>
<th>4'5½&quot;</th>
<th>5'9½&quot;</th>
<th>7'7½&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'2&quot;</td>
<td>1212</td>
<td>2222</td>
<td>2212</td>
<td>3222</td>
<td>4222</td>
<td>5222</td>
<td></td>
</tr>
<tr>
<td>3'1½&quot;</td>
<td></td>
<td>1313</td>
<td>2323</td>
<td>2313</td>
<td>3323</td>
<td>4323</td>
<td>5323</td>
</tr>
<tr>
<td>4'5½&quot;</td>
<td>1414</td>
<td>2424</td>
<td>2414</td>
<td>3424</td>
<td>4424</td>
<td>5424</td>
<td></td>
</tr>
<tr>
<td>5'9½&quot;</td>
<td>1514</td>
<td>2524</td>
<td>2514</td>
<td>3524</td>
<td>4524</td>
<td>5524</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- "PW" — Picture windows — for single pane glazing — standard frame member construction.
- "DG" — Double glazing — for 1" thick, double insulating glass, stock sizes — special section frame construction.

### BASEMENT WINDOWS

<table>
<thead>
<tr>
<th>Size</th>
<th>32½&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'2&quot;</td>
<td></td>
</tr>
</tbody>
</table>

### UTILITY WINDOW

<table>
<thead>
<tr>
<th>Size</th>
<th>14½&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'2&quot;</td>
<td></td>
</tr>
</tbody>
</table>

### WAREHOUSE UNIT

- All units shown are warehouse types and sizes.

### FIXED PANELS

<table>
<thead>
<tr>
<th>Size</th>
<th>4'0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'5½&quot;</td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions shown are over-all out-to-out measurements. Units with single ventilator may swing from right or left jamb. All units are warehouse types and sizes. Fixed types furnished for all above sizes.**

---

**DOUBLE-HUNG WINDOWS**

<table>
<thead>
<tr>
<th>Size</th>
<th>2'0&quot;</th>
<th>2'4&quot;</th>
<th>2'8&quot;</th>
<th>3'0&quot;</th>
<th>3'4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'1½&quot;</td>
<td>B2031</td>
<td>B2431</td>
<td>B2831</td>
<td>B3031</td>
<td>B3431</td>
</tr>
</tbody>
</table>
| 3'9½"    | B2039| B2439| B2839| B3039| B3439| 3'8"
| 4'5½"    | B2045| B2445| B2845| B3045| B3445| B3845|
| 5'1½"    | B2051| B2451| B2851| B3051| B3451| B3851|

**"B" Types**

<table>
<thead>
<tr>
<th>Size</th>
<th>5'9½&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'1½&quot;</td>
<td>B3059</td>
</tr>
</tbody>
</table>

**"E" Types**

<table>
<thead>
<tr>
<th>Size</th>
<th>5'9½&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'1½&quot;</td>
<td>E3059</td>
</tr>
</tbody>
</table>

**Dimensions shown are window dimensions.**

---

**DIMENSIONS SHOWN ARE WINDOW DIMENSIONS.**

---

**Fixed Panels**

<table>
<thead>
<tr>
<th>Size</th>
<th>3'4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'5½&quot;</td>
<td></td>
</tr>
</tbody>
</table>

---

**Courtesy of the Steel Window Institute**
For more SEE-able features...

Quality Building Products

M-D Nu-metal WEATHER STRIP
Packaged sets for doors. In stainless steel or bronze. Complete packaged units mean easier handling for you . . . easier installation for customers. M-D Numetal door sets available with regular door bottoms or with any M-D threshold.

M-D Jamb-Up
DOOR WEATHER STRIP
Extruded Aluminum & Durable Vinyl
Perfect for wood or metal doors. Made of sturdy, extruded aluminum and tough, durable vinyl. Comes completely packaged with necessary strip, nails, screws and instructions. Available with or without extruded aluminum and vinyl DV-1 Door Bottom.

M-D H-4 FOLD-BACK
DOOR WEATHER STRIP
Automatically spaces itself when properly placed against door stop. A smoothly-operating, economical packaged set for all standard doors. Aluminum or bronze—with any door bottom or threshold desired. Nails, screws and instructions furnished in each set.

M-D Nu-GARD
AUTOMATIC DOOR BOTTOMS
For all doors. With silvery-satin or Albron finish—will not rust or tarnish. Furnished in standard lengths—28”, 32”, 36”, 42” and 48”.

M-D On-GARD
COIL WEATHER STRIP
All-metal weather strip in handy rolls. 8 widths in either stainless steel or bronze. Features built-in tension, embossed nail zone and gum-proof edge.

M-D M-way WEATHER STRIP
The “original” coil metal and wool felt weather strip. Fast-selling because it’s so easy to put on. Each individual package contains one 18 ft. roll with nails and instructions. Packed 12 cartons in free display.

M-D Casement WINDOW WEATHER STRIP
Easy to install on steel or aluminum casements. Slips over window flange. Style No. 1 is used on head and lock side or swinging edge of metal casement windows. Style No. 2 is used on hinge side and the sill.

Macklanburg-Duncan Co.
Builders Hardware, Lumber and Building Supply Dealers

Order Today
Your order will receive prompt shipment.
For more SELL-able features...

for Doors and Windows

M-D EXTRUDED THRESHOLDS

AP-3 3/4 — America's most popular threshold with replaceable vinyl insert. Note vinyl calking strips under each leg, which may be removed if the use of Nu-Calk Calking Compound is preferred. Available in Alacrome or Anodized Albras.

AP-118 — Designed especially for thick pile rugs. Has vinyl calking under legs, as well as replaceable vinyl insert. Available in Alacrome or Anodized Albras.

AP-158 — Threshold of sturdy, extruded aluminum with replaceable vinyl insert. Can be used as bottom of door or on top of wood threshold. Available in Alacrome or Anodized Albras.

M-D DRIP CAPS

Prevents rain from draining or blowing under door or wood casement windows.

A Available in DCA Aluminum or DCA Albras. Holes punched, nails furnished—comes in any length.


M-D CALKING COMPOUND

Nu-Calk Speed Loads

World's finest calking compound available in loads, with or without nozzle... hand squeeze tubes... or 1/4 pt., pt., qt., and gal. cans. Also 5-gal. and 55-gal. drums, gun or knife grade.

M-D Na-Glaze

GLAZING COMPOUND

Always sets to rubber-like consistency. Clean, easy to handle. Use and recommend with complete confidence that it always "stays put." Packed in 1/2 pt., pt., and qt. cans. 25 lb., 50 lb., 100 lb. and 880 lb. drums.

M-D DOOR BOTTOMS

A M-D Numetal Door Bottom made of extra thick wool felt and heavy gauge stainless steel, brass or aluminum. Standard lengths—28", 30", 32", 36", 42" and 48".

B M-D heavy duty extruded aluminum and felt door bottom in Alacrome or Anodized satin, bright or brass colors, in all standard lengths.

C M-D extruded aluminum and vinyl door bottom— in natural Alacrome or Anodized Albras finish—in all standard lengths.

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Choose
THE FINEST OF
FRANTZ
GARAGE DOORS

THE 200 SERIES

Truly deluxe in every sense of the word, the beauty and styling of the 200 Series are matched only by its quality materials and its many features. Just turn the latch and a 200 door glides up as if by magic, with no rebound. On closing, a crisp click signals automatic latching on both sides. Such easy operation—plus fast installation—makes the 200 Series preferred by those who want a door that has everything! Choose from 21 different sizes and styles. No door can give you more!

NO OTHER DOOR
HAS ALL THESE FEATURES

Exclusive double brakes, adjustable and self equalizing... Exclusive two-way adjustable springs for perfect adjustment... Chrome handle and brass cylinder lock... Glide-O-Matic self-opening... tapered track... inside lock... zinc plated hardware... 14 big features in all.

FRANTZ... The Lumber Dealer's Door

FRANTZ MANUFACTURING COMPANY
Sterling, Illinois

Winter-Seal makes good "House Sense"

FINEST QUALITY ALUMINUM WINDOWS, DOORS, JALOUSIES, SIDING, AWNING WINDOWS

Winter-Seal quality costs no more. Your customers enjoy the ultimate in value, comfort and beauty... you enjoy biggest profits. Whatever your needs... Aluminum combination windows and doors, jalousies, prime windows, sliding glass doors, awning windows, siding... Rogers Industries delivers the complete Winter-Seal line, backed by the famous Good Housekeeping guarantee.

Enjoy the savings and convenience of buying all your aluminum products from your Rogers Winter-Seal quality supplier. It makes good "House Sense."

WINTER-SEAL DIVISION

ROGERS INDUSTRIES INCORPORATED
Detroit 27, Michigan
WOOD WINDOW UNITS . . .

A Complete TOP QUALITY LINE TO ENHANCE ANY HOME

RIMCO "SLIDE"

A truly advanced concept of a modern window style, the Rimco Slide gives you real fenestration versatility. And, for all its luxury features, it's economical from every angle . . . purchase price, installation time and painting ease with virtually no call-backs.

CHECK THESE FEATURES —

Yes, check these features against window units selling for much more and you'll see why more and more builders and architects are making the change to Rimco Slide —

* Easy removal through "just right" pressure on aluminum head track.
* Anodized aluminum sill track for smooth, quiet operation. Nothing to stick or bind.
* All wood parts are protected with deep penetrating Woodlife preservative applied by the Dri-Vac Controlled process.
* Plastic sash-stop prevents pinched fingers and damage to weatherstripping.
* Factory applied chrome plated finger pulls and sash lock.
* Anodized aluminum weatherstripping
* Wood bead glazed with glass bedded.
* Insulating panels factory installed.
* Prefit screen, wired aluminum, complete with hardware.
Three underscreen operators are available to meet every requirement. All are tops in their class.

RIMCO "VENT"

Here's a Rimco Wood Window Unit that is popular for both residential and commercial building. Its weathertight construction has made it the first choice of many builders and architects. Hundreds of uses: singles, ribbons, stacks, corners, casement and picture groupings (as shown above). Of particular interest is the new Rimco "VUVENT™" Unit—combining all of the features of the "VENT" and "VIEW" in one full-jamb unit with new narrow meeting rails.

Deluxe in every respect, the Rimco Casement Window Unit has been engineered for extra features right down to the last detail.

Monobuilt construction assures fast installation with sag-free operation.

Rimco's new concealed sliding hinge gives a clean outside appearance... no exposed hardware... you see only the beauty of the window itself.

**HUNDREDS OF COMBINATIONS**

And they make beautiful arrangements with their companion Picture Sash Unit.

**RIMCO "CASEMENT"**

Compare these features to any casement on the market and you'll agree that with Rimco you get more merchandizable window for the money.

* Selected Ponderosa Pine

* Protected with deep-penetrating Woodlife preservative applied by the Dri-Vac controlled process

* Anodized aluminum and stainless steel weatherstripping

* Over 90° swing-out for ease of cleaning

* Deluxe rotary operator for positive operation with no "wind-rattle"

* Available with regular glazing & Insulating Panel or 7/8" insulating glass.

* Concealed sliding hinge

* Continuous sub-sill on multiple units, for fast, foolproof installation

* Side jamb lugs provide extra bearing support

**HUNDREDS OF COMBINATIONS**

And they make beautiful arrangements with their companion Picture Sash Unit.

Long, sturdy operator-arm and concealed sliding hinge (nylon traveling over stainless steel track) provide over 90° sash opening for ease of cleaning and catching a breeze from either direction.
RIMCO "SIX-TEN"

Now... from Rimco... a removable double-hung Wood Window Unit designed for standard frame openings... the Rimco Six-Ten. Choice of the Six-Ten gives you features like:

- Construction of selected Ponderosa Pine, protected with deep-penetrating Woodlife preservative applied by the Dri-Vac controlled process; both sash removable; anodized aluminum weatherstripping, factory applied; available in a wide variety of sizes and light designs to compliment any architectural style.

RIMCO "BASEMENT" WOOD WINDOW UNIT

Packed with features, the Rimco "Basement" Wood Window Unit rounds out the line of quality products. Weatherstripping completely factory installed; reversible hinges permit sash to be hinged from top or bottom; fits standard block openings; removable sash; insulating panel plus an optional screen-frame mounted panel affords triple glazing. Like all Rimco Wood Window Units, the Rimco "Basement" Unit is protected with deep-penetrating Woodlife preservative applied by the Dri-Vac controlled process.
8:00 a.m.

...NO PORCH IN SIGHT!

5:00 p.m.

...COZY AND TIGHT!

The unique modular construction of DeVAC GlassWalls permits rapid installation, with resulting savings in labor costs. Two workmen can enclose a porch or breezeway in DeVAC GlassWalls in one working day. Result—the final cost of building a GlassWalls room is less per square foot than the cost of building any other room.

DeVAC GlassWalls, the fastest, most economical way to build "that extra room"...whether you convert a porch or breezeway or start from the ground up.

DeVAC GlassWalls are full-length window units with wood surround and a hollow base that can conceal wiring and ductwork. GlassWalls are their own upright supports, and require only trim as a facing. Full-length Fiberglas screens are included. Storm sash is optional. With DeVAC's exclusive three-way directional control of ventilation, (shown at right), GlassWalls give homeowners "control" of the weather—summer or winter. Get the full story of DeVAC GlassWalls from Sweets Catalog, or from any qualified DeVAC representative.

DeVAC, Inc.
5900 Wayzata Blvd., Minneapolis 16, Minn.
3 GREAT SALES-WINNING

BEAUTIFUL BIRCH

BIRCH

Qualitybilt

CABINETS

KITCHEN CABINETS

SLIM...TRIM...

Qualitybilt

WOODWORK

CASEMENTS

VERSATILE, NEW

4-WAY

Qualitybilt

WINDOWS

4-WAY WINDOWS

ASK FOR FULL DETAILS ON THESE PRODUCTS TODAY!

FARLEY & LOETSCHER MFG. CO.

DUBUQUE, IOWA

206
QUALITYBILT LINES...

OVER 120 DESIGNS AND SIZES

Over 120 standard Qualitybilt units permit complete flexibility in design and layout to "custom-style" kitchens without extra cost. Cabinetmaker quality throughout... full 1" thick, 7-ply, warp-resistant doors, dovetailed drawers, mortise-tenon joints on front frames, distinctive hinges and pulls in a choice of four finishes. Available Semi-Assembled (KD); Set-Up Unfinished; or Set-Up Finished natural or enameled.

SUPER SATIN SURFACE*—This excitingly new densified and glossified surface is supplied on all flat exposed surfaces... can be finished "as is," stained, or painted. Saves up to 75% on finishing costs.

*Trademarks "Super Satin Surface" and "SSS" (or "Triple S")—Use licensed on products having a Supersealed or Super Microsealed surface that satisfies the quality standards of the trademark owner.

MODERN NARROW LINES... QUALITY HARDWARE

The finest and most complete casement line available. Two widths of sash in five heights available with one light, divided lights, insulating glass, or window glass with R.D.G. Precision hardware includes offset hinges for easy cleaning from inside, pick-up action locks, powerful operator. Complete units include frame, glazed sash, inside stops, mullion casings, weather strip, hardware and screens. Frames and glazed sash accurately prefit to size, toxic treated, weather strip applied.

REMOVABLE INSERTS—New Qualitybilt snap-out inserts provide divided light effects with standard one light units... make cleaning and painting a snap.

HUNDREDS OF COMBINATIONS WITH TWO STYLES

This amazing window line provides hundreds of imaginative window combinations with only two types of units... TWO-SASH and SINGLE SASH. Use them as Awning, Hopper, Outswinging Casements, or FIXED UNITS... singly or in ribbons, stacks, or with picture units. Select from roto, lever, bar, or manual operation, single glazing with removable double glazing panels, or insulating glass. Fully weatherstripped and toxic-treated with water-repellent preservative.

Complete catalogs in Sweets 1960 Architectural and Light Construction Files.

SELECT FROM A COMPLETE LINE OF QUALITYBILT MILLWORK ITEMS!

APRIL 1960

207

Entrances • Doors • Frames • Sash • Blinds • Casements • Screens
Glider Windows • Sliding Doors • Combination Doors • Storm Sash • Louvers
Garage Doors • Mouldings • Interior Trim • Sash Units • Kitchen Cabinet Units
Cabinet Work • Stairwork • Disappearing Stairs • "Farlite" Laminated Plastics
Naturally, the Strauss twins specify Twindow®. The Strauss brothers specify TWINDOW in all their homes. They build around 600 units a year in Lincoln, Nebraska. In their sales pitch, the Strausses point up the fact that TWINDOW keeps a home warmer in the winter, cooler in the summer—saves on heating and cooling bills all year 'round. And there are no storm windows to put up, take down and store away. TWINDOW is a permanent storm window. The Strausses find that many of their buyers are on second and third homes. Having had TWINDOW in a previous home, they insist on TWINDOW in the next. This gives Strauss homes a definite sales edge over homes without TWINDOW. TWINDOW-Glass Edge and TWINDOW-Metal Edge come in all popular sizes for a wide variety of window styles. Write for our TWINDOW Booklet. Pittsburgh Plate Glass Company, Room 0117, 632 Fort Duquesne Boulevard, Pittsburgh 22, Pennsylvania.

...the windowpane with insulation built in
From budget-priced Steelite, to decorator styled Magic-Fold, Clopay makes a vinyl-covered closure for every need... from a tiny closet to a huge multi-door installation... in fabulous selection of colors.

Clopay VINYL-COVERED FOLDING DOORS

Clopay MAGIC-FOLD

Elegant in style and quality to please the most discriminating taste... yet modest in price. Designed to blend equally well with contemporary or traditional furnishings... in single or double-door installations. Available in a wide range of easy-to-care for "Fashion" vinyl coverings.

Clopay STEELITE

Luxurious styling and budget price makes Steelite the most practical closure. Can be installed in minutes. Vinyl laminated to S-curved steel panels that never sag out of shape insuring customer satisfaction. Latch-o-matic model includes matching cornice and deluxe handle.

Clopay WAL-DOR

Economy line... but with many higher priced features. Handsome shantung embossed vinyl covers encase solid core panels for a lifetime of beauty and utility. Doors glide smoothly without a whisper. Easy and quick to install.
DISCRIMINATING HOME BUYERS IN THE WORLD!

Distinctive line offering a choice of outstanding decorative styles. Available in bi-fold, bypass, accordion or conventional construction. Carefully crafted of kiln-dried redwood, and other fine woods, Clopay wood doors are sanded satin smooth, ready for finishing.

**Clopay Tropix-Weve**
High styled, multi-purpose door for the décor conscious purchaser. Made of kiln-dried California redwood frames with choice of woven redwood or blond mahogany (African limba) panel inserts. Woven panel construction provides ventilation of closets and any other areas where moisture might collect.

**Clopay Shoji**
A touch of rich oriental flavor . . . though reasonably priced. Sturdy Fiberglas panels simulate the delicate beauty of rice paper. Double removable panels facilitate finishing.

**Clopay Sculptured**
(Exclusive new three-dimensional panel treatment. Crafted of kiln-dried California redwood frames with sculptured panels. Frames and panels may be painted to match or contrast with room décor . . . for the luxury look at the budget price.

Clopay Corporation
Clopay Square, Cincinnati 14, Ohio

Door Division, Dept. AB-4
Clopay Corporation, Clopay Square, Cincinnati 14, Ohio

☐ Please send me literature on the following:
   □ Vinyl covered doors □ Wood doors

☐ Have representative call.

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Firm

Address

City

Zone

State
LOOK INTO THE Complete LINE...

WAGNER Garage DOORS

RESIDENTIAL
Standard and special designs in sectional overhead type residential doors for quick factory drop shipment. Makers of the fabulous Redwood Beauti-door.

WOOD
All standard types of sectional overhead wood doors available in extension spring or torsion spring galvanized hardware.

STEEL
Sturdy sectional and one-piece steel overhead type doors available in residential and commercial sizes. Galvanized steel and factory painted.

COMMERCIAL
Commercial sectional overhead type doors job design in wood or steel with either extension or torsion spring galvanized hardware.

Investigate the Wagner profit-making sales plan on Garage Doors. Ask for condensed price list AB-60.

Wagner also makes sawhorse trestles, folding scaffold and ladder brackets. Ask for building hardware bulletin AB-60H.

WAGNER MANUFACTURING COMPANY
CEDAR FALLS, IOWA, U.S.A.

NOW...
F.F.F.
IN OUR WINDOW!

FROST FREE FEATURE
AVAILABLE ON ALL

HORIZONTAL ROLLING ALUMINUM PRIME WINDOWS

manufactured by
IDA PRODUCTS CO.
1909 E. FOREST / DETROIT 7, MICHIGAN

Write for full particulars.

AMERICAN BUILDER
wood casement windows

...only ones to offer exclusive Rolscreen feature

Talk about a living convenience feature you can demonstrate...PELLA and only PELLA offers an inside screen that rolls up and down! Besides that, storm sash are also self-storing. Folks can say, "goodbye window chores!" After wrestling with conventional screens and storm sash, home buyers regard these two PELLA features as sheer luxury. And yet, you can afford PELLA WOOD CASEMENTS in your popularly priced homes. Do as so many leading builder-merchandisers are doing. Combine PELLA CASEMENTS with economical PELLA TWINLITE® or MULTI-PURPOSE WOOD WINDOWS. Find out how this will work on your next job by calling your PELLA distributor now. Consult your classified telephone directory...or mail coupon.

Six standard No. 25W PELLA CASEMENT UNITS used in this arrangement.

ARCHITECT: PAUL ALBITZ, BUILDER: JOSEPH N. BOYER

THIS COUPON ANSWERED WITHIN 24 HOURS

ROLSCREEN COMPANY, Dept. LB-22, Pella, Iowa
Please rush me literature on PELLA WOOD CASEMENTS, TWINLITE and MULTI-PURPOSE WINDOWS.

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FIRM NAME
ADDRESS
CITY & ZONE STATE
You know it... we know it... today's home buyers are more cautious, more critical, more quality-conscious than ever. So, the more quality products you can show and demonstrate, the easier it is to close the sale.

In RO-WAY garage doors you have quality that practically speaks for itself. Smart styling, for example, with decorative or standard panels. Finest materials—carefully selected woods and heavier-gauge hardware. Superior construction throughout, such as glued and steel pinned mortise and tenon joints, rabbed sections, precision squared muntins, rails and stiles. Easy, quiet operation with ball bearing rollers, specially designed track and tension-balanced springs working together for smooth performance.

This is RO-WAY quality... quality your prospects can see and appreciate... quality that helps make your sales job easier. See for yourself—call your RO-WAY distributor for full details.

For added sales appeal and maximum convenience, install the famous RO-WAY Electric Operator with push-button or remote electronic control.

See our catalog in Sweet's Architectural File or write for copy.
lower your building costs...

improve buyer appeal

Malta “let-in-the-sun” window designs instantly and unforgottably convey to the prospective buyer an impression of genuine quality, beauty, modern styling... and a promise of cheerful living.

The new Malta “Town and Country” oriel unit, for example, gives your new homes all the warmth and utility of wood windows—plus slim, trim lines. The spacious fixed upper sash and awning-type lower sash let in more sun and light. And, there is no clumsy center partition rail to spoil the thin-line design or obstruct visibility.

Malta “Town and Country” units give you all the features of stacked vents... yet they cost about one-third less. An Erie, Pennsylvania builder stated flatly: “I save enough with ‘Town and Country’ windows to include screens and storm sash at no cost to the buyer.”

Talk to a Malta dealer today. He's your direct line to faster sales and higher profits on every new home you build.

Supreme Quality Since 1901

THE MALTA MANUFACTURING CO.
Malta, Ohio
Cut installation time in half!

One piece for each side of double hung window! Just fasten the sash and the job is done. Installation time is half! Speeds window production, too! Increases profits! Complete range of sizes for all frame openings!

Gives silent dependable operation plus tightest possible seal. Check with us today for prices.

SEND FOR THIS FREE CATALOG

CENTRAL METAL STRIP CO.
4343 N. WESTERN AVENUE • CHICAGO 18, ILLINOIS • JU 8-8036

INSTALLED IN SECONDS!
NO Hanging!
NO Painting!
NO Hardware!

New, unique patented design enables the builder to use construction short-cuts, labor-saving installation procedures never before enjoyed. Available in heights to 8', widths to 4'. Can be installed in pairs. 16 lovely, washable, fire-resistant vinyl colors available.

THE Columbia-matic
FABRIC DOOR
Slashes Builders Costs

For complete details write
THE COLUMBIA MILLS, INC.
368 S. WARREN STREET SYRACUSE 1, NEW YORK

BRAND NAMES DIRECTORY

(Continued from page 190)

ORIENTAL United States Gypsum Co
ORTHOCIDE California Spray-Chemical
ORTHO-GRO California Spray-Chemical
OSMOPLAST Osmose Wood Preserving
OSMOSALTS Osmose Wood Preserving
O T C Owatonna Tool Co
O-T OPEN TRUSS Republic Steel Corp
OVERDOORS Barber Colman Co
OXALUMA Cortland Grinding Wheels
OXFORD Oxford Tile Co
OZWOOD PRESERVATIVE Osmose Wood Preserving Co
OZARK Ozark Oak Flooring Co
OZAN Ozan Lumber Co
P A R Protection Products Mfg Co
P & S Paas & Seymour Inc
PACEMAKER Eljay Mfg Co
PACEMAKER Harloe Products Corp
PACEMAKER Hubbell Harvey Inc
PACEMAKER McQuay Inc
PACEMAKER (Light) Wakefield Co
PACEMAKER (Furnace) Payne Co
PACE-PAK Burnham Boiler Corp
PACER Sequoia Manufacturing Co
PACER (Windows) Aluminum Industries
PACE-SETTER Tennessee Fabricating Co
PACER (Windows) Aluminum Industries

PACKET National-U S Radiator Corp
PAD Producers & Distributors Inc
PAINTERS PRIDE Wooster Brush Co
PAINTGUN Root-Lowell Corp
PALCO Pacific Lumber Co
PALCO Pratt & Lambert Inc
PALKYD Pratt & Lambert Inc
PARETTI Barrett Cravens Co
PANELAIR Payne Co
PANELBOND Horner Flooring Co
PANELFOLD Panelfold Doors Inc
PANEL-GLO Masonite Corp
PANELRAY Day & Night Mfg Co
PANELSTONE Ruberoid Co
PANELPLANK Plywood Co
PANEL-TRACK Embassy Steel Prods Inc
PANELWOOD Masonite Corp
PANEL-VENT Owens-Illinois
PANELYTE St Regis Paper Co
PANLAM Polystyrene United Inc
PQUA Moore Benjamin & Co
PARADOME Holophane Co Inc
PARAFLO Dravo Corp
PARAGON Allied Chemical Corp
PARA-HUE Sappolin Paints Inc
PARALLEL-O-GREY Libbey-Owens-Ford Glass Company
PARALLEL-O-PLATE Libbey-Owens-Ford Glass Company
PARA-PLASTIC Serviced Products Corp
PARBOND Parr Paint & Color Co
PARFLAKE Structural Products Div
PARFLEX Parr Paint & Color Co
PARKWOOD Parkwood Laminates Inc
PARMARTIC Parr Paint & Color Co
PARDRID Bird & Son Inc
PARQUET WOODTILE Robbins Flooring
PAR-TILE Plywood Service Inc
PAR WOOD Plywood Service Inc
PASADOR Farley & Loetscher Mfg Co

(Continued on page 221)
For many years the leader with Removable Double-Hung and Glide Windows

Exactly the right style and size for every residential requirement. Get details of the R•O•W full-line story from your dealer. He knows he can back R•O•W Windows all the way. Better design, more features and top-quality construction make these windows the first choice of builders who want to sell homes fast and at a fair profit. Achieve installation labor savings and eliminate costly call-backs with these beautiful windows.

AND NOW—America’s Finest Awning and Casement

Both R•O•W SURE-LOK AWNINGS and R•O•W ROYAL CASEMENTS are self-locking. There are no separate and awkward locks. Both are beautifully designed for easiest operation and positive weather protection. They are years ahead of all competitive windows in styling and operation. If the R•O•W distributor in your area is not yet making these available, write us and we will have the closest manufacturing R•O•W distributor forward full information to you.
Now 2 types of **Thermopane** insulating glass for **all** kinds of windows

It's both desirable and practical to put insulating glass in all of the windows of a house. Two types of Thermopane make it possible: Thermopane with Bondermetic Seal® for picture windows, window walls and sliding doors; GlasSeal® Thermopane for double hung, casement, awning, sliding—all types of opening windows.
In every room... built-in quality you can put your finger on!

It's there, lightly etched right on the pane—the familiar name Thermopane®.

Your prospective home buyers may miss it if you don't point it out. It's that inconspicuous! But the inscription is there—PROOF that you've used the best—built-in quality your prospects have read about in magazines and seen on network TV.

Thermopane has been nationally advertised for 17 years.

So most of your prospects know that Thermopane in every window means a more comfortable home to live in. A home that will cost them less to heat, less to air condition.

Put Thermopane in all of the windows of your next model house. Offer it as an option, if you wish. Thermopane is the best-known, most wanted insulating glass in the world.

...you can't miss with these merchandising aids!

Your L·O·F Glass Distributor or Dealer has other merchandising aids to help make your model home promotion a complete success. Phone him—he's listed under "Glass" in the Yellow Pages of your phone book.

FREE HANDOUT FOLDERS

FREE WINDOW STICKERS

FLOOR DISPLAY (available on loan)

Advertised on Bourbon St. Beat...ABC-TV Network...Monday Nights*

*In most cities. Consult your local station schedule

Thermopane made in U.S.A.

only by

Libbey-Owens-Ford

Toledo 3, Ohio
another first from Bilt-Well
by Caradco

BILT-WELL Engineering offers new flexibility in planning window arrangements...
new labor-saving installation features

Unique window groupings limited only
by creativity of the designer with BILT-WELL's unitized sill construction and stock filler moulds.

Individual units can be installed side by side in long, continuous ribbons...around corners...in charming angle or bow bays.

The BILT-WELL Line of Building Woodwork—
WINDOW UNITS, Double-hung, Awning, Casement, Basement, CABINETS, Kitchen, Multiple-use, Wardrobe, Storage, Vanity-Lavatory. DOORS, Exterior, Interior, Screen and Combination.

manufactured by CARADCO, Inc.
Dubuque, Iowa

Look for these BILT-WELL Window Features

1. Distinctive Hardware
2. Effective Weatherstripping
3. Kiln-dried Ponderosa Pine, preservative treated
4. Surpasses F.H.A. Requirements
5. Single or Insulating Glass

There's more to offer with BILT-WELL WOODWORK by Caradco

Only BILT-WELL Casement and Double-Hung Windows convert to Angle and Radial Bays with all Stock Parts

Stock filler moulds for radial bays available to make angles from 5 degrees to 12 degrees. Choice of 30 or 45 degree stock filler moulds for angle bays.
Specify the BILT-WELL Line by CARADC

Super double-hung windows

Super-hold with ingenious sash-holding device for budget homes.

Super-lift with fingertip operation for medium priced homes.

Super-therm with double insulating glass for custom built homes.

Casement Windows

Sleek, trim, double-weather-stripped casements with concealed hinges and hard-ware. Unitized sill permits side-by-side installation in long ribbons.

Awning Windows

New releasable hinge permits removal of sash for easy cleaning. Lever, jointed bar, rigid bar or gear operator available. Use these windows as casements, awnings, hopper or fixed sash.

Kitchen Cabinets

Beautiful, streamlined cabinets of Ponderosa Pine, all water repellent treated for dimensional stability, with pine or birch doors and drawer fronts. Cabinets come in 3" modules to fit any size kitchen. Wide choice of accessories.

Storage Walls

Economical and practical arrangements of door and drawer units form complete storage walls. Easy to install in out-of-the-way corners for additional storage, too.

BILT-WELL Products by CARADC, INC.

Dubuque, Iowa

APRIL 1960

BRAND NAMES DIRECTORY

(Continued from page 216)

PATCH PASTE Schalk Chemical Co
PATHFINDER LIGHTS Cannon Electric
PATIO MAGIC Daryl Products Corp
PATIO RAMA Daryl Products Corp
PATRICIAN Tilley John S Ladders Co
PATTEN-COMFORT Patten J V Co
PAUL BUNYAN Lineed Oil Products Co
PAUL HEINSELTY'S Heinsley Mastercraft
PAYLOADER Hough Frank Co
PAYLOADER Hough Frank Co
PAYMOVER Hough Frank Co
P C GLASS BLOCK Pittsburgh Corning
PEARLITE Lustro Tile Mfg Co
PEE GEE Devoe & Raynolds Co Inc
PEE GEE Pearsall-Gaulbert Paint Varnish
PEERLESS Peerless Heater Co
PEERLESS Robbins Flooring Co
PEERLESS Tucker Duck & Rubber Co
PEERLESS Peerless Corp
PEERLESS DOOR Holcomb & Hoke Mfg
PEG-BOARD Masonite Corp
PELLA Rolsecreen Co
PENCLOR Pennsalt Chemicals Corp
PENCHROME O'Brien Corp
PENCO McGuffie Co
PENCO (Cabinets) Alan Wood Steel Co
PENETRAY Penetray Corp
PENETREM Trench Mfg Co
PEN-FAST O'Brien Corp
PENGlass Pennsylvania Wire Glass Co
PENMETAL Penn Metal Co Inc
PENN CRETE Penn Crete Products Co
PENN-TONE Penn Crete Products Co
PENTRINWALL Pennsalt Chemicals Corp
PENNYVERNON Pittsburgh Plate Glass
PEN-O-LASTIC McGuffie Co
PENPLY Peninsula Plywood Corp
PEN-SHEEN O'Brien Corp
PENTAPEX Moore Benjamin & Co
PENTA STAIN Wood Treating Chem Co
PENTECOR Mississippi Glass Co
PENTEX O'Brien Corp
PENTEX Penn Crete Products Co
PENTOX Osmose Wood Preserving Co
PEOPLE HEATER Emerson-Pryne Co
PERCHLORON Pennsalt Chemicals Corp
PERF-TEX O'Brien Corp
PERFECTAIRE Perfect Line Mfg
PERFECTAIRE Arkansas Oak Flooring Co
PERFECTAIRE Lufkin Rule Co
PERFECTO Green A P Fire Brick Co
PERFORALL Woodall Industries Inc
PERFO-ROUND Cascades Plywood Corp
PERFO-SQUARE Cascades Plywood Corp
PERFUSAIRE Auer Register Co
PERIM-A-BASE Burnham Corp
PERIM-A-PACK Burnham Corp
PERIMETER INSULATION Corson G & W H Inc
PERIM-SIL Baldwin-Ehret-Hill Inc
PERLITE Builders Fireplace & Supply
PERLITE Builders Fireplace & Supply
PERMACOUSTIC Johns-Manville Corp
PERMACUSHION Robbins Flooring Co
PERMA-GRIT Skil Corp
PERMA-JET Webb Industries Inc
PERMA-JET Webb Industries Inc
PERMA-JET Webb Industries Inc
PERMA-JET Webb Industries Inc
PERMALINE Line Material Industries
PERMALITE Great Lakes Carbon Corp

Because they incorporate a fine combination of smart, good looks with excellent construction and workmanship, they find that Calder doors help to make home sales easier and their list of satisfied customers grow.

Every Calder Wedge-Tight door . . . the door that floats on lifetime bearings . . . fits like part of the wall, yet even a child can raise and lower it easily.

Discover for yourself how Calder doors can help to sell your houses. Our trained salesmen will be glad to create interest at your Demonstration Homes with radio controlled doors . . . provide free, colorful literature . . . demonstrate famous Calder quality to help sell the house!

FREE CATALOG...
illustrates full line of residential and commercial garage doors, many more top quality features.

DEALERSHIPS AVAILABLE

LANCASTER 12, PENNA.
DISTINCTIVE VISTARAMA CASEMENT WINDOWS—with exclusive Vistarama removable framed grids. Slimlined elegance combined with a smart decorator touch.

YEARS AHEAD of all other windows—Vistarama leads in design, engineering and construction. Quality craftsmanship combines with "new idea" features to make Wabash Vistarama the wood window line that sells on sight.

The Wabash Vistarama line, with its new dimension in styling, offers you windows to sell for every home, every room. Not shown above are Vistarama Panel Windows . . . versatile units that install in countless groupings; can be used as awnings, hoppers, fixed units or as economy casements. And gracious Vistaview Picture Windows combine with any ventilating unit in charming combinations.

All Wabash Vistarama units are crafted of preservative-treated Ponderosa Pine . . . backed by 75 years of Wabash woodworking skill. Get all the facts on this modern line of quality wood windows—learn how you can fit Wabash Vistarama Windows into your summer and fall starts, and to remodeling projects. Learn how adaptable these units are to a variety of designs. You’ll find prospective home buyers will appreciate the extra quality of Wabash Vistarama Windows.
features...here today!

MODERN VISTARAMA PICTURE-AWNING WINDOW—for a picture view and fresh air, too. Fixed upper sash, ventilating lower sash in a single Vistarama unit.

Typical Vistarama advanced design features:
MORE WEATHER-TIGHT—neoprene weatherstrip, applied to the frame for tighter seal. Retains flexibility at temperature extremes; will not deteriorate.
RIGID CONSTRUCTION—assures permanently square frames. Glued and pinned slot and tenon construction.
WOOD BEAD GLAZING—glass set in glazing compound; anchored with attractive wood stops. Tighter seal; faster and easier to reglaze.

WABASH VISTARAMA WINDOW UNITS

DISTRIBUTION
Wabash Vistarama Windows are sold through reputable millwork jobbers and lumber dealers. For the name of the nearest jobber or dealer to you, write WABASH, 310 South Michigan Avenue, Chicago 4, Illinois.

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Quick Answers to All "Closure" Needs Like These — with all advantages of space-saving upward action

Kinnear Counter Shutters — a curtain of interlocking aluminum or steel slats, in Kinnear's straight profile "Midget" slat design. Ideal for food-service and locker-room counters, pass-through openings to tool or parts rooms and similar areas.

Kinnear Rolling Grilles — provide an "openwork" curtain of steel bars and links. Blocks trespass, but not light, air or vision. Restrict passage anywhere — at corridors, stairwells, doorways, counter openings, or as area-dividers.

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(Continued from page 221)

PERMALUME Shower Door Co of Amer
PERMA-LOK Logan-Long Co
PERMA-NETTING Gilbert & Bennett
PERMA-POST Perma-Jack Corp
PERMA-SPUN Logan-Long Co
PERMATAB Logan-Long Co
PERMATITE Durkee-Atwood Co
PERMATITE General Bronze Corp
PERMATOP Permagale Corp of America
PERMA WALL Conver Steel & Wire Co
PERMA-WALL Logan-Long Co
PERMITE Permiteco Inc
PERM-TECT Asphalt Corp of America
PERM-DIP Wilbur & Williams Co
PERM-SEAL Asphalt Corp of America
PERSIANS Watstownbrick Co
PET Portable Electric Tools Inc
PETCO Peterson J C Corp
PETER PUTTERS Schalk Chemical Co
PETROCOTE Thliman Pulp & Paper Co
P G 1013 Permagale Corp of America
PHENIX QUALITY Phenix Mfg Co
PHILGAS Suburban Propane Gas Corp
PHOENIX Samson Cordage Works
PIGSKIN Industrial Canvas Prods Corp
PILGRIM Abrasive Products Inc
PILOT Fiat Metal Mfg Co
PILOT Johns-Manville Corp
PINCOR Pioneer Gen E Motor Corp
PINE CRAFT White Pine Sash Co
PIN-UP Holly-General Co Div Siegler
PIONEER Pioneer Plastics Corp
PIONEER Sunbeam Plastics Corp
PIONEER (Tools) Pioneer Gen E Motor
PIONITE Pioneer Plastics Corp
PIPE-SEAL Calbar Paint & Varnish Co
FIT-PILE Jones & Brown Inc
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Jones & Brown Inc
PITTSBURGH LOCK HAMMER Milwaukee Electric Tool Corporation
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PLEXSTONE Plectone Corp of America
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PLURALITE Mississippi Glass Co

(Continued on page 238)
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- Hip roof
- Gambrel roof
- Dormers
- Siding and shingling
- Cornices
- Porches
- Exterior walls of wood
- Exterior walls of brick
- Interior walls finished in plaster, in plywood
- Wall panels
- Mouldings for interior trim
- Stair construction
- Windows
- Sash details
- Window framing details
- Doors and door trim
- Hardware used in dwellings
- Closets, shelves, built-in equipment
- Breakfast alcove
- Sewing room
- Flooring
- Chimneys and fireplaces
- Mantels and seats
- Outdoor fireplaces
- Scaffolds
- Garages
- Insulation
- Arches and gates
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Time-Saver magazines

April 1960
Today's garage—your biggest bargain in space

More and more builders are turning to the profit and sales potential so evident in the garage. The reason is space—the extra storage, work and play space homebuyers are demanding. It's space a garage provides at the lowest cost per square foot.

It's no secret to you—today's homebuyers want more space . . . for privacy, activity, storage. They need more space to raise growing families. Unfortunately, this extra space in a home also raises the price.

For a homebuyer, the alternative to this space-price problem is to buy an older home, and that's what the majority do. For you, the alternative to losing these sales is to offer more livable space at less cost, and you can. You can develop and sell the extra living space, the extra storage space offered in the most neglected area of your home—the garage. It's your biggest bargain in space!

1. The garage is a bargain to build. Consider the worth of a garage. In addition to storing the car, it's an excellent place for a home workshop, a rainy-day place for children to play, an out-of-the-sun place for summer barbecues. It supplies room for storage of bicycles, lawn mowers, garden tools, and for activities the house cannot supply. Best, it's a bargain to build.

Extra-use space costs $3 less to build. If you're an average builder, your square foot cost for building a garage is only one-third the cost of building the rest of the home—$3 to $5 per square foot, compared with $9 to $15. An analysis by Len Haeger, architect, estimates the building cost of an attached garage at about $2.00 a square foot. This does not include land cost, overhead or profit. Compared on the same material-and-labor-only basis, the cost of a three-bedroom home is $6.72 per square foot. It adds up to this: you can build 300 to 400 square feet of extra space in your homes at approximately one-third of the square foot building cost.

What about down payment? Down-payment-wise the garage is still a bargain to sell, especially for homes priced near $15,000 without garage. The down payment of a $15,000 home with FHA financing is $705. You add only $260 for a double garage evaluated at $1200. The total down payment for this more livable, more salable home would still be less than $1000. Even for a home costing $16,000—a double garage adds only $360 to the down payment.

Builders who have recognized the sales significance of the garage testify that the average homebuyer can and will put down an extra $200 to $300 for the space he needs in a garage. One of the first things most new homeowners do is add a garage. In fact, a study of 1957 Chicago area building revealed that the number of permits issued for garages was approximately two-thirds of those issued for new homes.
Extra usability ups FHA evaluation. Not only is a garage cheaper to build per square foot, but also it gets an even higher evaluation when offered as multi-use space. A builder in Ohio reports his garage evaluation was increased from $950 to $1060 when he used Overhead Door Corporation’s “Convertible-Garage-Room” plan to make the garage more attractive as livable space. He gained $110 in evaluation for only $40 cost.

2. The garage is bargain space homebuyers want and need. Buying and building trends favor the garage. Surveys show that the garage, competing with carpots or built-in features, is the heavy favorite with homebuyers. A study made by PRACTICAL BUILDER found 62% of homes now being built include a garage. A survey by the National Association of Real Estate Boards reveals that 53% of realtors believe a garage to be a strong influence in the sale of a home. In a study made by ARCHITECTURAL RECORD architects cited the low-cost extra space offered by a garage as one of the important reasons for garage popularity. Of course, a substantial share of this preference for extra space in the garage has grown with the increase in non-basement construction.

Extra space is essential in non-basement homes. The total space in the average three-bedroom home just doesn’t offer enough storage space, work space, play space. HOUSE AND HOME reported recently that, according to the Small Homes Council, The Cornell Kitchen Study, and the mortgage department of Metropolitan Life, FHA standards require less than half the storage space needed by most young families.

Trend favors 2-car garage. The fact that homebuyers favor the garage as the solution to their space problem is underlined by the trend to the two-car garage. Surveys show only 15% of families actually have two cars, yet 61% of garages being built are two-car or larger. For one-car families, the double garage means ample room to open the car door, easier loading and unloading; it offers space for storage and play; it adds structural size that enhances the appearance of their home.

3. Unique “OVERHEAD DOOR” ideas open garage for work, play. Overhead Door Corporation has taken the lead in developing plans to help you sell this bargain space as multi-use space. One especially exciting idea is the “Convertible-Garage-Room” – a garage that converts in seconds to a livable room. All it takes is a second “OVERHEAD DOOR” to replace the blank back wall (or side wall) to open the garage to bright, inviting living space. Garages using this sales-provoking idea have been built all over the country, winning a tremendous response from space-hungry homebuyers.

“Convertible-Garage-Room” adds multi-use space at lowest cost. Before designing the “Convertible-Garage-Room,” Overhead Door Corporation engaged a market research company to interview homebuyers on their need for extra space. This research revealed that seven out of 10 homebuyers want and need the multi-use space a “Convertible-Garage-Room” offers. It also showed that over half of those interviewed would pay $400 and more for this feature. Yet a “Convertible-Garage-Room” adds less than $100 to the cost of a conventional two-car garage. Materials and labor saved in the backwall make up most of the cost of the second door.

4. The “OVERHEAD DOOR” – your biggest bargain in satisfaction. Ideas that make the most of the garage multi-use space are endless. And they are practical, thanks to the high product quality and reliable service included in every “OVERHEAD DOOR” installation. You’re guaranteed that the “OVERHEAD DOOR” will fit tightly against weather and intruders, that it will open easily. There are no call-backs. If trouble should develop, it will be efficiently handled by the same factory-trained expert who installed the door – your local “OVERHEAD DOOR” distributor.

Style, too, is an important part of the sales appeal you get with famous “OVERHEAD DOOR.” New 1960 models are available with a wide selection of flush, panelled, and carved doors to give you distinctive design as a valuable sales closer.

See your “OVERHEAD DOOR” distributor. Get the full story on the tremendous sales potential in extra living space. Your “OVERHEAD DOOR” distributor has full information on the “Convertible-Garage-Room,” including plans, bills of materials, and color sketches; also builder sales tools that include wall banners, newspaper ad layouts, colorful handout idea booklets and publicity releases. Look for your distributor in the white pages under “OVERHEAD DOOR” or write to Overhead Door Corp., Dept. AB-4, for new idea booklet, “Discovered – Extra Living Space.”

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"There is no warping problem because Bifold Doors are made of Weldwood® Novoply®," says fabricator Sidney S. Chilnick, Executive Vice President and General Manager of Reinhart, Inc., Philadelphia, Pa. "We have had virtually no return for adjustment. No maintenance is necessary, and they take any finish beautifully."

Weldwood Novoply is the only material with which warp-free doors of such simplified design could be made. It's a 3-ply panel of carefully selected wood flakes and chips bonded with tremendous heat and pressure, and is guaranteed against warping. For information, mail the coupon.

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Arcadia Metal Products Fullerton / California
a house is no better than its water system

You read a lot these days about what sells houses. You name it, and that’s it. But what good is it all without an adequate, dependable water system? After all, that’s what bathes the baby, does the dishes, washes the clothes, sprinkles the lawn, helps cook the food, maybe cools the house and heats it, too, provides fire protection . . . and takes care of all the obvious personal needs.

Many builders the country around have found the answer in BURKS pumps and water systems. BURKS famous Super Turbine, for instance. The only pump with LIFE-LOK—a simple, external adjustment of the impeller that assures more gallons per minute, better performance, and up to 40% longer service life. Or BURKS new multi-stage centrifugal—for greater capacities at higher pressures from deeper settings.

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**PLUMBING, WATER SUPPLY**

**Bathroom Standards**

- Minimum spacing for water closet
  - Minimum 6" better
  - 9"
  - Water closet and lavatory side by side
  - Shower and lavatory
  - 9"
  - Shower and water closet
  - Water closet and bathtub side by side
  - Wall and bathtub
  - Water closet and lavatory facing bathtub

- Mirror Doors
- Clearance for lavatory with towel bars

- Average lavatory counter height 31"
  - For adult use in master bath 34-36"

- Recommended spacing for Counter Twin Lavatory installations

**SCALE**: 1/8" = 1'-0"

**APRIL 1960**
ONE-FLOOR PLANS: In the one-story basementless house, backing up kitchen and bathroom fixtures (plan, left), will produce the optimum in savings. When this is not practical, back up the rooms (plan, right). When fixtures are badly separated in the plan, material and labor costs go up, not only for drainage and venting, but for water piping.

TWO BATHROOMS ALIGNED OVER A KITCHEN AND A POWDER ROOM

MUST BE 2" (GENERALLY 1.5")

TWO-STORY HOUSE: A considerable saving is achieved when fixtures are aligned over one another, so that all may discharge to a single stack. Light dotted lines indicate extra piping that would be necessary if they were not aligned.

SOME FURTHER NOTES

• Wherever possible, it is best to locate rooms containing fixtures near the point of entrance of the water and sewer services. This will cut the length of service lines.

• Many plans today include compartmented baths, toilet and sink separate from tub and shower, or toilet separate from sink and tub and shower. Piping should be planned so that fixtures drain and are vented with a single stack.

• The suggestions on this page are not meant to be absolute. Local conditions and codes sometimes prevent installations as shown here. However, when they can be used, savings mount—especially in multi-home projects.

WATER-HEATER AND CHIMNEY WELL LOCATED FOR ECONOMICAL HOT-WATER PIPING

EQUIPMENT LOCATION: When water-heater is located too far from fixtures using hot-water, there is not only extra cost for material and labor to install the piping, but heat loss through the extra run of pipe makes the heater less efficient. Note in the plan above that fireplace was located so that water-heater could be properly vented and still be close to those fixtures needing hot-water.

LOCATING CLOTHES WASHERS: Where possible, clothes washers should be placed to take advantage of an already existing vent, and should minimize the installation of extra water piping. The sketch above indicates one way this could be done.
PLUMBING, WATER SUPPLY
Septic Tank Systems

Min. trench width 12"

Slope 25% ± 2" to 4'/100'

4" Drain Tile

Dashed Lines Indicate Extent of Coarse Aggregate

Watertight Joints at Bend

Place Distribution Box on Concrete Slab or Undisturbed Earth

Absorption-Field System for Level Ground

Absorption-Field System for Sloping Ground

Distribution Box

4" Bell and Spigot Pipe

Slope 2" to 4'/100'

4" Drain Tile

Opening of joints 1/8" to 1/4"

Grade Board (Optional)

Gravel or Broken Stone

Slope 2" to 10'/100'

Longitudinal Section

Absorption-Trench and Lateral

CROSS SECTION

Manhole Cover

Inlet

Outlet

0.2 D Min. (20% of Liquid Depth)

0.25 Min. 1.0 Max.

2.5 Min. 5.0 Max.

Penetration of Outlet Baffle; Generally 40% of Liquid Depth; for Rectangular Tanks

6" to 8"

6" to 8";

NOTE: Make Inlet at least 1" Above Outlet. 3" Preferred

Types of Inlet and Outlet Devices

Note: "A" should be no less than 6" and no greater than 8"

"B" penetration of outlet device generally 40% of liquid depth for rectangular tanks and 35% for horizontal cylindrical tanks.

Household Septic Tank

<table>
<thead>
<tr>
<th>Number of bedrooms</th>
<th>Recommended minimum tank capacity</th>
<th>Equivalent capacity per bedroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 or less</td>
<td>750</td>
<td>375</td>
</tr>
<tr>
<td>3</td>
<td>900</td>
<td>300</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>250</td>
</tr>
</tbody>
</table>

April 1960
PLUMBING, WATER SUPPLY

Well Pump Data

Typical shallow well pump installation where pump is located in a building or pit adjacent to water source. Pump in basement if well is less than 100' from house; over well if over 100' from house.

Installation where pump needs to be protected from freezing. Cover of pit should be well insulated for added protection.

NOTES

Because of atmospheric pressure, a shallow well pump will only operate to a depth of 22'. Beyond that, a deep well pump must be installed. Three types of pumps are used today for either deep or shallow well systems. They are: reciprocating, centrifugal and centrifugal-jet. A reciprocating pump operates by means of a piston and cylinder, much like the cylinder in an automobile. On the forward stroke a check valve opens, forcing water into the cylinder. On the reverse stroke, the check valve closes, forcing the water collected in the cylinder through the pipe and into the storage tank. A centrifugal pump operates with an impeller, a wheel that doesn't look like but works much like a boat propeller. This wheel spins the water, increasing its velocity and pressure. The water spirals up into a casing of decreasing diameter that further increases the water's pressure. As this action is continued, the water is forced through the pipe and into the storage tank. The Centrifugal-Jet Pump sends a stream of water through a small-diameter nozzle into a Venturi tube, which increases its pressure. From this point, the water is swept up into the centrifugal pump, and on to the storage tank. The details of well installation which are shown here are for purposes of illustration only. Consult your State Dept. of Public Health and your local building codes for exact specifications.
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WE PUT UP $4 to 1
WE PUT UP $4 to 1

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APRIL 1960 237
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SEWAGE TREATMENT SYSTEMS

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ACTIVATED SLUDGE PROCESS

TRICKLING FILTER SYSTEM

(CoContinued from page 224)
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FACTORY-BUILT "OXIGEST" SEWAGE TREATMENT PLANTS
Headed for New Jersey, Canada and Ohio

Recent line-up for rail shipment includes a 16,000-gallon "Oxigest" for a high school at Cape May, New Jersey; a 5,000-gallon unit for installation at an Air Force refueling base on the Dewline in Canada; and a 27,000-gallon "Oxigest", with special hopper ends, destined for a new high school at Barlow, Ohio.

And Now... At Last!
FOR THE BUILDER WHO HAS BEEN BY-PASSING THOSE LOW-LYING LOTS IN A SUBDIVISION...
A Compact Home Sewage Ejector

The new Smith & Loveless "Uniject" is a low-cost, pneumatic sewage ejector. Not a sump-pump—handles 3-inch solids! Designed for installations where it is necessary to raise sewage to a gravity sewer, on-the-site treatment facility or septic tank. Eliminates lowering entire sewer line to serve those "low lots" in a subdivision. Capacity to 15 GPM at 20' TDH.

Write for complete information and the name of our sales representative in your area. Address: Department 100A.

Smith & Loveless "OXIGEST"

FACTORY-BUILT QUALITY, ECONOMY AND DEPENDABILITY IN A SEWAGE TREATMENT PLANT FOR SMALL SUBDIVISIONS, SCHOOLS, MOTELS AND FACTORIES.

The factory-built "Oxigest" provides low-cost, dependable treatment without requiring a skilled operator. Available in single, quality-constructed units to serve from 10 to 100 homes—or can be installed in parallel, as needed, to serve larger subdivisions.

The long-period aerobic digestion treatment process of the "Oxigest" provides maximum treatment with minimum annual maintenance.

The "Oxigest" is easily and quickly installed after delivery to the job site on special-built Smith & Loveless trucks—or by rail for larger units. Available in 27 standard sizes.

WRITE TODAY FOR FREE ENGINEERING DATA MANUAL ON "OXIGEST" SEWAGE TREATMENT PLANT. ADDRESS DEPARTMENT 100B.

BY THE MAKERS OF AMERICA'S FINEST FACTORY-BUILT SEWAGE LIFT STATIONS

APRIL 1960
Enameled iron lavatories of Kohler quality and design

For homes and apartments, new or remodeled, these two lavatories offer distinguished modern design, economy, convenience. At modest cost, they can be built into counter-tops of plastic covered plywood. Watertight installation in any counter material is made easy by self-sealing, one-piece frames.

The compact Radiant, of graceful, circular form is especially popular for modernizing where a distinctive fixture is desired for a bathroom, or washroom. Its 18-inch diameter can be accommodated in a counter of 21-inch width. The Tahoe, with roomy basin and integral soap dishes, is available in two sizes, 20 x 18" and 24 x 18". Both have concealed front overflows with chromium-plated ferrules. Made in Kohler white and colors.

The handsome chrome-plated Constellation fittings are all-brass construction, insuring maximum resistance to corrosion and wear.

Kohler Co. Established 1873 Kohler, Wis.

Kohler of Kohler

Enameled Iron and Vitreous China Plumbing Fixtures • All-Brass Fittings
Electric Plants • Air-Cooled Engines • Precision Controls
THE NIBCO HY-SET FAMILY
-3 NEW TIMESAVERS!

HY-SET ELL KIT
707-35A
707-35A. Copper to F.S.P.S. 1/4" x 3/8" and 1/2" x 3/8".
707-5A. Copper to Copper. 1/4" x 1/2".

KIT CONTAINS—Ten patented Hy-Set Eells, six pre-punched aluminum straps, twenty self-tapping screws, twelve nails for attaching strap.

HY-SET TEE KIT
712-5A
712-5A. Copper to Copper to F.S.P.S. 1/4" x 3/8" x 3/4" and 1/2" x 3/8" x 3/4".
711-5A. Copper to Copper to Copper. 1/4" x 1/2" x 3/4".

KIT CONTAINS—Ten patented Hy-Set Tees, six pre-punched aluminum straps, twenty self-tapping screws, twelve nails for attaching strap.

HY-SET ADAPTER KIT
703-5A
703-5A. Copper to F.S.P.S. 1/4" x 1/2".

KIT CONTAINS—Ten patented Hy-Set Adapters, six pre-punched aluminum straps, twenty self-tapping screws, twelve nails for attaching strap.

EASY TO INSTALL
1 Screw HY-SET FITTING to aluminum strap.
2 Nail aluminum strap to stud faces.
3 Make solder/screw connections.

SAVE UP TO $11.40 PER KIT BY USING THESE NEW HY-SET FITTINGS...THE RESULT OF INSTALLATION ENGINEERING BY NIBCO. AVAILABLE FROM YOUR WHOLESALER.

NIBCO INC.—Dept. K-4104, Elkhart, Indiana
Please send us more information on:
☐ HY-SET ELLS  ☐ HY-SET TEES  ☐ HY-SET ADAPTERS

name

firm

address

city, state

APRIL 1960

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Mr. Builder — For more selling power at a low cost investment... for added luxury and convenience in your new or remodeled homes... for a better profit margin... nothing beats nationally advertised ShoweRite tub enclosures, shower doors, and shower stall enclosures.

ShoweRite puts you “one up” in the art of “homesmanship”... because it puts your best bath forward.

ShoweRite products are now available from six convenient distribution points.

*Homesmanship—how to better your bathroom and improve profits at low cost.

BUILDING POOLS?
BUILD WITH MODERN EQUIPMENT!

You can’t beat the quality and price of Modern pool equipment. No matter what size pool you are building there are Modern products specifically designed to simplify its building and maintenance. Modern stocks over 250 pool items...enables you to do all your purchasing from one convenient source. Whether you need a complete filter system, deck equipment or the fittings, consult Modern first. Our technicians backed by a quarter of a century of pool construction and operating experience will be glad to advise you in the proper equipment selection...can save you money and time in actual construction. Thousands of satisfied pool owners all over the world are proof of the superior quality and value built into every Modern product.

Our policy for two decades has been: to offer honest values, honestly described; to market distinctive and better products; sell them at fair prices; to render efficient service.

Send for Modern’s free catalog. It’s crammed with information and photos that will help you save time, money and trouble. Ask for Catalog No. 21D.

modern
BRIGGS BEAUTYWARE

can make a BIG difference
in your new home sales

Unsurpassed quality of product . . . ease of installation . . . ready availability are just a few of the reasons why more and more builders are turning to Beautyware by Briggs. They know that nationally advertised Briggs Beautyware in their homes can make a big difference in boosting their new home sales.

The fused-in-to-stay compatible colors add a fresh and imaginative touch that harmonizes with every and any decor. The rich, sculptured styling will be as fresh tomorrow as it is today. And, Briggs Beautyware needs so very little care to keep it at its sparkling best day in and day out.

So, if you're looking for bathroom beauty that gives your homes the mark of quality—look to BRIGGS BEAUTYWARE.

THE CHAUCER vitreous china lavatory is smartly styled with oval off-center bowl for abundant counter space, has anti-splash rim and cast-in soap impression and features unique spray spout. Completely flexible, it may be installed in a countertop, vanity or placed on legs.

THE MEDALLION porcelain enamel bathtub boasts full-length seat, slip-resistant bottom and recessed toe panel. Has seam-free one-piece construction, leakproof wall flange and H-framework that installs without blocks, shims or extra support.

THE KING water closet in vitreous china is wall hung for easy cleaning beneath, eliminates dirt-catching cracks and crevices and hard-to-get-at space between wall and fixture.
(Continued from page 240)

RAINBOW ROCK Gen Engines Co Inc
RAINCHER Protection Products Mg Co
RANCH Reiter Woodwork Specialty Co
RANCHLINE Allied Chem Corp Barrett
RANCWOO Southwood Corp
RANWOOD U S Plywood Corp
RAN-D-WALL Aetna Plywood & Veneer
RANGAIRE Roberts Mg Co
RANGEMASTER Aubrey Hdwe Mg Inc
RANGER Clark Equip Co Industrial Truck Div
RANGER Wood Shovel & Tool Co
RANGER Roberts Mg Co
RANGE-VENTOR Universal Blower Co
RAPIDSEAL Grabler Mg Co
RAPIDSTAN Rapi Standard Co Inc
RAWL DRILLS Rawplug Co Inc
RAWL DRIVES Rawplug Co Inc
RAWLPLUGS Rawplug Co Inc
RAY-O-LITE Ray-O-lite Corp of Amer
RAY VEC Electrend Products Corp
RAZON Trento Mg Co
READING Hardware Products Inc
READYBUILT Readibuilt Products Co
READY-CUT Everyready Brikaw Co
READY HUNG DOORS Ready Hung Door
REALITE Holohane Co Inc
REAL SEAL Dad & Lad Co
RECESSO Lawler Automatic Controls Inc
RED BRAND Keystone Steel & Wire Co
RED CENTER Simonds Saw & Steel Co
RED DEVIL Peerco Inc
RED DOT Gouger C L Machine Co
RED-MOUNT Chester J & Sons Inc
REDGE Electric Div H K Porter
RED END Lukfin Bule Co
RED END Simonds Saw & Steel Co
RED FARM CHAMP Ludlow Papers Inc
RED FOOT Roe Jutus & Sons
RED HEAD Phillips Drill Co
RED-I-CUT Carbonundum Co
RED-I-POST Sawhill Tubular Prods Inc
RED LABEL Johnson's Wax
RED RAIL Tennessee Fabricating Co
RED SILO CHAMP Ludlow Papers Inc
RED STRIPE Pittsburgh Plate Glass Co
RED TAG Cyclone Fence Dept
RED TANG Simonds Saw & Steel Co
RED TOP Keystone Steel & Wire Co
RED TOP United States Gypsum Co
REDUCIT O'Brien Corp
RED WARRIOR True Tempor Corp
RED WING Pittsburgh Plate Glass Co
REFLECTASURE Am Asbestos Product
REFLECT-O-RAY Appleton Coated Paper
REFRACT-O-CRETE Acme Brick Co
REFRIG-A-BAR Acme Natl Refrig Co
REFRIGERATED-ROOER-AIRED United States Air Conditioning Corporation
REGAL Athens Stove Works Corp
REGAL DRESSATORY Regal Laminates
REGULUX Regulux Sash & Door Co
REGENCY Air Control Products Inc
REHCO Chicago Spring Hinge Co
REHCO (Shower Units) Reheo Corp
RELCO Slant-Fin Radiator Corp
RELIABIL Ajax Building Bracket Co
RELIABLE Allith-Prouty Inc
RELICHT Richfield Manufacturing Co
RELY-ON Dick's Armstrong Pontius Inc
REMCON Remcon Div Pyramyd Inst Corp
REMINGTON Remington Alum Window
REMOVIT Farley & Loetscher Mg Inc
RESIZED SPEED-GRITS Behr-Manning Co
RESURPO Beardon Co
RETARDO Moore Benjamine & Co
RE-J Wilbur & Williams Co
REVALON Revere Copper & Brass Inc
REVCO Revere Copper & Brass Inc
REV-A-SHELF Lake Drive Prod Co Inc
REV-FLO Sequoia Manufacturing Co
REV-O-FILE Mosler Safe Co
REV MASONRY Marietta Paint & Color
REVOLVO Frick-Gallagher Mg Inc
Rex Air Controls Inc
Rex Chain Belt Co
Rex (Heater) Cleveland Heater Co
REXALUM Consolidated Gen Prod Inc

(Continued on page 268)
Gerber gives you all the advantages of the widest plumbing fixture lines...and MORE

Gerber specializes in plumbing fixtures for homes in the $9,000 to $25,000 price range — the Mighty Middle mass market which includes 9 out of 10 homes built today.

By concentrating on a complete line for this market only, production and marketing economies are passed on to builders in the form of deluxe features normally found only in more expensive lines.

Compare Gerber's sensible prices and quality features with those of any equivalent line produced by any other manufacturer, and you'll see that with Gerber you supply a better bathroom for less. You can order complete packaged bathrooms in white or six modern colors — Petal Pink, Wedgewood Blue, Forest Green, Driftwood Tan, Daffodil Yellow, Cloud Gray.

Gerber plumbing fixtures are nationally advertised and have smart styling to assure home buyer acceptance. They are the only bathroom fixtures with the Good Housekeeping Guarantee Seal. Gerber fixtures have many exclusive features to make installation fast and easy. Gerber also offers sales and merchandising aids and special services to help sell Gerber bathrooms and the homes in which they are installed.

"Plumbing Fixtures for the Mighty Middle"  • Gerber Plumbing Fixtures Corp., 232 N. Clark St., Chicago, Illinois

See our condensed catalog in Sweet's, or write for your copy of Gerber's 94-page full line catalog.

Gerber
Look for the Silver Band*

Make sure your homes feature genuine Orangeburg quality. It helps make the sale easier. Means more satisfied customers. So look for the Silver Band to be sure you’re getting genuine Orangeburg: Root-Proof Pipe for sewer lines from house to street; for run-offs from downspouts...Perforated Pipe for foundation drains, septic tank filter beds. Over 300 million feet in use from coast to coast. It’s the Brand your customers know. Write for “Tips for Installing,” Dept. AB-40, Orangeburg Manufacturing Co., Orangeburg, N. Y.

ORANGEBURG MANUFACTURING CO.
Division of The Flintkote Company. Manufacturer of America’s Broadest Line of Building Products

genuine ORANGEBURG®
Root-Proof Pipe and Fittings
The New Carbrim * Disposer Bowl
—teams up to perfection
with any waste disposer!

*Carbrim Vegi-Prep Model DS-832 LDB illustrated below.

When your kitchen specifications call for a garbage disposer (and what modern specifications do not?), you owe it to your customers to specify the new Carbrim Stainless Steel Sink with Disposer Bowl. Here, at last, is the sink design every disposer manufacturer has been looking for—the design that has been painstakingly developed to enable disposers to achieve their peak rated efficiency. Look at the handsome Vegi-Prep Model shown above. Notice how the drain outlets have been moved to the rear to permit more working space for food preparation. See how the disposer intake has been cleverly recessed to accommodate accumulated waste. And above all, don’t overlook the heavy rubberized undercoating that hushes sink clatter and reduces disposer vibration. All Carbrim Sinks are guaranteed never to wear out—never to chip, crack or peel—and no separate sink frame is required for installation! Disposer Bowls are available on the right or left. Ask your wholesaler to show you this new design, or write today for Catalog No. 860 to Sink Division, Carrollton Manufacturing Company, Carrollton, Ohio.

Most Popular of All Sink Designs—Now Available with Disposer Bowl
Model 832 LDB shown above with disposer bowl at left has Carlton’s famous sparkle finish, which actually improves with use! Bowls are 14 by 16 inches, by seven inches deep, allowing for at least a gallon more water capacity in each bowl. The Carbrim self-rim feature makes installation quicker and easier; and much more sanitary.

You just can’t buy better—when you buy...
NEW LUXURY BRASS FITTINGS
Sparkling new brushed chrome fittings with plastic prism handles add beauty to any bath... another popular new salesmaker from Eljer.

“Attractive appearance... choice of colors... choice of genuine, hand-rubbed wood cabinets... ample storage area...” These were some of the features specified by builders throughout the country when we asked them what they wanted most in a completely new, first-quality lavatory.

You will find all these features (and many more) in this beautiful new Brent lavatory-cabinet combination. That's why we call it builder specified... it was designed for you—to help sell more of your homes. Send today for complete specifications.

ELJER
Three Gateway Center, Pittsburgh 22, Pa.

1,850,000 CONSUMERS WILL SEE THIS AD!
More than 1,850,000 prospective homeowners will be presold on the new Brent lavatory and Luxury Brass fittings when they see this full-page, four-color ad appearing in current issues of leading consumer magazines.
The sink with many followers, but no equal—Lyoncraft Disposo-Well is the first sink engineered just for garbage disposer units, and a sales winner proved in thousands of homes! Still most efficient: the in-corner positioning of the disposer for more unbroken work room. Stack dishes, fix food, and the disposer remains uncovered for instant use. Also catching the eye: the Redi-Rim® feature with rim and sink a single unit to eliminate crumb-catching crevices. And Disposo-Well, made of finest nickel stainless, range from the single-bowl size, through the 32"x21" double-bowl, to the roomy 45"x21" double-bowl model. For full specifications on the first and finest sink made for disposer units, send for the new Lyoncraft catalog at the address below.
In Rapid City, S.D., Private Homes, Inc., made careful tests before selecting a heating system for their homes, priced at $11,000 and up. The following results are reported:

"We constructed several pilot-model houses wherein we varied only in the heating method—Hydronic Heat with baseboards versus Forced Air Radial Heat. We conducted various tests during the winter of 1958-1959 and concluded:

1. It was more economical to heat with Hydronic Heat.
2. The temperature difference between floor, ceiling and exterior walls varied only 3-4 degrees while the temperature difference in the warm air heated home was 7-9 degrees.
3. The noise and dust factors were considerably reduced in the Hydronic heated home.
4. The initial installation cost is somewhat higher for the Hydronic heated home as compared to the forced air heating method but the benefits the buyer receives make the difference in initial cost seem insignificant.
5. It is simpler to install the Hydronic system.

"We have subsequently installed Hydronic Heat in over 100 of our new homes during the 1959 building year. We feel that the buyer receives more for his money with Hydronic heat."

"Hydronic Homes Sales Promotion for Builders
A comprehensive program of ideas and sale helps for utilizing the outstanding and exclusive advantages of hydronic* heating. Every builder should see this presentation—there's no obligation in getting the facts. Write, phone or wire today.

*Modern hot water heating.
HEATING, COOLING, VENTILATION

Condensed Method of Estimating Heating Requirements

**“CONDENSED METHOD” HEAT LOSS FACTORS**

1. **WINDOWS & DOORS**
   - Multiply sq. ft. by:
   - a. Without storm sash: 115
   - b. With storm sash: 75
   - c. Double 3/4" glass with 1/2" sealed air space between: 55

2. **OUTSIDE WALLS (NET)**
   - Multiply sq. ft. by:
   - a. SOLID MASONRY—(Brick, stone, etc.) with plaster applied direct to inside surface of masonry wall: 45
   - b. AVG. FRAME—Brick Veneer—Wood Siding—Shingles or Stucco—with sheathing, bldg. paper, studs, lath and plaster: 30
   - c. FURRED MASONRY—(Same as 2a with air space between plaster and masonry wall): 30
   - d. INSULATED FRAME—Same as 2b—with 1" or less insulation board or blanket: 20
   - e. HEAVILY INSULATED—Same as 2b with 2" or more insulation: 10

3. **CEILINGS & INSIDE WALLS**
   - Multiply sq. ft. by:
   - a. CEILING—Plaster on lath or wall-board. No floor above—Attic not vented: 34
   - b. Same as 3a—with 2" or more insulation and ventilated attic: 12
   - c. CEILING of first floor room below unheated room on second floor: 17
   - d. INSIDE WALL adjacent unheated room: 17

4. **FLOORS**
   - Multiply sq. ft. by:
   - a. Double wood floor—over cool basement or other enclosed space: 15
   - b. Same as 4a—but open space below floor exposed to outside: 32
   - c. Concrete floor—Directly on ground. No edge insulation: 10

5. **INFILTRATION (AIR LEAKAGE)**
   - Multiply each sq. ft. of window and door area by:
   - a. WINDOWS AND DOORS. Average fit—Not weatherstripped: 60
   - b. Average fit—weatherstripped (or equipped with storm sash): 30
   - c. Poor fit—not weatherstripped: 140
   - d. Poor fit—Weatherstripped (or equipped with storm sash): 43
   - e. EXTRA FOR EACH OUTSIDE DOOR: 1000
   - f. EXTRA for air lost up fireplace flue: 3000

*Above factors are approximate heat loss through each sq. ft. of surface with 70° inside and -30° outside.

The map at the right is zoned according to winter design temperatures, and gives percentages by which results from Step C should be multiplied to find actual heating requirements for the locality.

**HOW TO USE THE CONDENSED METHOD HEAT LOSS FACTORS**

Quantities of heat are measured in units called British Thermal Units (abbreviated BTU).

Heat is lost from a warm building through all of its surfaces exposed to lower temperature. This is called "transmission losses." Heat is also lost due to wind blowing through cracks around windows and doors. This is called "infiltration losses." Total heat loss of a building is the sum of transmission losses plus infiltration losses.

A. The first step is to find how much heat is lost by transmission. Calculate the areas in square feet of all exposed surfaces of the room or building including:
   1. Window and outside door area (combined).
   2. Net outside wall (gross wall area minus item 1).
   3. Ceiling area (below unheated room or attic space). Inside walls adjacent unheated rooms.
   4. Floor area (if space below floor is not heated).

B. Next, estimate infiltration losses. This depends on the amount of cold air blown into the house, which is in turn dependent on the size of the window or door and the length of the crack around it. Simply multiply the area of windows and doors already calculated in Step A by the infiltration factor selected from Table 5. Also, since there is more air leakage through door cracks than through window cracks, allow an additional 1000 BTU for each outside door. Add 3000 BTU for each fireplace.

C. Add the infiltration losses (Step B) and the transmission losses through the windows, walls, etc. (Step A) all together. The sum is the heat that would be lost from the room or building — if the temperature difference between inside and outside were 100°. In other words, this is the amount of heat it takes to maintain 70° inside when the outside temperature is 30° below zero, which would occur only in the very coldest sections of the United States.

D. Heating requirements are naturally less where the weather does not get so cold. The average minimum temperature in Dallas, Texas, for example, is only 10° above zero. The “design temperature difference” between inside and outside would be 70° minus 10° equals 60°. Therefore, the heating requirement is only 60/100 or 60% of the amount based on 100° TD.
HEATING, COOLING, VENTILATION
Design Data for Perimeter Heating

METHODS OF ANCHORING DUCTS

Metal Bracket
Concrete Block
Tie-Down Rods

Concrete Paddle
Brick
Block

PLenum AND Duct InstAllATION

MOISTURE BARRIER

REGISTER OUTLET FORMS

Wood
Concrete

FOUNDATION INSULATION

REGISTER LOCATION

Concrete Slab

PERIMETER LOOp SYSTEM WITH FEEDER AND LOOP DUCTS IN CONCRETE SLAB

PERIMETER LOOp SYSTEM WITH FURNACE OVER LOOP

PERIMETER RADIAL SYSTEM WITH FEEDER DUCTS IN CONCRETE SLAB OR CRAWL SPACE

CRAWL SPACE PLENUM SYSTEM
Baseboard-electric heating is basically the same as hot-water baseboard heating. The difference lies in the use of a resistance heating element in place of a hot-water convector.

A heating rod of the same type as used in a cooking range runs the length of the baseboard panel. Convecter fins are added to increase the heat transfer area. The heating element operates at "black heat" (it cannot climb above 150 degrees fahrenheit), so it cannot cause injury.

Baseboard panels heat approximately 50 per cent by convection and 50 per cent by radiation. They are controlled by individual room thermostats. Heat is almost instantaneous upon demand.

Electric-resistance heating of a home can also be accomplished by means of radiant cables. These are flexible resistance cables buried in the ceiling, floor or walls.

They differ from baseboard-electric heat in that virtually all of their heating is by radiation.

Most common area for radiant-heat cables is in the ceiling. Cables are stapled to either lath (if ceiling is plaster), or gypsum board. Then either the plaster or an additional layer of gypsum board is put over the cable, as shown in the drawings.

The amount of cable required will depend upon the design of the house and its geographical location. Control is by individual room thermostats.

Courtesy: Hotpoint, Inc.

Courtesy: Ceilheat, Inc.
HEATING, COOLING, VENTILATION
Design Data for Circulating Hot Water Heating

**SERIES LOOP**

**ONE-PIPE**

**TWO-PIPE**

**PERIMETER HEATING SYSTEMS**

**COMPRESSION Tank**

**TANK**

**BUILT IN WATER HEATER**

**BOILER WITH BUILT-IN DOMESTIC HOT WATER HEATER**

**BASEBOARD PANELS**

**FINNED TUBE**

**COMMERCIAL HEATING**

**TIERED FINNED TUBES**

**BASEBOARD PANELS**

**CAST IRON**

**RECESSED OR NON-RECESSED FOR USE WITH WALL-TO-WALL CARPETING (BOTH ABOVE TYPES)**

**ZONED HOT WATER HEATING**

**KITCHEN**

**BEDROOM**

**LIVING ROOM**

RADIANT + CONVECTED HEAT = 3° DIFFERENCE BETWEEN FLOOR AND CEILING

*Courtesy: Better Heating-Cooling Council*
Type of furnace—high boy, low boy, counterflow, or horizontal—depends upon location, space available, and type of system. Choose labeled furnace for safety and good performance. True comfort requires filtered, humidified air circulated gently and evenly.

Duct system of engineered design required. Must be installed in accordance with design and proper clearances in accordance with applicable codes. Install balancing damper in each branch duct. Final adjustment and owner comfort depends on it.

Streamlined fittings needed for free-flowing system. Flexible connectors between furnace and duct system prevent vibration transmission.

Perimeter diffusers located under windows give most uniform comfort and assure best air distribution.

Air from perimeter diffusers should fan upward in front of windows. Diffusers may be in floor, baseboard, or low sidewall location.

Locate thermostat approximately 30-in. from floor. This is "sitting level" at which occupants are most sensitive to air temperature.

Choose sensitive thermostat which will give frequent, short burner cycle for even room temperature.

System must be balanced and adjusted to obtain uniform temperatures throughout every room of the house. Comfort Air Circulation adjustment also provides almost constant blower operation necessary for best balance and continuous, gentle air motion.

Courtesy: National Warm Air Heating and Air Conditioning Association
Types of cooling units—unitary, self-contained companion unit, evaporator with remote condenser unit, or heat pump (both heating and cooling)—any of these can be air cooled or water cooled. Select type to fit space and availability of water.

Comfort cooling requires gentle, even circulation of filtered, cooled, and dehumidified air. Fan and filter may be common to both heating and cooling systems.

Same features designed into quality duct system for cooling as for heating. Properly engineered, some duct can be used year-round.

Cover all supply ducts and fittings in unconditioned spaces and return lines through attic spaces with good insulation and vapor barrier. All joints of vapor barriers must be sealed.

Perimeter diffusers located under windows give most uniform comfort. Locate under every window to assure best air distribution.

Perimeter diffusers are excellent for year-round use. Ceiling diffusers and high side-wall outlets distributing air horizontally are especially good for cooling. Where cooling is involved, highside-wall returns are particularly desirable.

Reverse acting thermostat is required to control the operation of cooling unit. A second thermostat located adjacent to heating thermostat or a combination thermostat may be used for year-round control.

Sensitive thermostat with close differential is desirable for shorter “off-periods.” Setting is usually made somewhat higher than heating (77° to 80°).

System must be balanced and adjusted in order to obtain uniform temperatures throughout every room of the house. Comfort Air Circulation adjustment also provides almost constant blower operation necessary for best balance and continuous, gentle air motion.

Courtesy: National Warm Air Heating and Air Conditioning Assc.
HEATING, COOLING, VENTILATION
Planning for Air Conditioning

Orientation*

1. Sun exposure very brief, if any.
2. Little sunshading needed.
3. Overhang can be minimum.

1. Sun exposure is short but intensified by high air temperature and low angle.

Solutions (in order of effectiveness)
A. Sunshading by walls, trellis, lattice, high fences, low trees, etc.
B. Porch or veranda.
C. Attached carport or garage.
D. Awnings.
E. Minimum Glass Area.

1. Sun exposure is sustained and intensified by day’s hottest air.
2. Both tall and medium trees needed for shade.

Solutions (in order of effectiveness)
A. Attached carport or garage.
B. Porch or veranda.
C. Reflective screens.
D. Recommended overhang.
E. Avoid slabs reflecting heat against wall.

Recommended Roof Overhang*

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*Dimensions above staggered line generally not practical as an overhang unless used as porch due to added cost and structural problems. Figures apply to wall facing south.

Data from National Association of Home Builders

NOTE: Space prevents the publishing of cooling load calculator charts. However, several "short methods" of computing cooling loads are available. For one, write to Carrier Corp., Syracuse 2, N. Y., ask for Residential Cooling and Heating Load Calculator (price $2.00). For another, write to Aluminum Co. of America, Alcoa Bldg., Pittsburgh 19, Pa., ask for publication "Comfort Everybody Can Afford."
Ventilating Fans

**GENERAL INSTALLATION RULES**
Where fans are installed to discharge directly to outside they should be located with prevailing winds.

Fans discharging directly into attic should be centrally located if possible.

Flat-roofed buildings without adequate attic space should be provided with a penthouse for fan location. Either vertical or horizontal units may be used.

Provide adequate protection against fire in all installations. Various devices are available to insure fan cut-off and closing of intake louvres.

**MINIMUM AREAS FOR DISCHARGE OPENING**

<table>
<thead>
<tr>
<th>TYPE OF OPENING</th>
<th>SQUARE FEET PER 1000 CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood louvres backed with $\frac{1}{2}$&quot; hardware cloth. 40% minimum free area</td>
<td>2.27 Sq. Ft. per 1000 CFM</td>
</tr>
<tr>
<td>Metal louvres backed with $\frac{1}{2}$&quot; hardware cloth. 50% minimum free area</td>
<td>1.82 Sq. Ft. per 1000 CFM</td>
</tr>
<tr>
<td>Plain opening covered with $\frac{1}{2}$&quot; hardware cloth. 80% minimum free area</td>
<td>1.14 Sq. Ft. per 1000 CFM</td>
</tr>
<tr>
<td>Automatic or manual shutters, 90% minimum free area</td>
<td>1.01 Sq. Ft. per 1000 CFM</td>
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</table>

**ESTIMATING FAN REQUIREMENTS**

The following formula will aid in determining the size of the fan required to adequately ventilate a given area:

\[ \text{CFM} = \frac{\text{Volume of Area} \times \text{Desirable air change}}{\text{Rate of Air Exchange}} \]

* When estimating cubic feet contents, closets and other unoccupied areas may be deducted.
* Select rate of air exchange according to locality from map at the right.

**Example:**

Volume = 15,000 Cu. Ft.
Desirable air change = 11/2 minutes

\[ \frac{15,000 \times 1.5}{11.5} = 10,000 \text{ CFM (Fan Capacity)} \]

**FAN LOCATIONS**

- **Suction Box**
- **Attic Stairway**
- **Gable Installation**
- **Attic Wall**
- **Penthouse**
- **Basement**
- **Vertical Discharge**

The installation of attic fans generally follows the three methods shown at top of page. In homes with basements it is sometimes practical, and equally effective, to install the fan in a compartment beneath the basement stairs allowing the discharge to exhaust directly into the basement proper. Intake and discharge louvres should follow the same rules that apply to attic installation. The same precautions should be taken against fire.
HEATING, COOLING, VENTILATION

FHA REQUIREMENTS

Provide cross ventilation for each separate space by ventilating openings protected against the entrance of rain and snow.

Ratio of total net free ventilating area to area of ceiling shall not be less than 1/150, except that ratio may be 1/300 provided:

a. A vapor barrier having a transmission rate not exceeding one perm is installed on the warm side of the ceiling; or

b. At least 50 per cent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated (at least 3'-0" above eave or cornice vents) with the balance of the required ventilation provided by eave or cornice vents.

Attic space which is accessible and suitable for future habitable rooms or walled-off storage space shall have at least 50 per cent of the required ventilating area located in the upper part of the ventilated space as near the high point of the roof as practicable and above the probable level of any future ceiling.

HOW TO USE FREE AREA VENTILATION GUIDE

Using length and width dimensions of each rectangular or square attic space, find one dimension on vertical column, the other dimension on horizontal column. These will intersect at the number of square inches of ventilation required to provide 1/300th.

FREE AREA VENTILATION GUIDE

<table>
<thead>
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<th>WIDTH (IN FEET)</th>
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APRIL 1960

1/4" MESH SCREEN
Gross area = Net area

1/8" MESH SCREEN
Gross area = 1.25 x Net area

1/16" MESH SCREEN
Gross area = 2 x Net area

LOUVERS WITH 1/4" MESH SCREEN
Gross area = 2 x Net area

LOUVERS WITH 1/8" MESH SCREEN
Gross area = 2.25 x Net area

LOUVERS WITH 1/16" MESH SCREEN
Gross area = 3 x Net area

Remember — 1. Include overhang of roof area in measurement of attic areas. 2. At least 50% of the required ventilation must be in the highest part of the roof practicable. 3. Provide cross ventilation for each separate space.
NOW, from Van-Packer...

**All-Fuel Chimney** — A low cost, safe, attractive, residential chimney. Asbestos-cement housing in choice of four non-fade brick colors: red, white, buff and gray. Tile-lined sections are prefabricated; installation is fast, easy and economical. Each section has 3/8-inch fire clay tile liner, 3-inch vermiculite-concrete insulating wall, and asbestos-cement outer jacket. UL listed for all fuels, safe even for incinerators.

**Metal Gas Vent** — Double-wall, air-insulated gas vents are available in round or oval types. Special design makes installing easy — sections lock together simply, yet tightly, forming a strong, leak proof system. Inner wall of aluminum heats fast for greater efficiency; galvanized steel outer wall provides unusual strength. Full range of sizes and fittings. UL listed for standard (Type B) and recessed wall heaters (Type BW).

**Smokestacks** — Van-Packer Smokestacks for boilers and incinerators feature factory-built refractory sections with corrosion-resistant metal jackets that need no painting. They outlast steel stacks by three times (average), yet cost no more. Model HT Smokestacks are listed under the Factory Inspection and Label Service Program of Underwriters' Laboratories, Inc. Available in 10", 12", 15", 18", 21", 24", 30" and 36" ID's.

**Masonry Gas Vent** — This Van-Packer gas vent is made of 3/8-inch fire clay tile with an asbestos-cement jacket for safety and permanence. It is acidproof and fireproof, and won't dent, rattle, corrode or flake off. It is UL listed for Class B service and can be used with all gas-fired appliances (except incinerators) requiring a 3-inch to 7-inch ID flue. Comes with asbestos-cement brick-design panel housing in choice of four brick colors.

WITH A THERMO-CENTER YOU SAVE HUNDREDS OF DOLLARS PER HOME: (1) NO WATER SUPPLY OR DRAIN PIPING IS REQUIRED. (2) NO REFRIGERANT LINES ARE NEEDED. (3) DUCTWORK AND WIRING ARE SIMPLIFIED. (4) NO SPECIALIZED ON-THE-JOB CONSTRUCTION IS NECESSARY. (5) INSTALLATION TIME AND LABOR ARE GREATLY REDUCED. (6) LESS THAN 5 SQUARE FEET OF FLOOR AREA IS REQUIRED. GET THE FULL FACTS ABOUT THE THERMO-CENTER FROM YOUR CARRIER DEALER LISTED IN THE YELLOW PAGES. OR YOU CAN WRITE CARRIER CORPORATION, SYRACUSE, NEW YORK.

1 The first step is to put aside outdated notions of where a heating unit can be located. Planting the furnace in the middle of the basement was good enough years ago when people were satisfied simply with heating their homes.

2 In the Thermo-Center, the unit is moved to an outside wall. There's no change in the amount of ductwork required, nor is the system operation affected in any way. Heating units can be upflow, downflow or horizontal; gas or oil.

3 Next, the prefabricated sleeve and transition assembly is built into the wall and joined to the furnace plenum and ductwork. The sleeve and transition assembly can be applied to any standard type of wall construction.

4 The cooling unit is inserted into the sleeve, anchor brackets attached, seams caulked and electrical connections made. There are no refrigerant lines, no plumbing, no specialized on-the-job construction, no installation delays.

5 The Thermo-Center can be applied to any type of home—ranch, split level or multi-story. In a house with a basement, for example, the cooling unit is connected to a plenum set on top of an upflow Carrier Winter Weathermaker.

6 In a house built on a slab, the transition is joined to a Thermo-Center downflow plenum which supports the Winter Weathermaker. The plenum directs air from the heating and cooling units into the duct system.

Healthful comfort assured in award-winning homes with steel pipe radiant heating

The Oak Hill Development in Middletown, New Jersey, has been awarded top national honors in residential design and construction. And despite the wide choices available in these custom-built residences, the vast majority of buyers insisted on individually controlled steel pipe radiant heating systems. The great comfort and satisfaction in radiant heating over the past five years by more than 500 home owners in the adjacent Apple Brook Farm Development, was convincing proof!

Yes, modern steel pipe radiant heating, with its built-in comfort, uniform and draft-free heat, totally useful floor and wall space, is being used in more and more homes and commercial structures.

Steel pipe is first choice for radiant heating systems affording maximum comfort and space utilization . . . reliably and most economically. It is the most widely used tubular product for: drainage lines, structural applications, snow melting, refrigeration, gas, air and water transmission lines, fire sprinkler systems and in electrical conduit.

STEEL PIPE IS FIRST CHOICE
- Low cost with durability
- Strength unexcelled for safety
- Formable—bends readily
- Weldable—easily, strongly
- Threads smoothly, cleanly
- Sound joints, welded or coupled
- Grades, finishes for all purposes
- Available everywhere from stock

INSIST ON PIPE MADE IN U.S.A.

Steel pipe heating coils are shown installed in slab floors for an Oak Hill residence. Similar coefficients of expansion for steel and concrete make steel pipe the ideal choice for sturdy, trouble-free life.
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per copy with name stamped) or bill me.

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THAT EXTRA SELLING FEATURE
FOR NEW HOMES
Improves and beautifies ANY FIREPLACE!
Thermo-Rite
FIREPLACE ENCLOSURE

GLEAMING SOLID BRASS FRAME!
HEAT-TEMPERED GLASS DOORS!

Removable Louvers EASILY Kept Clean
INTERIOR
Glass Louvers with Finger-tip Adjustment
Retains the Beauty of the Glass Block
All Metal Parts are Made of STAINLESS STEEL

Vitroliner Chimneys with their concealed rain cap design, eliminate streaking on the housing and roof, by providing for the free flow of combustion gases from the chimney.

Vitroliner, THE PIONEER CHIMNEY, LEADS IN QUALITY AND ENGINEERING FEATURES.
Year-round living comfort 
adds SELL to your homes

Install GM DELCO heating-cooling

You save floor space, because Delco's complete line gives you the right-size cooling coil to stack on any up-flow, down-flow or horizontal furnace. Remote condenser, weatherproofed for exterior installation, is completely air-cooled . . . no water costs or restrictions. Complete blower-and-coil packages, too, for hot water and steam systems.

You reap greater savings and added sales appeal when you show your homes equipped for year-round living comfort with a product having national brand acceptance . . . backed by General Motors reputation. Get the facts how you can save . . . and profit . . . with Delco's complete line of air conditioning and heating units. Write, wire or phone for full details.
You Can Tell A Metalbestos Man
By the way he finishes a job!

When your heating contractor completes a Metalbestos gas vent installation, it's good for the life of the home. He uses the best pipe and installs it right. That "Safety System" Seal says so. It also says: no inspection problems, no customer complaints, no danger later on. Mighty comforting words for a builder. Ask any Metalbestos Man.

See your local Metalbestos representative or write Dept. L-1

Available Only From Metalbestos
Color Slide Film ("Heat in Harness") • Venting Service Schools • Vent Installation Handbook • "Safety System" Gas Vent Tables • Gas Vent Service Bulletins • Safety System Seals • Sales, Product & Technical Literature • Ad & Article Reprints • Direct Mail & Display Materials.
TENANTS of middle-income Oakwood Villa have the same luxurious comfort found in so many high rent apartment buildings—General Electric Built-In Thinline Air conditioning.

General Electric Thinline Air Conditioning Provides Luxury in Inexpensive Apartment


“We chose Built-In Thinlines over all other air conditioners because of the design that conceals the grille behind a decorator baffle, and because Thinlines have hidden controls. The units are almost invisible. But everyone notices the air conditioned comfort.”

All 100 apartments in Oakwood Villa have a Built-In Thinline Air Conditioner of 9,500 BTU* capacity in the living room. Two and three room apartments also have a 5,300 BTU unit in one of the bedrooms. Each apartment has its own air conditioning system controlled independently to the temperature and humidity desired.

If you are planning to build or if you own an existing building, there are General Electric Room Air Conditioners to satisfy your cooling needs, too. The Golden Value Line of the 60’s includes 18 different Thinline models, ranging from 5,300 to 16,000 BTU's*.

See your General Electric Dealer for full details. Room Air Conditioner Department, General Electric Company, Appliance Park, Louisville 1, Kentucky.

*Cooling capacities are tested and rated in compliance with NEMA Standard CN 1-1958 and are stated in terms of British Thermal Units.

Progress Is Our Most Important Product

GENERAL ELECTRIC

GENERAL ELECTRIC BUILT-IN THINLINE ROOM AIR CONDITIONERS ARE EASY TO INSTALL

Case installed during construction. Unit slides into case later. Add decorator panel. That's all there is to it.
BEST BOILER BUY!
New! ROBERTS-GORDON
“Petite” Gas-Fired
CAST IRON
HOT WATER BOILERS

Builders everywhere are saying, "We didn’t think we could ever get so much boiler at such a low price!" Roberts-Gordon "Petite" Boilers are compact, ready-to-install "packages". Perfect for space-saving installations in new homes and multiple apartments. Can be used singly, or in tandem for low-cost zone control. Easy to install, tops in efficiency. Ruggedly-built for dependable, trouble-free performance. 50,000, 70,000 and 90,000 BTU/HR.

GORDONEER
CAST IRON
GAS HOT
WATER BOILERS
These trouble-free units utilize the famous Roberts-Gordon "Spreader-Flame" principle, which insures maximum heating efficiency. Ideal for all gravity or forced circulation hot water heating systems. Wet base greatly increases efficiency and adaptability. Easy installation, minimum maintenance. 78,000, 115,000 and 150,000 BTU/HR.

BRAND NAMES DIRECTORY

(Continued from page 268)
ROLL-EEZ Junior-Pro Products Co
ROLL-O-WHEEL Buschman E W Co Inc
ROL THREAD Hillwood Mfg Co
ROL-TOP Kinnear Mfg Co
ROLLETTE Connerweld Corp
ROLITIVE Cement Midcontinent Adhesive Company
ROLY-DOOR Morrison Steel Products Inc
ROMAN BRONZE Revere Copper & Brass
ROMANESQUE Lustro Tile Mfg Co
ROMANS Watstontown Brick Co
ROMANY-SPARTAN US Ceramic Tile
ROMAR Romar Filter Corp
ROMEX General Cable Corp
ROOF DECK Graco Steel Products Co
ROOF INSUL Johns-Manville Corp
ROOMAIRE Young Radiator Co
ROOMATES York Wall Paper Co
ROSEMAN Tiller Rake Roseman Tractor Equipment Company
ROSEMOLD Midland Brick & Tile Co
ROSE WALTZON Masonite Corp
ROTARY Swartwout Co
ROT-STOP Rockeote Paint Co
ROTO-GLO Pass & Seymour Inc
ROTON-WATERED Sedgwick Mach Works
ROTORWOOD Parkwood Laminates Inc
ROUNDEL Mondial United Corp
ROUNDEVENT Webb Mfg Co Inc

RO-WAY Rowe Mfg Co
ROYAL Alumatic Corp of America
ROYAL Chattanooga Royal Co
ROYAL Crossett Lumber Co
ROYAL Sloan Valve Co
ROYALCOTE Masonite Corp
ROYAL EAGLE Eagle Rule Mfg Corp
ROYALFOLD Curtisson Corp
ROYAL Chattanooga Royal Co
ROYALTEX Polystyrene United Inc
ROYAL 24 INCH SHINGLES White Creek Shingle Co
RUBATEX Rubatex Div Great Amer Ind
RUBBERCOAT Wilbur & Williams Co
RUBBERCOTE Thomas Moulding Floor
RUBBERLIKE Bird & Son Inc
RUBBERLOCK Michell Rubber Products Inc
RUB-R-BOND Elliott Paint & Varnish Co
RUGASOL Sika Chemical Corp
RUGBY Standard Brick & Tile Corp
RUGGED ROLLING DOOR W M Products Corp
RULANE Suburban Propane Gas Corp
RUNWELL Frantz Mfg Co
RUSCO Ruskell F Co
RUSCO-MATIC Ruskell F Co
RUS-KIL Mobile Paint Mfg Co
RUSTBAAR Horn A C Div Sun Chem
RUSTEX Elliott Paint & Varnish Co
RUSTGO Stay-Tite Products Co
RUST-O-LEUM Rust-Oleum Corp
RUTLAND Rutland Fire Clay Co
RUUD ALCOA ALLOY Ruud Mfg Co
RUUDIATOR Ruud Mfg Co
R- V LITE Arvey Corp

FROM CARTON TO ATTIC...
Installed in Minutes!
BAR-BROOK*
BREEZEBUILDER* Package Unit
ATTIC FANS

... are true package units—NOT partially pre-assembled.
Fan, motor, ceiling shutter, and suction box are completely factory assembled, and wired to standard knock-out box on top of fan. Pre-cut ceiling trim. The builder's answer to economical home cooling. 3 sizes for 31", 36", 42" ceiling openings. UL Approved.

Also Model FH Fans for vertical or horizontal operation. 6 sizes, 30" to 54".

BAR-BROOK MFG. CO., Inc.
Box 6638-G
Shreveport, Louisiana
"T. M. Reg.
U.S. Pat. Off.

AMERICAN BUILDER
A nationally advertised unique symbol combined with a complete line of builder-designed furnaces. Your new home prospects will know this symbol. You will recognize the low cost installation features and their compactness.

Completely factory wired, assembled and tested, these compact units can be installed with the ease of an appliance. Installer simply connects flue, fuel lines and power service. Fits into a 23/4" wide space. Available for oil and gas.

Especially designed for use with Air Conditioning addition of Coil and Outdoor Condenser converts units into a Yearround Air Conditioner.

For really low cost houses, famous Williamson quality is available in the new Wintermatic economy line 75,000 and 100,000 BTU in gas; 100,000 in Oil. Hi-Boy and Counter-Flow models only.

Wintermatic and Special Series Units are 22 3/4" wide

<table>
<thead>
<tr>
<th>BTU</th>
<th>HI-BOY or COUNTER-FLOW</th>
<th>LO-BOY</th>
<th>HI-BOY</th>
<th>LO-BOY</th>
<th>COUNTER-FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>75,000</td>
<td>25</td>
<td>41</td>
<td>62</td>
<td>44</td>
<td>65</td>
</tr>
<tr>
<td>100,000</td>
<td>29</td>
<td>47</td>
<td>62</td>
<td>44</td>
<td>65</td>
</tr>
<tr>
<td>125,000</td>
<td>32</td>
<td>52</td>
<td>62</td>
<td>44</td>
<td>65</td>
</tr>
<tr>
<td>150,000</td>
<td>35</td>
<td>55</td>
<td>62</td>
<td>44</td>
<td>65</td>
</tr>
<tr>
<td>175,000</td>
<td>40.5</td>
<td>—</td>
<td>67</td>
<td>—</td>
<td>70</td>
</tr>
<tr>
<td>200,000</td>
<td>45.5</td>
<td>—</td>
<td>67</td>
<td>—</td>
<td>70</td>
</tr>
</tbody>
</table>

*Not available for oil fuel  †Not available in Wintermatic Series

THE WILLIAMSON COMPANY
3330 T4 Madison Rd., Cincinnati 9, Ohio

I want more information on your Builder Furnaces.

Name ____________________________
Address __________________________
City ____________________________ Zone ___ State ________

NAME ____________________________
Address __________________________
City ____________________________ Zone ___ State ________

NAME ____________________________
Address __________________________
City ____________________________ Zone ___ State ________

NAME ____________________________
Address __________________________
City ____________________________ Zone ___ State ________

NAME ____________________________
Address __________________________
City ____________________________ Zone ___ State ________

NAME ____________________________
Address __________________________
City ____________________________ Zone ___ State ________

NAME ____________________________
Address __________________________
City ____________________________ Zone ___ State ________

NAME ____________________________
Address __________________________
City ____________________________ Zone ___ State ________
It's easy to show the superiority of HYDROTHERM's HORIZONTAL boiler sections. Simple test quickly shows prospects how gas-fired HYDROTHERM's horizontal, cast iron boiler sections save fuel—boost efficiency. Hand held over flame feels direct heat of rising gases—beside flame, only radiant heat—hot gases slip by.

This convincing test demonstrates how HYDROTHERM efficiency brings luxury, gas-fired hydronic heating to a home they can afford. Hot gases rise, whether from match or burner. HYDROTHERM staggered, horizontal water sections, like hand over flame, force hot rising gases to traverse all water-backed, cast iron sections at right angles on their way from burner to flue. This true gas design transfers 40% more heat per pound of cast iron than possible with vertical section boilers—homeowners get a compact unit with less stand-by loss, quicker load pick-up—greater fuel savings. Explain these advantages with the graphic match test that lets prospects actually feel the difference. Try it—it really tells the story.

Send your construction plans. We'll prove how HYDROTHERM advanced engineering gives luxurious hot water heat at no extra cost.
THREE-WIRE, 220-VOLT PERIMETER WIRING

This system has two basic advantages over conventional wiring. First, it makes two circuits available for every one wire that’s pulled, reducing labor costs. And second, it makes 220-volts available in every room, so that room air conditioners can be installed without the need for additional wiring. Convenience outlets can be wired in either of the two ways shown, and overhead lights can be wired off the perimeter if it is desirable.

LOW-VOLTAGE RELAY SWITCHING

Low-voltage relay systems are most often used where it is desired to operate lights or other electrical devices from several different switches. The master switch system, shown above, is the most common: from one master switch, generally in the master bedroom, as many as nine key circuits in the house can be controlled. Low-voltage wire need not be armored or heavy, can be run at much lower cost than conventional 110-volt wire.
# ELECTRICAL, WIRING

## Load and Circuit Chart

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Typical Connected Watts</th>
<th>Volts</th>
<th>Wires</th>
<th>Circuit Breaker or Fuse</th>
<th>Outlets on Circuit</th>
<th>Outlet</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KITCHEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RANGE</td>
<td>12000</td>
<td>120</td>
<td>3 # 6</td>
<td>30A. 1 Special Purpose</td>
<td>1</td>
<td></td>
<td>Use of more than one outlet is not recommended.</td>
</tr>
<tr>
<td>OVEN (Built in)</td>
<td>4500</td>
<td>240</td>
<td>3 # 10</td>
<td>30A. 1 Special Purpose</td>
<td>1</td>
<td></td>
<td>May be direct connected.</td>
</tr>
<tr>
<td>RANGE TOP</td>
<td>6000</td>
<td>120</td>
<td>3 # 10</td>
<td>30A. 1 Special Purpose</td>
<td>1</td>
<td></td>
<td>May be direct connected.</td>
</tr>
<tr>
<td>RANGE TOP</td>
<td>3300</td>
<td>120</td>
<td>3 # 12</td>
<td>20A. 1 Special Purpose</td>
<td>1</td>
<td></td>
<td>May be direct connected.</td>
</tr>
<tr>
<td>DISHWASHER</td>
<td>1200</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 Parallel Grounding</td>
<td>1</td>
<td></td>
<td>These appliances may be direct connected on a single circuit. Grounded receptacles required, otherwise.</td>
</tr>
<tr>
<td>WASTE DISPOSER</td>
<td>300</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 Parallel Grounding</td>
<td>1</td>
<td></td>
<td>These appliances may be direct connected on a single circuit. Grounded receptacles required, otherwise.</td>
</tr>
<tr>
<td>BROILER</td>
<td>1500</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Heavy-duty appliances regularly used at one location should have a separate circuit. Only one such unit should be attached to a single circuit at the same time.</td>
</tr>
<tr>
<td>FRYER</td>
<td>1300</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Heavy-duty appliances regularly used at one location should have a separate circuit. Only one such unit should be attached to a single circuit at the same time.</td>
</tr>
<tr>
<td>COFFEEMAKER</td>
<td>1000</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Heavy-duty appliances regularly used at one location should have a separate circuit. Only one such unit should be attached to a single circuit at the same time.</td>
</tr>
<tr>
<td>REFRIGERATOR</td>
<td>300</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Separate circuit serving only refrigerator and freezer is recommended.</td>
</tr>
<tr>
<td>FREEZER</td>
<td>350</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Separate circuit serving only refrigerator and freezer is recommended.</td>
</tr>
<tr>
<td><strong>LAUNDRY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WASHING MACHINE</td>
<td>1200</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Grounding type receptacle required. Separate circuit is recommended.</td>
</tr>
<tr>
<td>DRYER</td>
<td>5000</td>
<td>240</td>
<td>3 # 10</td>
<td>30A. 1 Special Purpose</td>
<td>1</td>
<td></td>
<td>Appliance may be direct connected — must be grounded.</td>
</tr>
<tr>
<td>IRONER</td>
<td>1650</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Grounding type receptacle required. Separate circuit is recommended.</td>
</tr>
<tr>
<td>HAND IRON</td>
<td>1000</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Consider possible use in other locations.</td>
</tr>
<tr>
<td>WATER HEATER</td>
<td>3000</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Consult utility company for load requirements.</td>
</tr>
<tr>
<td><strong>LIVING AREAS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WORKSHOP</td>
<td>1500</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Separate circuit recommended.</td>
</tr>
<tr>
<td>PORTABLE HEATER</td>
<td>1300</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Should not be connected to circuit serving other heavy-duty loads.</td>
</tr>
<tr>
<td>TELEVISION</td>
<td>300</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Should not be connected to circuit serving appliances.</td>
</tr>
<tr>
<td>PORTABLE LIGHTING</td>
<td>1200</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Provide one circuit for each 500 sq. ft. Divided receptacle may be switch controlled.</td>
</tr>
<tr>
<td><strong>FIXED UTILITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIXED LIGHTING</td>
<td>1200</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Provide at least one circuit for each 1200 watts of fixed lighting.</td>
</tr>
<tr>
<td>AIR CONDITIONER 3/4 hp</td>
<td>1200</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Consider 4 kw 3-wire circuits to all window or console-type air conditioners. Outlets may then be adapted to individual 120- or 240-volt machines. Connection to general purpose or appliance circuits is not recommended.</td>
</tr>
<tr>
<td>CENTRAL AIR CONDITIONER</td>
<td>5000</td>
<td>240</td>
<td>Special Purpose</td>
<td>240</td>
<td>1</td>
<td>Parallel Grounding</td>
<td>Consult manufacturer for recommended connections.</td>
</tr>
<tr>
<td>HEAT PUMP</td>
<td>*14000</td>
<td>240</td>
<td>Special Purpose</td>
<td>240</td>
<td>1</td>
<td>Parallel Grounding</td>
<td>Consult manufacturer for recommended connections.</td>
</tr>
<tr>
<td>SUMP PUMP</td>
<td>300</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>May be direct connected.</td>
</tr>
<tr>
<td>HEATING PLANT</td>
<td>600</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Direct connected. Some local codes require separate circuit.</td>
</tr>
<tr>
<td>FIXED BATHROOM HEATER</td>
<td>1500</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 Parallel Grounding</td>
<td>1</td>
<td></td>
<td>Direct connected.</td>
</tr>
<tr>
<td>ATTIC FAN</td>
<td>300</td>
<td>120</td>
<td>2 # 12</td>
<td>20A. 1 or more Parallel Grounding</td>
<td>1</td>
<td></td>
<td>May be direct connected. Individual circuit is recommended.</td>
</tr>
</tbody>
</table>

*Maximum connected load (range varies from 6000 to 14000 depending on season).  

[Courtesy "Live Better Electrically"]
ELECTRICAL, WIRING

How to Light-Plan a House

GENERAL: All incandescent bulbs, except the low-wattage decorative types, must be shielded by a diffusing material. A minimum of one permanent lighting unit per room must be on switch control at room entrance or entrances when they are more than ten feet apart.

LIVING ROOM, FAMILY ROOM:
For rooms 125 square feet and below, required is either: a) A single lighting fixture 12-15 in. in diameter, holding one 100-watt bulb or three 40-watt bulbs, b) 6 feet of structural lighting such as a cornice, bracket or valance.
For room sizes between 125 and 225 square feet, required is either: a) A 15-17 in. fixture holding one 150-watt bulb or four 40-watt bulbs, b) 8-12 ft. of structural lighting.
For rooms over 225 square feet, 16-20 ft. of structural lighting is required. In all cases, a combination of structural and ceiling fixture lighting is desirable.

DINING AREA: Required is ceiling fixture, suspended type preferred, centered above spot for dining table, incorporating at least 150 watts in one or more bulbs. If possible, one foot of structural lighting for every 12 square feet of room area should also be used.

KITCHEN:
For general lighting, there should be one ceiling fixture, a minimum 12 inches in diameter, to house one 150-watt, two 75-watt, or three 60-watt bulbs. If fluorescent type, use two 40-watt, four 20-watt, or two circline fluorescent lamps.
For local lighting, above sink in front of window use additional ceiling fixture as above, or one recessed fixture in soffit containing a minimum of 150 watts.
For sink under a cabinet, range, and work counters, required is a wall bracket containing one 20-watt fluorescent, or two 40-watt incandescent for each four feet of counter. If mounted flush with underside of cabinets, shielding is not required.

BEDROOMS: For bedrooms 125 square feet and below, use either: a) One ceiling fixture with a 12-15 in. diameter containing one 100-watt bulb, or b) three 40-watt bulbs, and 6 feet of structural lighting. For bedrooms between 125 and 225 square feet, use 15-17 in. fixture containing one 150-watt or four 40-watt bulbs, or 8-12 ft. of structural lighting.
A combination of both is most desirable.

BATHROOM AND LAVATORY:
One fixture located at each side of grooming area and one fixture located on ceiling or wall over grooming area. Each of these should accommodate one 20-watt fluorescent, two 40-watt incandescent, or one 60-watt incandescent. For wall-to-wall mirrors, a row of shielded fluorescent tubes should be extended across full width of mirror.

LAUNDRY, UTILITY, WORKSHOP, BASEMENT: A minimum of one ceiling or wall fixture over each principal work area. Ceiling fixtures should be a minimum 12 in. in diameter carrying a minimum 150 watts in bulb or bulbs. For fluorescents, two 40-watt, four 20-watt, or two circline fluorescent lamps. Wall brackets along work areas should contain one 20-watt fluorescent, or two 40-watt incandescent, for each four feet of area to be covered.

OUTSIDE THE RESIDENCE: A minimum of one or more fixtures at each entrance of the residence.

ACCESSIBLE UNFINISHED STORAGE AREAS: A minimum of one fixture socket or wall bracket for each 200 square feet of floor space.

CLOTHES CLOSETS: A minimum one-lamp receptacle or fixture for each full-door closet.

GARAGE OR CARPORT: A minimum of one lamp receptacle or fixture using one 100-watt bulb at both sides of each parking area.

Courtesy: American Home Lighting Institute, Inc.
Selected Built-in Lighting Details

VALANCE
Shown here with side-mounted channel. Tube should be far enough from wall to prevent drapery from shielding downward light. Provides both ceiling- and wall-lighting.

CORNICE
Provides wall light only. Face-board joins ceiling. Channel is ceiling-mounted. Recommended for low-ceiling rooms, or where window head is close to ceiling.

COVE
Emits light horizontally and upward unless shield is translucent (luminous cove). Should be either luminous or low enough to flood upper wall—otherwise too inefficient for home lighting applications.

BRACKET
Like valance, but centerline of faceboard is on same level with tube, should be closer to wall. Light emission is both upward and down.

RECESSED DOWNLIGHT
Technically a fixture, but its inclusion in home should be planned prior to rough wiring. Using reflector-type bulb, adds highlights and drama to interior design.

CONCENTRIC RING LOUVER
Like valance, but centerline of faceboard is on same level with tube, should be closer to wall. Light emission is both upward and down.

EDGELIGHTING
Arrangement of plastic or glass panel to transmit light edgewise — invisibly except where decorative cuts, ripples, or flutes in surface re-direct light, appear as its source.

SOFFIT
Underside of beam or furred-down section containing recessed luminous panel. Chiefly for local lighting, but several soffit panels could provide adequate general illumination.

METAL REFLECTOR

CANOPY-OVERHANG
Like luminous cove; but downward, diffused light is primary purpose of structure. Uniform brightness of diffusion panel would normally require at least two rows of tubes.

TROFFER
A fixture that provides a "pre-assembled" recessed panel including reflector. Generally narrow, made to permit end-to-end, continuous runs.

SUSPENDED CEILING
Either diffusion or opaque material suspended to form light plenum. Plastic or glass left open (right) would afford better ventilation, but could be harder to shield properly.

COFFER
A recessed cavity open at bottom with high cut-off angle. Interior surface becomes an indirect, diffused light source, primarily local.
## TYPICAL SERVICE-ENTRANCE SCHEDULES FOR VARIOUS LEVELS OF UTILIZATION — 115/230 volts, 3-wire

<table>
<thead>
<tr>
<th>Nominal Rating</th>
<th>Maximum Capacity</th>
<th>Main Switch</th>
<th>Main Control Center Units</th>
<th>Size of Service Wire</th>
<th>Size of Conduit</th>
<th>Utilization Circuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>100A</td>
<td>24,000 watts</td>
<td>100A Sw. or 100A Cir. Bkr.</td>
<td>2-50A (Water Heater)</td>
<td>2—No. 2</td>
<td>1⅛&quot;</td>
<td>General Purpose, Electric Cooking, Electric Laundry, Water Heater, Air Conditioning</td>
</tr>
<tr>
<td>150A</td>
<td>36,000 watts</td>
<td>200A Sw. (150A Fuses) or 150A Cir. Bkr.</td>
<td>3-50A (Water Heater)</td>
<td>2—No. 2/0</td>
<td>2&quot;</td>
<td>General Purpose, Electric Cooking, Electric Laundry, Water Heater, Air Conditioning (Small Homes)</td>
</tr>
<tr>
<td>200A</td>
<td>48,000 watts</td>
<td>200A Sw. (200A Fuses) or 200A Cir. Bkr.</td>
<td>4-50A (Water Heater)</td>
<td>2—No. 4/0</td>
<td>2&quot;</td>
<td>General Purpose, Electric Cooking, Electric Laundry, Air Conditioning, Water Heater, Electric Heating (Temperate Climate)</td>
</tr>
</tbody>
</table>

### SAMPLE SERVICE-ENTRANCE CALCULATION

For a 1500 sq. ft. home with electric range, electric water heater and electric home laundry.

**Lighting and General-Purpose Load:**
- 1500 sq. ft. x 4 watts/sq. ft. = 6000 watts

**Small Appliance Load:**
- Number of appliance circuits included in branch circuit layout = 4
- Total 14000 watts
- Take 3000 at 100% = 3000 watts
- Remainder of 11000 at 35% = 3850 watts

**Fixed Appliance Load:**
- Water heater = 3000 watts
- Clothes dryer = 4500 watts
- Clothes washer = 500 watts
- Ironer = 1650 watts
- Total of service capacity: 24500 watts

**Required current-carrying capacity of service-entrance conductors (at 115/230 volts, 3-wire, single-phase):**

\[
\frac{24500}{230} = 106.5 \text{ amperes}
\]

Service-entrance conductors must be:
- No. 1's Type R in 1½" Conduit
- No. 1½'s Type TW in 1½" Conduit
- No. 2's Type RH in 1½" Conduit

This service entrance can be described as a 25 kw service, the value obtained by multiplying the current rating of the service entrance by the voltage between the two ungrounded conductors (230 volts). A wide range of possible service entrance arrangements could be used to carry out the design set forth in this typical calculation. If a main disconnect switch is not required by local regulations, six or less circuit breakers can be used as protective subdivisions as set forth in Section 2351 a. of the National Electrical Code. If a main disconnect switch were required in this particular service entrance, either a 200-amp switch fused at 110 amps or, because the calculation contains spare capacity, a 100-amp switch fused at 100 amp or a 100-amp circuit breaker may be used as the main disconnect.

*Courtesy Live Better Electrically*
GUARANTEED FOR LIFE
Murray “MP” fully magnetic circuit breakers help you

PROSPECTS know that only the best is GUARANTEED FOR LIFE. Show them you use only the best with this lifetime guarantee on competitively priced Murray “MP” circuit breakers.

Your electrical contractor will leave visible proof of quality on every installation: a GUARANTEED FOR LIFE sticker and an official warranty in every load center. These instill confidence in the whole wiring job, giving you that extra talking point to clinch the sale.

Look at these “MP” sales features:
- Modern circuit breaker convenience and safety
- Finest branch circuit protection possible
- Installs anywhere for maximum wiring economy
- No nuisance tripping saves you customer gripes

Ask your electrical contractor to install GUARANTEED FOR LIFE, fully magnetic Murray “MP” circuit breakers on your next job. Ask him also about the Model Home Promotional Aids he has available for you. For further information, write Murray directly for bulletin which tells how national GUARANTEED FOR LIFE promotion can help make sales for you. Murray Manufacturing Corporation, 1250 Atlantic Avenue, Brooklyn 16, N. Y.
ONE MODEL HOME STANDS OUT
...it's the one with salespower by Lightolier

It may take a few dollars more (but not many) to put Lightolier fixtures in your models. And for those dollars you get the Lightolier name, evidence of quality; Lightolier lighting, evidence of sound planning; Lightolier styling, proof of your good taste. Perfect example: the exciting new Corona fixture above. The efficient fluorescent light is framed with walnut to give the look of fine cabinet work. Other examples below, priced to fit any sensible budget. To learn more about Lightoliers and what they can do for your homes, fill out the coupon today.

LIGHTOLIER, Dept. AB-40
Jersey City 5, N.J.
Please send me your new free catalog of lighting especially for builders, the name of my Lightolier distributor, details of your builder merchandising plan.
NAME
TITLE
FIRM NAME
ADDRESS

Showrooms: New York—11 E. 36th St; Chicago—1267 Merchandise Mart; Dallas—1718 Hi Line Drive; Los Angeles—2515 So. Broadway
NEW ECONOMY MODEL INTERCOM FOR BUDGET PRICED HOMES

The "Cadet," an AM standard system, is a new addition to the Progress line of Sound-Guard Intercoms. Now builders of economy homes can offer the luxury of a radio-intercom. Since the housing kit is the same for all 4 Sound-Guard systems, the buyer has the choice of deluxe models such as AM-FM, clock-controlled AM, or AM deluxe radio intercoms. (not illustrated)

ACCESSORY WITH PHOTOELECTRIC CONTROL ACTIVATES POST LANTERN

The Progress Nite-Guard will fit any 3" post. A photoelectric cell automatically turns the post lantern on at dusk and off at dawn. An exclusive control allows adjustment of on-off light levels. Simple to install, Nite-Guard offers homeowners protection and safety.
From Virden, famous for quality, comes a new and separate line of lighting fixtures. Called Scotch Plaid Lighting, here is beauty in design, excellence in workmanship, at a truly economical price! Ideal for tract homes or low-cost housing. Excellent for remodeling, wherever you want high-style at budget prices. See the new Scotch Plaid Lighting line at your nearby Virden distributor. Ask him for your copy of our new, free, full-color catalog. Or mail the coupon below.

130 items in full color. All styles, all types.
- ceiling pieces
- wall brackets
- pulldowns
- outdoor fixtures
- recessed

See your Virden distributor or mail the coupon today!

Virden Lighting, Dept. AB-4
5209 Euclid Avenue
Cleveland 3, Ohio

Please send me your free Scotch Plaid Catalog SP-160.

Name: ____________________________
Address: __________________________
City: __________________ State: ______
(Continued from page 280)

SHERMAN-NAPCO Sherman Prods Inc
SHIELDLALL Textron Metals Co
SHIELDCOTE ENAMEL Marietta Paint
SHIELDWHITE PAINT Marietta Paint
SHINGLE N SHAKE Lowe Bros
SHIRLEY Shirley Corp
SHOKTROL Zurn Indus Inc
SHOPMASTER Shopmaster Div Energy Mfg Co
SHOPMATE Portable Electric Tools Inc
SHORGAS Suburban Propane Gas Corp
SHOWELAIRE C & H Air Conditioning Co
SHOWERAMA Daryl Products Corp
SHOWERGLASS Shower Door Co of Am
SHOWERITE Efron Theodore Mfg Co
SHOWER MAGIC Daryl Products Corp
SHOWER-PROOF Calbar Paint & Varnish
SHOWLINE Hirsh S & Mfg Co
SHUREBOND UNIT SYSTEM Goldsmith
SHURE-SET Ramset Fastening System
SHUR-STEP Mayes Bros Tool Mfg Co
SHUR-TRED Johnson's Wax
SI-CLONE Simonds Saw & Steel Co
SIERRA Fiat Metal Mfg Co
SI-FLO Speakman Co
SIGMA Wakefield Co
SIGNAL Signal Electric Div King-Seeley
SIGNIT Sika Chemical Corp
SIKA-KOTE Sika Chemical Corp
SIKACRETE Sika Chemical Corp
SIKA-GARD Sika Chemical Corp
SIKA SEAL Sika Chemical Corp
SILOCOAT American Asbestos Prod Co
SILATEX Tamms Industries Co
SILCOTITE Ceresit Waterproofing Corp
SILENT-FLOW Goulds Pumps Inc
SILENT GLIDE Weatherproof Products
SILENTILE Curtis Companies Inc
SILENTKNIGHT White-Rodgers Co
SILENTTEX Chicago Spring Hinge Co
SILENTITE Curtis Companies Inc
SILENTVANE Westinghouse Elec Corp
SILENT NITE Wright Prods Inc
SILICONE SEAL Penn Cret Co Prods Co
SILICONE X-5 Elliott Paint & Varnish Co
SILICONIZ Lockrey Co
SILL-TITE Sterling Quality Products Inc
SIL-O-ETT United States Gypsum Co
SILVARA Shakertown Corp
SILVERCEL Silvercote Prods Inc
SILVERSTEEL Atkins Saw Div
SILVERSTAR Alumicorp of America
SIMBA Tubular Structures Corp of Am

(Continued on page 298)

MOSLEY TV WIRING HELPS SELL HOMES

Complete packaged kits with wiring, wall plates and hardware...designed by Mosley electronic specialists for perfect-picture reception.

Gives each home a factory-engineered, built-in system that connects one rooftop antenna with two or four rooms. (Have a set in each room or move one around.)

ALREADY USED IN THOUSANDS OF QUALITY HOMES
WRITE FOR YOUR FREE BOOKLET AB-4 NOW!

Mosley Electronics Inc.
4610 N. Lindbergh Blvd. * Bridgeton, Mo.
Fashion Fixtures for Your Homes at Bargain Prices during this spring promotion on PULLDOWNS by MOELIGHT

Dress up your homes with "high style" MOE Light pull-downs and turn prospects into buyers... faster, easier. Contemporary and traditional designs, to blend with your home style. Ideal for dining areas, living and bedrooms. Nationally advertised in American Home and House & Garden. Contact your electrical contractor for full information on fixtures.

M-1537 Frosted White and Polished Brass; adjusts 16" to 41 1/2"; 21" dia. shade. Regular Price $29.95. Special Price $24.95.

M-1535 Antique White and Polished Brass; adjusts 18" to 46 1/2"; 20" dia. shade. Regular Price $34.95. Special Price $29.95.

M-1529 Perforated Polished Brass; adjusts 19" to 47"; 20" dia. shade. Regular Price $34.95. Special Price $29.95.

M-1533 Antique White and Polished Brass; adjusts 25 1/2" to 53"; 16" dia. shade. Regular Price $39.95. Special Price $34.95.

SPECIAL INTRODUCTORY PRICES until May 15, 1960 only. Prices shown are for fixtures only. (Add a MOE Light M-1599 Track to move fixture back and forth 6 feet.)

SEND FOR COMPLETE NEW CATALOG LIGHTING GUIDE

THOMAS INDUSTRIES INC.
LIGHTING FIXTURE DIVISION
Executive Offices: 207 E. Broadway, Louisville 2, Kentucky
Leaders in Creative Lighting

THOMAS INDUSTRIES INC., LIGHTING FIXTURE DIVISION
207 E. Broadway, Dept. AB-4
Louisville 2, Kentucky

Send new 64-page MOE Light decorative lighting guide and catalog, "Visions of Beauty... Fashions in Light," showing in full color how to decorate every room with light.

Company
Address
City Zone State
Your Name
Into the hands of the building trade...

BESTWALL QUALITY at COMPETITIVE COST

*Regular Gypsum Wallboard
*Firestop Gypsum Wallboard
*Hummer Systems of Gypsum Wallboard Applications
Joint Systems • Metal Casing and Corners
*Insulating Gypsum Wallboard
*Wood Grained Wallboards
*Fireproof Gypsum Sheathing

*Gypsum Plasters
*Lite Mix
Gypsum Lath • Lite Acoustic Plaster
Concrete Bond Plaster • Finish Coat
Gauging Plaster • Keene Cement
Builder's Lime

*Reinforced with glass fibers—a Bestwall "first"

YOUR BEST BUY IS BESTWALL

BESTWALL GYPSUM COMPANY
Ardmore, Pennsylvania

Plants and offices throughout the United States
FLOOR, WALL, CEILING MATERIAL

Hardwood Flooring Data

**STANDARD SIZES, COUNTS and WEIGHTS**

“Nominal” is the size designation used by the trade, but it is not always the actual size. Sometimes the actual thickness of hardwood flooring is 1/8-inch less than the so-called nominal size.

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Actual</th>
<th>Counted</th>
<th>Weights M Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; x 2&quot;</td>
<td>3/4&quot; x 5/8&quot;</td>
<td>1&quot; x 2&quot;</td>
<td>2000 lbs.</td>
</tr>
<tr>
<td>3/4&quot; x 1 1/2&quot;</td>
<td>3/4&quot; x 1 1/4&quot;</td>
<td>1&quot; x 2 1/2&quot;</td>
<td>1900 lbs.</td>
</tr>
<tr>
<td>3/4&quot; x 2&quot;</td>
<td>3/4&quot; x 2 1/2&quot;</td>
<td>1&quot; x 2 1/2&quot;</td>
<td>1800 lbs.</td>
</tr>
<tr>
<td>3/4&quot; x 1 1/2&quot;</td>
<td>3/4&quot; x 1 3/4&quot;</td>
<td>1&quot; x 2 3/4&quot;</td>
<td>1600 lbs.</td>
</tr>
<tr>
<td>3/4&quot; x 2&quot;</td>
<td>3/4&quot; x 2 1/2&quot;</td>
<td>1&quot; x 2 3/4&quot;</td>
<td>1500 lbs.</td>
</tr>
</tbody>
</table>

**SQUARE EDGE**

<table>
<thead>
<tr>
<th>N&quot; x 2&quot;</th>
<th>N&quot; x 2&quot;</th>
<th>face count</th>
<th>1200 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N&quot; x 1 1/4&quot;</td>
<td>N&quot; x 1 1/4&quot;</td>
<td>face count</td>
<td>1200 lbs.</td>
</tr>
</tbody>
</table>

NOTE: Oak, Beech, Birch, Hard Maple and Pecan Flooring are bundled by averaging the lengths. A bundle may include pieces from 6 in. under to 6 in. over the nominal length of the bundle. No piece shall be considered less than 1 ft. in length.

According to the grading rules on this page, all flooring shall be considered standard grade unless the lumber from which the flooring is manufactured has been properly kiln-dried.

**ESTIMATING FLOORING**

Figures below are board feet of various sizes of flooring required to cover square feet of floor space shown at left.

<table>
<thead>
<tr>
<th>Square Ft. Floor</th>
<th>3/16&quot;</th>
<th>1/8&quot;</th>
<th>1/4&quot;</th>
<th>1/2&quot;</th>
<th>1/4&quot;</th>
<th>1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space</td>
<td>3/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
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<td>1107</td>
<td>1032</td>
<td>1032</td>
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<td>1161</td>
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<td>1383</td>
<td>1383</td>
<td>1290</td>
<td>1290</td>
<td>1290</td>
</tr>
</tbody>
</table>

**COMPUTING FLOORING NEEDS**

To determine the board feet of flooring needed to cover a given space, first find the area in square feet then add it to the percentage of that figure which applies to the size flooring to be used, as indicated below. The additions provide allowance for side-matching plus an additional 5% for end-matching and normal waste.

- 55% for 3/4" x 1 1/2"
- 45% for 3/4" x 2"
- 38% for 3/4" x 2 1/2"
- 29% for 3/4" x 3 1/2"
- 38% for 3/4" x 4"
- 30% for 3/4" x 4 1/2"
- 30% for 3/4" x 5"

The above figures are based on laying flooring across the room. Where there are bay windows or other projections, allowance should be made for additional flooring.

**NAIL SCHEDULE — OAK FLOORING**

Tongued-and-grooved flooring. To be blind-nailed.

- 1/4 x 2 — Bright casing nail — 4d wire or cut nail, or screw nail. 8 in. apart. Wood subfloor required.
- 5/8 x 2 1/2 — 7d or 8d screw type or cut steel nail.
- 5/8 x 3 — 7d or 8d screw type or cut steel nail. 10-12 in. apart. Wood subfloor required.
- 5/8 x 3 1/2 — 7d or 8d screw type or cut steel nail. 10 in. apart. Wood subfloor required.

**Square-edge flooring. Face-nailed.**

- 1/4 x 2 — 1-in. 15 gauge fully barbed flooring brad, preferably cement coated. 2 nails every 7 in. Wood subfloor required.

*If steel wire flooring nail is used, it should be 8d, preferably cement coated. Newly developed machine-driven barbed fasteners of the size recommended by the manufacturer are acceptable.*

## Resilient Flooring Data

### Dimensions*

<table>
<thead>
<tr>
<th>Size or Width,</th>
<th>Inches</th>
<th>Thickness,</th>
<th>Tiles</th>
<th>Tile</th>
<th>Tiles</th>
<th>Tile</th>
<th>Tiles</th>
<th>Sheet</th>
<th>Tile</th>
<th>Tiles</th>
<th>Tile</th>
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<tbody>
<tr>
<td>9 x 9</td>
<td>9 x 9</td>
<td>0.125</td>
<td>0.125</td>
<td>0.0625</td>
<td>0.0625</td>
<td>0.0625</td>
<td>0.0625</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
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<tr>
<td>9 x 9</td>
<td>0.1875</td>
<td>0.1875</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
<td>0.080</td>
</tr>
</tbody>
</table>

### Cost

<table>
<thead>
<tr>
<th>Approximate</th>
<th>Installed Cost</th>
<th>Per Square Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.125&quot;</td>
<td>0.125&quot;</td>
<td>0.0625</td>
</tr>
<tr>
<td>0.125&quot;</td>
<td>0.125&quot;</td>
<td>0.0625</td>
</tr>
<tr>
<td>0.125&quot;</td>
<td>0.0625</td>
<td>0.0625</td>
</tr>
<tr>
<td>0.080&quot;</td>
<td>0.080&quot;</td>
<td>0.080&quot;</td>
</tr>
<tr>
<td>0.080&quot;</td>
<td>0.080&quot;</td>
<td>0.080&quot;</td>
</tr>
</tbody>
</table>

### Use Level**

<table>
<thead>
<tr>
<th>Use Level**</th>
<th>Suspended</th>
<th>On Grade</th>
<th>Below Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### Physical Characteristics

| Thermal Conductivity (Btu/HR./Sq. Ft./°F/in.) | 3.1 | 3.1 |
| Relative Maximum Static Load Without Permanent Indentation (Lbs./Sq. In.) | 25/Fair | 25/Fair |
| Under Foot Comfort | Fair | Fair |
| Apparent Warmth to Touch | Fair | Fair |
| Quietness (Noise Level) | Fair | Fair |
| Surface Alkali Resistance | Excellent | Excellent |
| Grease Resistance | Fair | Fair |
| Ease of Maintenance | Very Good | Very Good |

**Nominal commercial dimensions only are shown—other sizes, shapes, thicknesses and widths vary with manufacturer.

**When installed in accordance with the specific precautions and recommendations of the manufacturer.

---

Material Courtesy Building Research Institute
FLOOR, WALL, CEILING MATERIAL

Ceramic Tile Standards

GLAZED CERAMIC INTERIOR TILE

Nominal thickness of Glazed Interior Tile shown in drawings is 3/16". Tiles 6" x 9" x 1/16" and 6" x 12" x 1/16" are available from some manufacturers. Nominal sizes shown are subject to slight variation. Also available from most manufacturers: these shapes in a bright glaze, a matte glaze and a special purpose glaze. The shapes in black are those most frequently used and those shaded are available when required.

QUARRY TILE

Basic shapes for flat Quarries are shown in black. For the trimmer shapes shown there are complementary corner pieces available. Consult the Tile Contractor if other shapes than those illustrated are required for special conditions. Dimensions shown on the drawings are nominal... some slight variation is to be expected in actual measurements. Shapes other than the basic ones shown are available from some manufacturers.

UNGLAZED CERAMIC MOSAIC TILE

The series of sizes of Unglazed Ceramic Mosaic is usually referred to as the 2" or the 1-9/16" series. Actually there are slight variations, according to the practice of manufacturers as follows: C = 2", 2-3/16", 1-9/16" or 1-15/16". Basic shapes are shown in black on the drawing. Pentagon and Octagon shapes are made by some manufacturers. For both Coves and Caps there are complementary corner pieces available.

PAVER TILE

The basic shapes for flat Paver Tile are shown in black. For the coves and caps there are the complementary corner pieces available. Consult the Tile Contractor if other shapes are required for special conditions. The sizes shown are nominal dimensions and will have a slight tolerance.

CERAMIC MOSAIC

The series of sizes of Ceramic Mosaic is usually referred to as the 2" or the 1-9/16" series. Actually there are slight variations, according to the practice of manufacturers as follows: C = 2", 2-3/16", 1-9/16" or 1-15/16". Basic shapes are shown in black on the drawing. Pentagon and Octagon shapes are made by some manufacturers. For both Coves and Caps there are complementary corner pieces available.

NOTE: In the industry today, ceramic tile is set (1) with cement mortar; (2) with organic adhesives, and (3) with cement mortar—using a newly-developed thin-setting bed method. Information on all three methods may be obtained from the Tile Council of America, Inc., 800 Second Ave., New York 17, N. Y.

Courtesy Tile Council of America

APRIL 1960
Polyethylene plastic wall tile which carry this hallmark indicate compliance with Commercial Standard 168-50 which includes the following conditions:

- **DIMENSIONAL TOLERANCES**—The face sizes of tiles shall not vary from the other, in any comparable dimension, more than a negative tolerance of 1/10 of 1% or 0.005 in., whichever is greater, and by a positive tolerance of 2 10 of 1% or 0.010 in., whichever is greater.
- **THICKNESS**—The thickness of the plastic in tile shall be greater than 0.062 in. The lip on the tile shall extend at least 0.033 in. beyond the back of the tile.

**ESTIMATING AND DESIGNING FACTORS**

(Based on 4 1/4 x 4 1/4 Tile)

<table>
<thead>
<tr>
<th>LENGTH OF TILE</th>
<th>NO. OF TILE</th>
<th>LENGTH</th>
<th>NO. OF TILE</th>
<th>LENGTH</th>
<th>NO. OF TILE</th>
<th>LENGTH</th>
<th>NO. OF TILE</th>
<th>LENGTH</th>
<th>NO. OF TILE</th>
<th>LENGTH</th>
<th>NO. OF TILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 1/4</td>
<td>1</td>
<td>3'-10</td>
<td>11</td>
<td>7'-5</td>
<td>21</td>
<td>10'-1-1/2</td>
<td>31</td>
<td>14'-6</td>
<td>41</td>
<td>18'-0</td>
<td></td>
</tr>
<tr>
<td>5'-8</td>
<td>2</td>
<td>4'-3</td>
<td>12</td>
<td>7'-9</td>
<td>22</td>
<td>11'-4</td>
<td>32</td>
<td>14'-10</td>
<td>42</td>
<td>19'-5</td>
<td></td>
</tr>
<tr>
<td>1'-10</td>
<td>3</td>
<td>4'-7</td>
<td>13</td>
<td>8'-1</td>
<td>23</td>
<td>11'-8</td>
<td>33</td>
<td>15'-2</td>
<td>43</td>
<td>19'-9</td>
<td></td>
</tr>
<tr>
<td>1'-6</td>
<td>4</td>
<td>4'-11</td>
<td>14</td>
<td>8'-6</td>
<td>24</td>
<td>12'-0</td>
<td>34</td>
<td>15'-7</td>
<td>44</td>
<td>19'-1</td>
<td></td>
</tr>
<tr>
<td>1'-9</td>
<td>5</td>
<td>5'-3</td>
<td>15</td>
<td>8'-10</td>
<td>25</td>
<td>12'-4</td>
<td>35</td>
<td>15'-11</td>
<td>45</td>
<td>19'-3</td>
<td></td>
</tr>
<tr>
<td>2'-11</td>
<td>6</td>
<td>5'-8</td>
<td>16</td>
<td>9'-2</td>
<td>26</td>
<td>12'-9</td>
<td>36</td>
<td>16'-3</td>
<td>46</td>
<td>19'-10</td>
<td></td>
</tr>
<tr>
<td>2'-3</td>
<td>7</td>
<td>6'-1/2</td>
<td>17</td>
<td>9'-6</td>
<td>27</td>
<td>13'-1</td>
<td>37</td>
<td>16'-7</td>
<td>47</td>
<td>20'-2</td>
<td></td>
</tr>
<tr>
<td>2'-10</td>
<td>8</td>
<td>6'-4</td>
<td>18</td>
<td>9'-11</td>
<td>28</td>
<td>13'-5</td>
<td>38</td>
<td>17'-0</td>
<td>48</td>
<td>20'-6</td>
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<td>19</td>
<td>10'-3</td>
<td>29</td>
<td>13'-9</td>
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<td>17'-4</td>
<td>49</td>
<td>20'-10</td>
<td></td>
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<td>7'-1</td>
<td>20</td>
<td>10'-7</td>
<td>30</td>
<td>14'-2</td>
<td>40</td>
<td>17'-8</td>
<td>50</td>
<td>21'-3</td>
<td></td>
</tr>
</tbody>
</table>

**HOW TO USE THIS TABLE**

This table can be valuable to the designer and estimator in several ways.

1. In designing or layout, the number of courses of tile can be ascertained, for any required height or length of wall.

   Example: Assume that a wainscot height of 4'-6" is desired and it is required to know the number of tiles necessary to approach this dimension. Checking the table it will be found that 13 tiles give a course height of 4'-7 1/4".

2. Estimating tile quantities for a given area.

   Example: Length of wall in lineal feet—17'-0"
   
   Height of wall—5'-8"
   
   Number of tile in 17'-0" = 48
   
   Number of tile in 5'-8" = 16
   
   48 x 16 = 768 tiles required.

   3. Estimating the number of pieces of 4 1/4" cap, base or feature strip required for lineal feet of wall.

   Example: Assume total lineal feet of wall to be tiled to be 48 feet.

   Consulting the table it will be found that 34 pieces are needed for 12 feet. Therefore: 34 x 3 = 102 the total number of pieces required.
CELLULOSE-FIBER TILE

There are, of course, very definite acoustical properties in the tiles shown here, and, as you might expect, the amount of sound absorption varies with the material, thickness, density, etc. of the product. This variance is measured in n.r.c., or Noise Reduction Coefficient. We mention this because you might be led to compare the materials and products strictly on their n.r.c. rating. This would be a mistake, since the variance is seldom one that the human ear can discern. This is particularly true in the home.

When choosing tile, it is best to take all factors into consideration. This would include: appearance, light reflection, thickness, moisture resistance, maintenance, insulation value, ease of installation, flame resistance and cost.

The standard size of this tile is 12"x12", although nearly all are available with other dimensions and with a variety of thicknesses. Some data on the types shown above:

Cellulose-Fiber Tile: Generally lower in price than other units; subject to some dimensional changes due to moisture content; also available with a flame-resistant finish; can be made termite, fungi and dry-rot proof by special manufacturing processes.

Mineral Tile: Are classified Class A Incombustible; are slightly more expensive than cellulose-fiber; are used often when special artistically decorative effects are desired.

Perforated Metal Tile: Is used commercially most of the time; has a mineral wool pad in back of metal; has highest acoustical efficiency of commercial acoustical tile; is used frequently where long-range economy of maintenance is important.

Glass-Fiber Tile: Also has an incom bustible rating; has good moisture resistance; some tiles have thin plastic membrane covering which makes them washable.

Perforated Asbestos Tile: Especially important for its moisture resistant qualities; has high acoustical qualities as well; often used in radio studios, etc., where sound absorption is important.

MINERAL TILE

GLASS-FIBER TILE

Cementing: When cementing on plaster, be sure plaster is sized or properly painted (in new or remodeling work). Can also cement to gypsum board. A dab of cement at each corner is all that is necessary. Check with manufacturer for proper adhesive.

Nailing: Wood furring strips, 1" x 3" may be used as a base for nailing or stapling where surface of ceiling is rough. On new work, it is often possible to nail strips directly onto bottom of joists. Nails should be driven beyond surface of tile with nail set; or by mechanical means.

Screwing: This method is generally used when floor above will be subjected to vibration. Material can be screwed to furring strips or to gypsum board backing. Finished level of ceiling is governed by care and accuracy with which gypsum board is installed.

NOTE: A fourth method—mechanical suspension—is often used industrially and commercially where special conditions prevail. For information, consult your manufacturer.
PLANNING FOR SOUND CONTROL

Determining how best to sound condition a building will often require the services of a sound engineer. He may be particularly needed when problems of acoustics are concerned with churches, schools and larger institutional buildings. But there are many things that you, as a home builder, can do to cut down the noise problem in your houses. Perhaps the most basic approach to the problem is a builder's awareness of the necessity to plan for sound insulation before he builds. This plan for sound control takes three forms: 1. planning the siting and location of the house with sound values in mind (see Table I), 2. segregating the living functions within the house (see Table II), and 3. building in sound control (see drawings in Table III).

The major problem in building-in noise control is a problem of sound insulation—the reduction of noise passing through walls, floors and ceilings. Sound absorption requires only surface treatments, such as acoustic tiles, either nailed to furring strips or applied with mastic. Sound insulation usually involves basic structural procedures (as shown in the drawings below). Acrustical ceiling tiles should be installed at the time of construction to avoid the extra cost of a double ceiling finish. Sound-insulating walls and floors, on the other hand, are integral parts of the building.

There are a few other cures for noise within the house.

TABLE I: ENVIRONMENTAL FACTORS

| 1. Location on a street with a minimum of through traffic, a cul-de-sac being preferable. |
| 2. Reasonable distance from noise-producing community buildings such as schools, hospitals, fire houses, churches. |
| 3. Avoidance of airports and regular air lanes. |

TABLE II: HOUSE PLANNING FACTORS

1. Zoning regulations against noise-producing, nonresidential uses of your land. |
2. Adequate distance from shopping centers, railroads, truck routes and super highways. Sufficient distance so that noise produced by these elements will be almost indistinguishable from the background noise level. |
3. Restrictions in the zoning or deed of sale making it impossible for homes to be built too close to existing houses. |
4. Insulation against sound transmission between bedrooms by closets built against regular walls. Avoidance of “closet walls” which have only a thin plywood or fiberboard backing as the barrier between two rooms. |
5. Inclusion in plan and specifications for noise-producing rooms of adequate sound-absorbing treatment, either by design of furnishings or specification of acoustical materials, or both. This sound-planning is particularly important in moderate-sized homes with open kitchens, combined living-dining room areas, and general “family rooms,” and also in children’s playrooms and adult workshops.

TABLE III: WALL CONSTRUCTION

Noise-producing rooms, particularly baths and utility rooms, should be provided with sound-proof doors and efficient sound-insulating walls and floors.

Noise is a form of vibration. The major problem in building-in noise control is the forma of sound insulation—the reduction of noise passing through walls, floors and ceilings. Sound absorption requires only surface treatments, such as acoustic tiles, either nailed to furring strips or applied with mastic. Sound insulation usually involves basic structural procedures (as shown in the drawings below). Acrustical ceiling tiles should be installed at the time of construction to avoid the extra cost of a double ceiling finish. Sound-insulating walls and floors, on the other hand, are integral parts of the building.

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TABLE I: ENVIRONMENTAL FACTORS

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TABLE II: HOUSE PLANNING FACTORS

1. Windowless wall or garage or both located as sound barrier against the greatest source of noise (street, neighbors, shopping center, etc.). |
2. Separation of quiet rooms from noise-producing rooms by distance: bedrooms away from living, food preparation, and utility rooms; studies isolated from play areas, hobby rooms, party rooms, workshops, etc.; places for quiet conversation protected from general living area by separation or by placing in an alcove off the main living room, etc. |
3. Placement of fireplaces, hallways, utility rooms, and other usually quiet areas to serve as sound barriers between various quiet rooms and the noise-producing areas. Placement of fireplace and other interior masonry walls to serve the same purpose.
4. Insulation against sound transmission between bedrooms by closets built against regular walls. Avoidance of “closet walls” which have only a thin plywood or fiberboard backing as the barrier between two rooms.
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FLOOR AND CEILING CONSTRUCTION

Noise-producing rooms, particularly baths and utility rooms, should be provided with sound-proof doors and efficient sound-insulating walls and floors.

In houses, especially two-story structures, the problem of impact noise is of considerable importance. Choice of floor coverings will help in reduction of impact noise.

Reduction of vibration-noise transmission is often a problem in houses with warm-air furnaces, year-round air conditioners, and various types of kitchen and laundry appliances, which are fastened to the floor. Special felt, cork, or rubber mounts are available. These can greatly reduce this type of impact noise transmission.

To reduce vibration noise through duct systems it is possible to use insulating duct liners or acoustical filters. But the best practice is to avoid the need for such treatments by specifying tight and rattle-proof ductwork and quiet-operating fans or blowers.

Plumbing noises can be annoying and precautions should be taken to minimize these sounds as much as possible. The worst noise is usually that from the toilet. But quiet-flushing, whirlpool-type equipment can be purchased at only a slightly higher cost. Drain lines should be isolated from the structure—free standing—or should be insulated with felt or some other form of insulation.
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PROVED! 3M gives you a complete line of quality adhesives, coatings and sealers for building

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"Coro-Gard," "WEATHERBAN" and "Roltite" are Reg. T.M.'s of 3M Co.
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with right-for-color woods of the

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Western Pine Region woods blend interior and exterior of this indoor-outdoor room. Rear wall is paneled in Ponderosa Pine, and finished in Shadowy Shoshone. The side wall (extending outdoors) is rough sawn board and batten incense Cedar finished in a contrasting blue. The ceiling is rough sawn Douglas Fir.
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Western Pine Association
member mills manufacture these woods to high standards of grading and measurement...grade stamped lumber is available in these species

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White Fir • Incense Cedar • Douglas Fir • Larch
Red Cedar • Lodgepole Pine • Engelmann Spruce

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Western Pine Association
Dept. 434-B, Yeon Bldg.
Portland 4, Oregon

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(Continued from page 282)

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**MATERIALS AND WEIGHTS** (lbs. per sq. yd.): Copper-bearing steel—2.50, 2.40. Galvanized steel—2.40.

**PACKING:** 10 sheets (20 sq. yds.) per bundle. All sheets squared on both ends.

**SPECIALMESH METAL LATH**
Improved design. Flat-rib lath for interior walls and ceilings. Saves plaster, provides excellent bond. Well suited to two-coat work or back-plastering. Longitudinal stiffening ribs are 3-1/2” wide, spaced 1-3/4” on centers. Cross-strands at 1” intervals, reinforced by alloy-loy members (two between each pair of ribs).

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**NEW! 37”-WIDE 3/8” STAY-RIB LATH**
New design. 27” x 96” coverage plus adequate side and end lap. 13 ribs across width—far greater rigidity as a plaster base or as reinforcement for light concrete slabs.

**SHEET COVERAGE SIZE:** 27” x 96”.

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**PACKING:** 10 sheets (20 sq. yds.) per bundle. All sheets squared on both ends.

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**STYLES A, K, L, M**
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**STYLES:** Style “A” for acoustical tile. Style “K” for plastered walls— with expansion wings. Style “L” for plastered or non-plastered walls—without expansion wings. Style “M” for masonry, brick, stone, tile, wallboard, etc.

**SIZES:** 8” x 8” to 24” x 36”. (Special sizes available upon request.)

**MATERIALS:** Doors, 14-gu steel; (Style “A” door, 16-ga.); frames, 16-ga. steel. Rust-inhibitive, prime coat.

**PACKING:** One per carton.

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**SIZES:** 12” x 12”, 12” x 24”, 24” x 24”.

**MATERIAL:** Door, 16-ga.; frame, 16-ga. Style “A” Steel. Style “B” Ti-Co Carri. Steel. White prime coated, painted.

**PACKING:** One per carton.

**CLEAN-OUT DOORS**
Convenient for removing accumulations of fireplace ashes or chimney debris. Door catch provides positive lock, prevents door from being blown open. Hinge design permits freedom of opening and closing. Wide flanges on frame simplify installations.

**SIZES:** 8” x 8”, 8” x 12”, 8” x 18”.

**MATERIAL:** 16-ga. copper-alloy steel, painted.

**PACKING:** 6 per ctn. Shipping weights: 8” x 8”—15 lbs.; 12” x 8”—21.5 lbs.

---

Part of the more than 4,000 Milcor products for the building industry. Write for price lists and catalog No. 202.

**CORNBER BEADS**

**NEW! RIGID BEAD CORNER BEAD**
Combines the rigidity of solid metal with the positive plaster key of expanded metal. Spring-fit angle hugs tight to corner. Fanga anchors securely—compartment for irregular framing. Tube-like nose permits easy splicing.

**MATERIAL:** 26-ga. tight-coat galvanized steel.

**LENGTHS:** 7’, 8’, 9’, 10’, 12’.

**WEIGHT** (per 1,000 lin. ft.): 160 lbs.

**PACKING:** 7 and 8’—80 pcs. per ctn. (8 bundles of 10 pcs.); 9’, 10’, and 12’—60 pcs. per ctn. (6 bundles of 10 pcs.).

**No. 1 EXPANSION CORNER BEAD**
Wide expanded metal wing integral with nose of the bead—plaster keys right up to the nose. Gives effective plaster reinforcement exactly where needed.

**MATERIAL:** 26-ga. tight-coat galvanized steel.

**LENGTHS:** 7’, 8’, 9’, 10’, 12’

**WEIGHT** (per 1,000 lin. ft.): 210 lbs.

**PACKING:** 7 and 8’—80 pcs. per ctn.; 9’, 10’, and 12’—60 pcs. per ctn.

**SUPER-EX CORNER BEAD**
Combines advantages of expansion and solid wing corner beads. Strong, straight nose reinforced by two solid flange sections, strengthened by corrugations. Integral expansion flange makes excellent plaster bond, simplifies erection.

**MATERIAL:** 26-ga. tight-coat galvanized steel.

**LENGTHS:** 7’, 8’, 9’, 10’, 12’.

**WEIGHT** (per 1,000 lin. ft.): 270 lbs.

**PACKING:** 7, 8’, and 9’—50 pcs. per ctn.; 10’ and 12’—40 pcs. per ctn.

**CORNER-EX**
Finished-edge corner reinforcement for inside corners. Accurately pre-shaped to 103° angle for snug, spring fit in a normal 90° corner. Center stiffener helps maintain correct angle and shape—guides Corner-Ex accurately into corner.

**MATERIAL:** Copper-bearing steel, painted.

**SIZES:** 2” x 2” x 96”; 3” x 3” x 96”.

**WEIGHT** (per 1,000 lin. ft.): 7”—100 lbs.; 9”—140 lbs.

**PACKING:** 75 pcs. per ctn. (3 bundles of 25 pcs.).

**CASING BEADS**

**EXPANSION AND SHORT FLANGE TYPES**
Cement cast textile flush facing for doors, windows and other openings. Nos. 60 & 66 used extensively as terminals for plaster at points where plastered surface joins non-plastered surface.

**MATERIAL:** 24 gauge Ti-Co Galvanized Steel.

**LENGTHS AND GROUNDS:** 7-ft. and 10-ft. lengths. 1/2”, 3/4”, and 1” grounds. Short flange only made for 1-1/2” and 1-1/2” grounds for acoustical plasters.

**WEIGHTS:** (per 1,000 lin. ft.): No. 60 Exp. —245 lbs.; No. 66 Exp. 1-1/2” and 1-1/2” exp. —370 lbs.; No. 60 5-F. —200 lbs.; No. 66 5-F. —210 lbs.; No. 138 5-F. —235 lbs.

**PACKING:** (per ctn.): 7’—80 pcs.; 10’—60 pcs.

**INLAND STEEL PRODUCTS COMPANY**
DEPT. D, 4025 W. BURNHAM STREET • MILWAUKEE 1, WISCONSIN

Baltimore, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Kansas City, Los Angeles, Milwaukee, Minneapolis, New Orleans, New York, St. Louis.
the right flair... everywhere

Whatever the application, flair adds interest. And the right flair makes more sales. Everywhere quality is called for, you'll find an incomparable richness in Poly-Clad Plywall—at half the cost!

As to beauty, you've twelve handsome wood grain finishes to assure the right touch for every taste. And all are guaranteed against fading—in writing... Poly-Clad protected to resist masa, scuffs, stains.

And that's not all! Now—you have Poly-Clad Plywall matching moldings—prefinished—ready to go right up. Nine styles and twelve matching finishes.

Add the right flair—everywhere—with Poly-Clad Plywall wood paneling.
Whenever—wherever—paneling is proposed, you can combine beauty and quality with Poly-Clad Plywall—at less cost! There's an outstanding panel that's right for every purpose—living, dining, family rooms, basements, dens. Exceptional Poly-Clad protects the finish—preserves the richness—for years of care-free family living.

And Poly-Clad Plywall wood paneling is ready to go up! Prefinished. Guaranteed against delamination and structural defects. The only paneling guaranteed against fading—in writing. Matching moldings cut costs even more—to make this your most profitable paneling package.

More and more builders say: "Poly-Clad Plywall is the right choice—the best choice—for every paneling need!" See for yourself. Let your dealer show you how this unusual product fits your building requirements—gives you more quality at less cost—everywhere, every time.
Cut on-site labor 40% to 50% with Bruce PRE-finished Floors

HOMEOWNERS LIKE THE
BEAUTY AND DURABILITY OF BRUCE PRE-FINISHED FLOORS

The factory-applied Bruce Finish brings out the full beauty of Oak and keeps floors looking new year after year. Tests show this superior finish will outlast surface finishes 3-to-1 because it’s baked into the wood. Durability has been proven in half-a-million homes.

Surveys show home buyers prefer Bruce Flooring by a wide margin over all other brands. This results from dependable quality and consistent advertising in leading national magazines. Builders find it pays to feature Bruce PRE-finished Oak Floors in their homes.

For complete information write:

E. L. BRUCE CO.
1648 Thomas Street
Memphis 2, Tenn.

Bruce PRE-finished Floors Used in over half-a-million homes
Whatever the job you’re working on...

Size

is no problem with

CONSOWELD

Laminated Plastic

Consoweld’s giant-size panels and cutting program offer you the broadest range of sizes in the industry!

Consoweld can fully meet your laminated plastic requirements with an absolute minimum of waste. Two things make this possible. First, the Consoweld distributor has a master manufacturing inventory of large-size panels (up to 51” x 144” for patterns and woodgrains; up to 60” x 144” in solid colors). Secondly, he has a carefully thought out cutting program designed to supply your needs for smaller sizes.

You get prompt service without being forced to buy more than your job requirements indicate. And, it is important to note that you get a greater selection of sizes from Consoweld than from any other source.

Have your dealer or fabricator contact your Consoweld distributor for complete details of the wide range of Consoweld panel sizes that are available.

Consoweld Corporation, Dept. AB-46
Wisconsin Rapids, Wisconsin

I’m interested in using Consoweld’s laminated plastic products. Please send me name of my nearest distributor for dealer contact.

NAME ________
ADDRESS ________
CITY & ZONE ________ STATE ________
POMONA'S CUSTOM-LOOK SELLS HER!!!!

FOR ONLY A FEW DOLLARS MORE

...And with the "lady of the house" Pomona's new "custom-look" in ceramic tile adds the fresh, unique appeal that makes her home different...helps to sell her faster, easier. You can have this "custom-look" for only a few dollars more...here's how...Simply include a few of Pomona's new Sculptured or Designer Tiles (usually seen only in more expensive homes) in a field of economical standard tiles as seen above. Because Pomona has the most extensive selection of designs and colors, this custom-look can be achieved in large tracts with no two installations alike. A new illustrated Idea Booklet for the Builder outlines the Custom-look Program and other Pomona Sales Aids in detail. Ask your Pomona representative for a copy or mail the coupon below today.

POMONA TILE MANUFACTURING CO.
The most beautiful kitchen of them all...

...is stocked by 55 distributors across the country (see telephone book Yellow Pages)

...is built in one of the country's largest plants producing factory finished cabinets

...is a product of exceptionally fine engineering both as to construction and finish

...is designed for maximum flexibility in kitchen planning and utmost ease of installation

...is contributing importantly to the sale of new homes in countless localities
MILLWORK, CABINETS

Steel Kitchen Cabinet Standards

9" to 18"
21" to 42"
36" to 48"
15" to 24"
VARIABLE

SINGLE DOOR BASE
DBL. DOOR BASE
CORNER BASE UNIT
3-DRAWER BASE
4-DRAWER BASE

W/1-DRAWER
W/1-DRAWER UP TO 30"
USUALLY REQUIRES
REVOLVING ShELVES

36" TO 42" HAS 2 DRAWERS
FILLER (As Shown)

CUTTING BOARD
SIT DOWN TABLE
CORNER SPIN SHELF BASE

15" to 21"
45"
30"
34"

CUTTER BASE SWING SHELF UNIT
USUALLY REQUIRES FILLER (As Shown)

STANDARD BASE CABINETS

12" to 15"
15" to 18"
15" to 18"
21"
45"

TRAY CABINET
VEGETABLE STORAGE
TILTING BIN
MIXER CABINET

PENINSULA CABINET
(Can Be Mounted On Casters To Make Roving Unit)

9" to 12"
12" to 15"
18" to 24"
24" to 48"
30" to 48"

HANDY UNIT
TOWEL DRYER
2 BURNER UNIT WITH CUT-OUT IN PANEL
1-3 OR 4 BURNER UNIT WITH OR WITHOUT CUT-OUT IN PANEL

Fitted BASE AND RANGE UNIT CABINETS

Courtesy Steel Kitchen Cabinet Manufacturers Assoc.

UTILITY IMPLMENT IMPLEMENT SINGLE OVEN DOUBLE OVEN CUSTOM RANGE HOODS

ANY SIZE IN COPPER, BRASS OR STAINLESS STEEL

BASE END SHELVES

APRIL 1960
MILLWORK, CABINETS
Wood Kitchen Cabinet Standards

SINGLE-DOOR WALL CABINETS
12"-24" h x 13"-18" w

DOUBLE-DOOR WALL CABINETS
24"-48" h x 13"-18" w

WALL-CABINET COMBINATIONS
FOR USE ABOVE APPLIANCES
12"-24" h x 21"-48" w

CORNER WALL CABINET
30"-45" h x 24"-27" w

UTILITY OR BROOM CABINET
180°

WALL-FILLER
1" or Wider

WALL-END SHELVES
180°

LOW COUNTER OR
LAVATORY UNITS
12"-48" h x 36" w

BASE CABINETS
24"-48" h x 36" w

BLIND CORNER BASE
36"-42" h x 36" w

With or without spin shelves

WOOD KITCHEN CABINETS
Can be obtained in any 3" module between min. and max. dimensions shown.

Courtesy National Institute of Wood Kitchen Cabinets
NEW CONCEPT IN BUILDER KITCHENS!
YOUNGSTOWN KITCHENS PRESENTS THE ALL-NEW "UNI-PAK"

COMPLETE KITCHEN PACKAGES MEAN BIG INSTALLATION SAVINGS!
see the full story inside
NEW "UNI-PAK" BUILDER PACKETS

☆ Buy a Package! ☆ Receive a Package! ☆ Install

ORDER FROM THESE 5 ONE-PACKAGE BUILDER UNITS...

COMBINE IN ANY WAY TO FIT YOUR KITCHEN PLANS

Drawings at right show the complete flexibility of UNI-PAK units. How UNI-PAK units can be moved flush to walls or away from walls to fit almost any kitchen plan.

SIMP简化ED KITCHEN PLANNING

Each "Uni-Pak" sink or storage cabinet unit is a carefully pre-planned "package" which takes the place of separate cabinets you formerly had to plan for yourself. Specifically designed for builders, they're completely flexible, allow for any size kitchen...for turning corners. Choice of right or left hand drawers. Sink bowls and range units can be positioned to meet your own requirements.

"Uni-Pak" kitchens are engineered to save builders time and money. Single "Uni-Pak" units can replace 2 to 4 standard base cabinets. Used in combinations FHA—MPS requirements are fully met. All doors and hardware come completely assembled and mounted. Drawers are built in. All you do is place the units in position.

GREATER APPEAL

Home-buyers respond fast to new "Uni-Pak" kitchens. Beige, or Youngstown K porcelain-resistant, wood-finished wall cabinets or individual units, a "Uni-Pak" kitchen will appeal to your model home.

Find out exactly how they save money. Get in touch with your representative...now.

WRITE...WIRE

AMERICAN-STANDARD, YOUNGSTOWN KITCHENS DIVISION, WARREN, OHIO. PHONE: FRANKLYN 4-1581
PACKAGES
Install a Package! ☆ Save Time and Money!

- 3E UNIT
- 48" STORAGE UNIT
- 60" SINK UNIT
- 72" SINK UNIT

APEAL TO BUYERS

Fast to the quality, built-in look of these cabinets. Your choice of White, Monterey in Kitchens famous “Honeywood”, the fashion laminate. Combined with match- individual Youngstown Kitchens base kitchen adds definite value and sales ap-
peal to buyers.

How this new “Uni-Pak” idea can save you with your Youngstown Kitchens repre-

Sink units contain 4 drawer sections at left or right side. Modern, quiet pull-out “shelf-drawers” are concealed behind the smartly finished doors. No drawer handles exposed to interrupt the smooth cabinet line. Drawers are easy to lift out for cleaning.

NEW IDEA IN KITCHEN DRAWERS!
ANOTHER "FIRST" FROM YOUNGSTOWN KITCHENS!
NEW "DIANA" 24" OVEN-RANGE
...THE ONLY BUILT-IN THAT INSTALLS LIKE A BASE CABINET

Today's newest, money-saving oven-range with a built-in cabinet look!
- Complete unit matches all Youngstown Kitchens base cabinets...same height, same depth, same width!
- Installs in minutes...saves time, saves work, saves money!
- 4-burner cook top...fingertip heat controls.
- Full oven, nickel-chrome lined, with broiler and baking units.
- Extra storage drawer at bottom.

New For Builders...a complete oven-range unit from famous Youngstown Kitchens that you can slide in place as easily as any base cabinet. The new "Diana" eliminates costly extra cabinets needed with conventional built-in ranges and ovens. The "Diana" gives your kitchen the modern built-in look. No cabinets to fasten on walls and break-up your wall space. The "Diana" fits flush with the front of all Youngstown Kitchens base cabinets. Available in White and Monterey Beige steel, Honeywood, Cherrywood, Brushed Chrome or Antique Copper. Get the full story from your Youngstown Kitchens representative.
WHY BUY FROM DEALERS?

QUALITY PRODUCTS FOR 20 YEARS

Your local dealer will not hesitate to speak of quality in the Precision Stairway Line. He knows that Precision Parts has built its folding stairway business on 20 years of standing behind all products 100%, and giving builders a dependable product. From the “Simplex 85” (the most economical stairway) to the “Precision Electric” (the most luxurious stairway) — all models are guaranteed and are manufactured in Precision’s modern plant from the best available materials. Precision Parts Corporation is a family corporation of highest integrity — backing up dealers throughout the country with dependable products, parts and service. The nationally-advertised brand-names, PRECISION & SIMPLEX mean quality to your prospective home buyer as well as your local dealer.

NATION’S LEADING FOLDING STAIRWAY MANUFACTURER TELLS WHY.

Because the dealer is a local business man, he is directly responsible to you, the builder. He is the first to receive complaints on the quality of products he sells and because his business is built on satisfaction, he must be able to stand behind the product he sells. Your local dealer is ready to back you up with quality products, parts and service. To do business on this basis (and this is the only way he can afford to do business) he must have full confidence in his manufacturer-supplier. He knows that the manufacturer must also stand behind the product and he, therefore, handles a manufacturer’s product on the basis of the manufacturer’s reliability. We, at Precision Parts Corporation, stand behind the dealer even after the sale is made. Precision Parts’ Stairways feature high quality materials, expert workmanship, plus 20 years engineering experience. These things are of direct concern to the dealer if he is to recommend one product over another. So, in summing up, the dealer is as invaluable to you as he is to us. He backs up sales, deals with reliable manufacturers, offers his services, parts and quality products, and, in many cases, helps you to finance your building needs. The dealer is a local business man whose future success in the community depends on satisfying you.

ADVANCED “PUSH BUTTON” ELECTRIC STAIRWAY

Through your local dealer, you can choose from 15 Precision & Simplex Folding Attic Stairways. Precision Parts Corporation has led the way in folding stairway development and manufacture for 20 years. Your dealer has a folding attic stairway to suit your needs and specifications. The complete Precision Parts Stairway Line includes 15 different models with wide variations in size and price range for all types of residential and commercial buildings. Contact your local dealer and let him help you choose the Precision or Simplex Attic Stairway that is right for your next job.

(30” x 54”) SUPER SIMPLEX

Your dealer can now supply you with the NEW SIMPLEX 2’ O. C. Folding Stairway for truss construction. Roof supports no longer prevent the use of an attic stairway to make valuable storage space accessible. Because storage space helps to sell houses, look to your local dealer for the latest, finest Precision Parts Corporation Stairways.

SIMPLEX SPECIAL FOR 2’ O.C. TRUSS ROOF

ECONOMICAL SIMPLEX “85”

PRECISION PARTS CORPORATION

400 NORTH FIRST ST. NASHVILLE, TENNESSEE

APRIL 1960
In Kitchen Business' Survey
You Asked For

- Faster Delivery
- Better Uniformity of Finish
- A Wider Variety of Special Purpose Cabinets

Long-Bell gives you (and has for years)

Fast, Fast Delivery Is Yours when you order your Kitchen Cabinets from Long-Bell.

Because Long-Bell ships direct from completely stocked distribution points... strategically located so close to you it's almost like having stock in your own warehouse.

A Perfect Finish... Everytime! The new Super Microseal® process is now applied to all Long-Bell Natural Wood Kitchen Cabinets (set up or knocked down). This revolutionary factory-finishing process gives cabinets the true luster of hand-rubbed wood...yet saves you 75% of the completed finishing job. Low-Cost Super Microseal gives Long-Bell Cabinets that Super Satin Surface®... needs no additional sanding...no primer coat.

© General Plywood Corp.

These Special Purpose Long-Bell Cabinets can help you plan better kitchens for better profits.

Produced in Volume for Lower Unit Costs

INTERNATIONAL PAPER COMPANY
LONG-BELL
DIVISION
Kansas City, Mo. Longview, Wash.

Long-Bell Natural Wood Kitchen Cabinets are available in units to fit any kitchen (in 3" modules)
... Ready to Install or Knocked Down... Birch or Rift grain Fir.
# HARDWARE, BUILDING SPECIALTIES

## Wire Nail Estimating Data

<table>
<thead>
<tr>
<th>Size and Kind of Material</th>
<th>1000 Feet Board Measure</th>
<th>Trade Name</th>
<th>Lbs. of Nails Required</th>
<th>Length of Nails</th>
<th>No. of Nails to Ea. Bearing</th>
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</thead>
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<tr>
<td></td>
<td></td>
<td></td>
<td>12&quot; Centers</td>
<td>14&quot; Centers</td>
<td>24&quot; Centers</td>
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<tr>
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<td>8d common</td>
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<td>60</td>
<td>48</td>
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<td>1 x 6 Boards and Shiplap</td>
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<td>40</td>
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<td>30</td>
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<tr>
<td>1 x 12 D&amp;M Blind Nailed</td>
<td>8d common</td>
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<td>25</td>
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<td>1 x 12 D&amp;M Blind Nailed</td>
<td>8d common</td>
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<td>20</td>
<td>16</td>
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<tr>
<td>1 x 12 D&amp;M Blind Nailed</td>
<td>8d common</td>
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<td>21</td>
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<td>3 x 12 D&amp;M Blind Nailed</td>
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<td>20</td>
<td>16</td>
<td>10</td>
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<tr>
<td>1 x 4 Flooring, Soft Wood</td>
<td>8d common</td>
<td></td>
<td>10</td>
<td>10</td>
<td>6</td>
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<tr>
<td>1 x 4 Flooring, Soft Wood</td>
<td>8d common</td>
<td></td>
<td>10</td>
<td>10</td>
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</tr>
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<tr>
<td>1 x 6 Bev. Siding</td>
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<td>8d common</td>
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<td>10</td>
<td>2</td>
</tr>
<tr>
<td>1 x 4 Ceiling</td>
<td>8d common</td>
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<td>18</td>
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<tr>
<td>1 x 3/4&quot; Ceiling</td>
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<td></td>
<td>11</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>1 x 4 Finish Lumber</td>
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<td>25</td>
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<td></td>
<td>12</td>
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<tr>
<td>1 x 3 Flooring, Soft Wood</td>
<td>8d floor brads</td>
<td></td>
<td>42</td>
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<tr>
<td>1 x 4 Flooring, Soft Wood</td>
<td>8d floor brads</td>
<td></td>
<td>32</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>1 x 6 Flooring, Soft Wood</td>
<td>8d floor brads</td>
<td></td>
<td>22</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>1 x 4 Flooring, Hard Wood</td>
<td>4d casing</td>
<td></td>
<td>13</td>
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<tr>
<td>1 x 2 Flooring, Hard Wood</td>
<td>4d casing</td>
<td></td>
<td>11</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>1 x 2 x 1/2&quot; Flooring, Hard Wood</td>
<td>4d casing</td>
<td></td>
<td>10</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

1 x 2 Furring on Brick Walls—100 Lineal Ft.—20d Cut Nails, Requires 51/2 lbs. Base Per 100 Lineal Ft. Sides of Trim, Per Side of Inside Trim.

48" Wood Lath Per 1000 Lath.
Metal Lath Per 100 Sq. Yd.
or Metal Lath Per 100 Sq. Yd.
3/4" Gypsum Lath, Per 100 Sq. Yds.
3/4" Plaster Board, Per 100 Sq. Yds.
3/4" Wall Board, Per 1000 Sq. Ft.
3/4" Wall Board, Per 1000 Sq. Ft.
3/4" Wall Board, Per 1000 Sq. Ft. BATTEENS Will Require 3/4 lbs. 4d Finish Nails Per 100 Lineal Feet. For Various Styles of Wallboards, See Manufacturer's Specifications for Recommended Nailing.

8d Finish Requires 1 Lb. 16" on Centers.
4d Finish Requires About 1/2 Lb. Total
3d Fine Requires 7 Lbs.
1" Staples Requires 12 Lbs.
1 1/4" No. 12 Hook Head Nails Requires 15 Lbs.
1 1/4" x 13 Gauge—3/4" Heads Requires 19 Lbs.
1 1/4" x 13 Gauging—3/4" Heads Requires 1 Lbs.
3d Flat Head Nail Requires 5 Lbs.
4d Flat Head Nail Requires 9 Lbs.
<table>
<thead>
<tr>
<th>BUILDING MATERIAL</th>
<th>COVERAGE</th>
<th>LENGTH OF NAIL</th>
<th>TYPE OF NAIL</th>
<th>GAUGE</th>
<th>HEAD SIZE INCHES</th>
<th>NAILS REQUIRED 12&quot; CENTERS NO. 16&quot; CENTERS NO.</th>
<th>LBS.</th>
<th>LBS.</th>
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</thead>
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<tr>
<td>1/2&quot; x 6&quot; Bvl. Sdg.</td>
<td>1000 bd. ft.</td>
<td>1 1/4&quot;</td>
<td>6d Wd. Sdg.—Skr. Hd.</td>
<td>12</td>
<td>1/6&quot;</td>
<td>2000 3.3</td>
<td>1500 2.5</td>
<td></td>
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<tr>
<td>1/2&quot; x 8&quot; Bvl. Sdg.</td>
<td>1000 bd. ft.</td>
<td>2 1/4&quot;</td>
<td>7d Wd. Sdg.—Skr. Hd.</td>
<td>11 1/2&quot;</td>
<td>1/4&quot;</td>
<td>1500 3.2</td>
<td>1125 2.4</td>
<td></td>
</tr>
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<td>3/4&quot; x 8&quot; Bvl. Sdg.</td>
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<td>10 1/2&quot;</td>
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**ABREVIATIONS:**
- Bvl. Sdg. = Beveled Siding
- Cncl. Nlg. = Concealed Nailing
- Scr. Gp. = Screw Grip
- Pin. Shk. = Plain Shank
- Wd. Sdg. = Wide Siding
- Skr. Hd. = Sinker Head
- Csg. Hd. = Casing Head
- Chk. Hd. = Checked Head
- w/w/att. = With Neoprene washers assembled to nail
HARDWARE, BUILDING SPECIALTIES
Wood Screw Data

LENGTH GAUGE NUMBERS

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WOOD SCREW SIZES

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APRIL 1960
HARDWARE, BUILDING SPECIALTIES

Hardware Details

HAND OF DOORS, CASEMENT WINDOWS

RIM LOCK
- OUTSIDE
- LEFT HAND
- RIGHT HAND

MORTISE LOCK
- OUTSIDE
- LEFT HAND REVERSE BEVEL
- RIGHT HAND REVERSE BEVEL

SPECIFY WHETHER IN- OR OUT-OPENING

RIGHT HAND OUTSIDE OPENING OUT
LEFT HAND OUTSIDE OPENING IN

ROLLER STOPS AND BUMPERS

STRAIGHT TYPE
OVERHANG TYPE
- 2 1/4"
- 3"
- Varies 4" to 6 1/4"

RUBBER ROLLER

HOW TO SPECIFY HINGES

Number of Doors - Left or Right
Number or Position - Type of Screws
Type of Screws - Type of Hinge - Weight - Height - Finish

TEMPLE HINGES are Made to Standard, Terminates or Patterns, Generally to Standards Existing at the Time of Hinge and Screw Connections for Wood Doors and Metal Joints Fabricated by Other Manufacturers

LOCATION OF HINGES

NUMBER OF HINGES PER DOOR

LOCATION OF HINGES

TYPES OF LOCKS AND LATCHES

SCREWS, TAPPED INTO OUTSIDE ESCUTCHEON

LATCH BOLT
ESCUTCHEON PLATE

DEAD BOLT

CYLINDER LOCK OPERATES DEAD BOLT

LOCKSET INSTALLED

UNIT LOCKS

NOTCH OR CUT-OUT IN DOOR BEFORE INSTALLATION

BORE-IN LOCKS AND LATCHES (TUBULAR AND CYLINDRICAL TYPES)

Cylinder Lock on Outside

DEAD BOLT

METHOD OF BORING Holes

TUBULAR DEAD LOCK
ALSO AVAILABLE WITH CYLINDERS BOTH SIDES

TUBULAR CASE

LOCKING DEVICE ON INSIDE ROSE (FOR BATHROOMS, BEDROOMS, ETC.)

TUBULAR LATCH SET (LOCKING DEVICE OPTIONAL)

CYLINDRICAL CASE
LOCKING BUTTON IN KNOB: CYLINDER (PIN OR WAFER) CAN ALSO BE USED HERE

DEADLOCKING LATCH BOLT

CYLINDRICAL LOCK SET
ALSO AVAILABLE AS SIMPLE LATCH SET AVAILABLE WITH LONG (3", 5", 10" ETC.) BACKSET

METHOD OF BORING Holes

Courtesy National Builders Hardware Association
America's Finest Low-Cost Residential Lockset...

In any competition there is always one stand-out. In low-cost residential locksets it's LOCKWOOD...because only in Lockwood ROCKET 60 will you get every one of these important features:

- EXTRA STRENGTH - knobs are fully reinforced
- EXTRA SECURITY - bolt has extra long throw
- ENDURING SECURITY - solid brass 5-pin cylinder
- STEEL MECHANISM - case hardened retraction
- CONCEALED THRU-BOLTS - piloted bolt sleeves
- SELF-ADJUSTING - equalized knob projection
- PANIC PROOF - inside knob is never locked
- FRICTION-FREE NYLON BOLTS for interior door locks and latches

LOCKWOOD HARDWARE MANUFACTURING CO., FITCHBURG, MASS.
SLIDING DOOR HARDWARE

1000/6000 Reversible Rocket Sliding Door Hardware—load capacity: up to 75 lbs./door for 4” to 1-1/2” single, bi-parting and bypassing doors • inexpensive standard duty line with adjustable double wheel carriers

Widely recognized as the foremost line of moderate-duty sliding door hardware. Twelve completely adjustable sets from which to select, with aluminum or aluminum fascia track. Doors move on unique four-wheel carriers (eight per door) with rocker arms for constant track contact. Luxurious operation at minimum cost—with every advantage of highest-priced moderate duty hardware.

JU

Rocket 1000/6000 two wheel hardware is an excellent line of moderate duty hardware. Rocker arms keep nylon wheels in constant contact with track. Choice of aluminum or aluminum fascia track. Reversible hardware set for 4” or 1-1/2” doors available. All adjustments. Packaged in sturdy tubes with color-coded labels.

SLIDING DOOR HARDWARE

7000 Sliding Door Hardware — load capacity: up to 100 lbs./door for 4” to 1” doors, single, bi-parting and bypassing • each door rides on eight rollers • moderate cost standard duty hardware, fully adjustable

The finest drapery hardware available anywhere—yet moderately priced for the mass market. Highest quality line, completely rust-proof since every part is either aluminum or nylon. No metal-to-metal contact between moving parts and all parts are re-inforced for lifetime service. Many features included that are unavailable in competitive brands.

DRAWER SLIDES

305/306 Drawer Slides — load capacity: up to 50 lbs./pair • min. space at each side of drawer • continuous ball bearing action • 1-1/2” to 36”, every inch

The sturdiest hardware, full of selling features, including: full range of sets, all adjustments, reinforced parts and jamb bracket (nothing attaches to floor), fast installation, specially designed lead carriers for constant track contact and the new passageway set with completely hidden hardware.

DRAPER SLIDES

2200 Drapery Hardware — medium-heavy duty hardware — entirely non-corrosive — aluminum track and parts, nylon carriers • wall or ceiling installation • finest drapery hardware available

Inexpensive standard duty hardware, fully adjustable

CLOSET ROD

Grant "Golden" Closet Rod—gold anodized aluminum track unique self-lubricating black nylon carriers • sturdy end brackets • center support for longer lengths • most functional, beautiful closet rod made.

Sturdiest hardware, full of selling features, including: full range of sets, all adjustments, reinforced parts and jamb bracket (nothing attaches to floor), fast installation, specially designed lead carriers for constant track contact and the new passageway set with completely hidden hardware.

DOOR POCKET FRAME

Grant Sliding Door Pocket Frame — load capacity: up to 100 lbs. • for 4” to 1-1/2” doors, 6’6” to 6’8” high, 2’0” to 3’0” wide • fits standard 2 x 4 construction

Sturdiest hardware, full of selling features, including: full range of sets, all adjustments, reinforced parts and jamb bracket (nothing attaches to floor), fast installation, specially designed lead carriers for constant track contact and the new passageway set with completely hidden hardware.

Grant Sliding Hardware is naturally suited for application to "built-ins"...for sliding doors or drawers in linen closets, kitchen cabinets, multi-purpose wall units, standing clothes closets and other cabinetry, no wider range of such hardware is produced by any manufacturer, for application throughout the house.
The world's most complete line of ventilating louvers...

LoManCo

153 different sizes and shapes!

IN ALUMINUM AND GALVANIZED

with more Builder Benefits!

LoManCo Louvers meet the new FHA Revised Minimum Property Requirements

LoManCo CIRCULAR CORNICE VENTS
New design in cornice vents...eight inches in diameter, 8 x 8 mesh screen installed...fast, easy to install. In heavy gauge aluminum only.

LoManCo RECTANGULAR CORNICE VENTS
One-piece cornice ventilator with 8 x 8 mesh screen installed. Available in three standard sizes. In heavy gauge aluminum or galvanized.

LoManCo ROOF-LINE LOUVERS
3 models and sizes...three sides open for more ventilation...8 x 8 mesh screen on the outside. In aluminum or galvanized.

LoManCo EXHAUST FAN VENT-HOOD
A new combination ventilator and roof jack, perfect for use with powered kitchen and bathroom exhaust fans. Rust-proof aluminum construction, unique clapper-proof back draft damper, hinged roof hood for extra weather protection, elimination of clogged screens. Seamless one piece bottom to prevent water leakage.

LoManCo VARI-PITCH and JUMBO VARI-PITCH LOUVERS
10 models and sizes, 4-12 to 10-12 pitch. The original patented adjustable triangular louvers in heavy gauge aluminum only.

LoManCo JUMBO STATIONARY LOUVERS
15 models...in 6, 8 and 10 foot base lengths from 2½" to 5" pitch. Other sizes on request. In heavy gauge aluminum or galvanized.

LoManCo TWIN-SECTION JUMBO LOUVERS
14 models...in 6, 8, 10 and 12 foot base lengths from 2½" to 5" pitch. Other sizes on request. Available in aluminum or galvanized.

LoManCo MULTI-SECTIONAL LOUVERS
A new concept in louvers...8 basic sections can make up 25 triangular and odd sized louvers. In aluminum only.

LoManCo CIRK-L-VENTS
LoManCo CIRCULAR CORNICE VENTS
LoManCo RECTANGULAR CORNICE VENTS
LoManCo FOUNDATION VENTILATORS
Die cast aluminum alloy ventilator grate with optional 8 x 8 mesh screen and shutters with lever for opening and closing. 4 models.

LoManCo CIRK-L-VENTS
• Model L-38 louver...3½” size.
• Model C-25 open and louver...3½” size.
• Model P-16 anti paint peelers...1” size.
• Model D-16 rain drains...1” size.

OTHER LoManCo PRODUCTS
LoManCo Aluminum Shutters
Only shutters with all the features and advantages home owners want. 100% Aluminum—no rotting, warping, cracking or splitting. One piece aluminum slat backed in heavy continuous frame provides deep attractive shadow lines. Completely assembled, ready for mounting. Factory finished in white baked enamel prime coat. In aluminum or galvanized, screens. Seamless one piece bottom to prevent water leakage.

LoManCo ADJUST-A-ROD
A strong, all metal closet rod adjustable in width. Made of heavy gauge tubular steel with completely welded seams. Five models furnished complete with mounting brackets, in enamal or plated finishes. For closets up to 140" wide.

Write...for illustrated catalog with specifications on the complete line of aluminum and galvanized LoManCo louvers.

Louver Manufacturing Company
3609 WOODDALE AVENUE • MINNEAPOLIS 16, MINNESOTA

APRIL 1960
ALLITH-PROUTY, INC.
Manufacturers of Hardware for All Types of Rolling Doors
DANVILLE, ILLINOIS

PRODUCTS
- Accordion Door Hardware
- Airport Door Hardware
- Barn Door Hardware (Underwriters)
- Fire Door Hardware
- Round House Door Hardware
- Vertical Slide Door Hardware
- Heavy Type Door Hinges
- Overhead Carriers
- Garage Door Hardware
- Folding-Sliding Overhead Type
- Round-the-Corner Straight Sliding
- Stadium Seat Brackets

ALLITH HARDWARE permits you to use standard stock, or special doors if desired, to harmonize with design of accompanying building. All working parts are simple and sturdy—no springs to stretch or loosen. All hardware parts inside and protected from weather. Unit shipped complete down to the last screw. Quickly and easily installed. Standard set fits any opening up to 9' wide x 7' 6" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high. Complete details furnished on request.

Allith Hangers for Box or Trolley. Tracks in all necessary sizes.

Brackets available for any of these tracks to meet any condition. Track sections shown half size.
Standard size ornamental iron is giant size business—

let Colonel Logan Ornamental Iron

add a whole new profits column

to your business in 1960!

Standard size ornamental iron sells because it saves . . . up to one-third over custom ironwork . . . and Colonel Logan is far the biggest and best line on the market. Colonel Logan offers the widest selection of handsome designs to you and your customers. Stock is easy to maintain in minimum space . . . quick delivery keeps pace with big demand, fast turnover. Installation is simple, for your crews or your do-it-yourself customers—no special training or tools needed. Illustrations above show only part of the many top quality columns, railings, valances, ornaments, accessories. Luxurious cast iron and wrought patterns suit every home, appeal to every buyer. Columns meet building codes—often prove lower-cost than other supports they eliminate. Most homes need Colonel Logan railings for safety—meaning year-round sales for you.

SEND for free complete sales and advertising kit today. It includes far the finest selling catalog in the business, convincing direct mail materials, giant wall chart in color; everything you need to plan and promote sales.

Colonel Logan
ORNAMENTAL IRON
LOGAN CO., 531 CABEL ST., LOUISVILLE 6, KY.
it's TECO
for products of
PROVEN PERFORMANCE

TECO WEDGE-FIT
SPLIT RINGS
... for economical
clear span TECO
Trussed Rafter

TRIP-L-GRIP
Framing Anchors
... for stronger
framing of roof,
floors and walls

... and the NEWEST in
FRAMING DEVICES

TECO-U-GRIP
Joist and Beam
Hangers ... for
better joist support
at 1/2 the cost of
old-style hangers

DU-AL-CLIP
Framing Anchors
... the all-purpose
economy framing
anchor with dual
framing action

TECO FAS-LOK
Metal Cross Bridging
... the new
MODERN bridging
that needs no nails

Send for
FREE
TECO
Products
Catalog

TIMBER ENGINEERING COMPANY
1319 18th Street, N.W., Washington 6, D.C.
Please send me a free copy of your
TECO Products Catalog

Name:
Firm:
Street:
City:
State:
AB-803

Majestic THULMAN WOOD-BURNING FIREPLACES
solve all problems -- from
hearth to chimney-top!

ZERO clearances! Both
FIREPLACE and CHIMNEY
butt against
WOOD or other
combustible
FLOOR, WALL,
CEILING and
ROOFING
materials!

also your choice of mastic-applied
black marble or black glass "sur-
rounds". Fireplace and chimney com-
pletely fabricated of corrosion-resistant
alloys and stainless steel. Attractive
chimney-tops look amazingly like
brick. AND, you give homeowners
fireplace performance that wins quick,
full and lasting satisfaction. Write for
full information now on Majestic
THULMAN Fireplaces and Chimneys.

FAMOUS
COAST-to-COAST
Lux-Right
AREAWALLS
STEEL AREAWALLS
The Nation's Best

WE MAKE the Corrugated Steel Areawall
you want. Special sizes, too, for "mam-
moth" split-level installations.

IMPERIAL LUX-RIGHT: The Nation's Best,
Brilliant, Light-reflecting, Extra Sturdy.
Heavy zinc coating by hand-dipping after
fabrication.

ECONOMY LUX-RIGHT: For medium-
priced homes and housing developments.
Of 16-gauge pre-galvanized steel sheets.

THRIFT-IT For lower-priced housing. Full
depth corrugations. Tight-coat galva-
nized.

WE PREPAY FREIGHT on 12 units or more.
See your dealer or distributor, or write
us. FREE Folder.

SAINT PAUL CORRUGATING CO.
Expert Fabricators of Sheet Metal Products for 75 Years
SOUTH END WABASHA BRIDGE • SAINT PAUL 7, MINN.
Provincial period-inspired cabinet hardware by Medalist is the perfect answer to today's increasing popularity for French Provincial decor. These authentically styled pulls, knobs and escutcheons, in various sizes, are richly finished in Antique English for application on natural or painted cabinets and built-ins. Your building material supplier has this popular decorative hardware on display now.

Write for sample Medalist Home Merchandising Aids Kit with N.A.H.B. award-winning "Harmony-in-Hardware" Brochure included.
“I made $2,000 by not laying up this masonry!”

“This picture shows me standing next to about 30 tons of bricks. That’s how much material I actually saved on last year’s jobs by using Benefire, the complete fireplace form... averages about a ton a job...

“How do I make money by not laying up masonry? Well, in the first place, Benefire takes all the time-consuming “tricky” elements out of the job, because the combustion chamber, throat damper, down-draft shelf and smoke dome are scientifically built right into the unit. Benefire does away with fussy, diagonal courses, fancy ductwork and expensive, free-hand corbelling. That means I save plenty of hours on every job—as well as almost a ton of brick and mortar.

“As a result, I get more fireplace jobs than any other mason—because I can actually charge less and net more profit on every job. And with Benefire, I can guarantee a perfect, smoke-free fireplace every time!”

See your dealer today for details on the complete Bennett line, or write for complete catalog to Bennett-Ireland Inc., 460 Market St., Norwich, N. Y.
Leading Scorer!

Kitchen Kompact Cabinets score high in a recent survey conducted by Kitchen Business regarding trends and features most wanted in wood kitchen cabinets.

Check the features shown here! You’ll see why more dealers (and consumers) want Kitchen Kompact.

Inquire for choice distribution areas still open

Warehouse stocks are carried by distributors in most major cities. Write today for the one nearest you.

Kitchen Kompact Inc.

911 E. 11th St., Jeffersonville, Indiana

April 1960
BEST WAY TO “STEP UP” SALES

Quality Hardware

M-D Aluma-Slide SLIDING DOOR TRACK

With new improved lower track, panels slide along smooth ridges—not one flat surface. For any size cabinet. Any panel material. Comes in decorative Alacrome, Anodized Albras, Anodized Albright or Anodized Satin. Completely packaged sets. Holes drilled—screws furnished.

Sets available for \( \frac{1}{8} \), \( \frac{1}{4} \), \( \frac{3}{8} \), \( \frac{1}{2} \) or \( \frac{3}{4} \) sliding panels of glass, plywood, masonite, etc.

M-D MAIL BOXES

Anodized Aluminum mail boxes in 3 distinctive styles. Choice of 6 gorgeous color combinations. Never rust, tarnish or need polishing. FREE engraved name plate available with every box.

M-D OT-400 REVERSIBLE SLIDING DOOR HARDWARE

Saves time! Cuts installation cost! OT-400 hangers are used on either \( \frac{3}{8} \)" or \( \frac{3}{8} \)" doors just by reversing their positions. Sturdy extruded aluminum track with built-in no-jump feature. Cadmium steel hangers with silent nylon wheels. Tubular packaged sets for 3, 4, 5, 6, and 8 ft. lengths.

M-D FOLDING DOOR HARDWARE

Silent nylon bearing gliding in top-quality extruded aluminum track assures effortless, trouble-free operation.

Here’s hardware that can’t be matched for ease-of-operation, ease-of-installation! M-D Folding Door Hardware can be used on any interior door, on any thickness, for every opening! Gives full access to closets, yet saves valuable wall and floor space.
**M-D CLOSET RODS**

with Nylon Hanger-Glides for wall-to-wall mounting—Style No. EXC

Handy M-D Nylon Hanger-Glides slide along the sturdy, extruded aluminum rod silently and smoothly—with just the flick of a finger. It means no more tugging and pulling for clothes. Neater closets. Come in 4 different, beautiful, anodized finishes. Each package contains closet rod, hanger-glides, end brackets, screws and instructions.

**M-D CLOSET RODS**

with Nylon Hanger-Glides

Shelf-Mounted. Style No. CRM

Sturdy extruded aluminum is easily mounted under shelf. Comes in 4 attractive, anodized finishes. Smooth sliding Nylon Hanger-Glides are easily slipped into the mounted rod. May also be attached to ceiling for use with shower curtain, or to top of window or cornice for use as a drapery rod. Completely packaged sets in 9 lengths from 36” to 96”.

**M-D MOULDING AND TRIM**

All shapes available in Anodized finish

Wide variety of shapes and sizes for all thicknesses of material. Available in permanent, high quality anodized aluminum finish—also furnished in polished aluminum, brass or stainless steel. Whether anodized or polished, the finish is unsurpassed in quality. Through constant checking and control, M-D produces a satiny anodized finish that is both beautiful and permanent.

**M-D ALUMINUM LEVELS**

Both pro and amateur are attracted to this gleaming, sturdy, extruded aluminum level. It’s a high quality, precision tool at a sensible price. Tough, non-breakable Pyrex vials are replaceable. Glossy red interior with silvery satin top and edges enhance its appearance. 10 sizes from 18” to 96”.

Individually packed in Poly tubing.

**M-D FOUNDATION & CORNICE VENTS**

Here’s variety to meet your customers’ needs. Die-cast aluminum vents for crawl spaces or cornices... in 2 styles for brick or concrete block construction. M-D Louvered Cornice Vents are made of heavy-gauge stamped aluminum with reinforcing ribs for extra rigidity. Also available in Anodized Albras finish. Two sizes—4”x16” and 8”x16”. Easy and ready to install. Dozens of uses for ventilation in new homes or for remodelling.

MACKLANBURG-DUNCAN CO.
Manufacturers of Quality Building Products • Box 1197 • Oklahoma City 1, Okla.
FOR OPEN WALL SHELVES No. 80 Standard (18" to 144" lengths)
1" Adjustment. No. 180 Brackets (4" to 20" lengths)
Satin anochrome, brass or ebony black finish.

FOR BUILT-IN SHELVES No. 255 Standard (24" to 144" lengths) ½" Adjustment. No. 256 Support (¾" long, ½" wide.) Nickel, zinc or bronze finish.

K-V Shelf Hardware

easily installed, easily adjusted!

For low cost, decorative effects or storage facilities wherever they're needed. Easily installed, easily adjusted. Lasts the lifetime of the home. Always keeps shelves straight, strong and sag-free. Ask for complete catalog.

KNAPE & VOGT MANUFACTURING CO.
Grand Rapids, Michigan

Manufacturers of drawer slides, sliding and folding door hardware, closet and kitchen fixtures and Handy Hooks for perforated board.
Check Page of Appliance Extras

Not all the units shown here are termed “appliances”. In the opinion of our editors they are, however, “appliance extras”...units which are fast becoming standard equipment in new houses. Since they often tip the scales in favor of a house’s saleability, we suggest: check this page before planning your next model house.

**INCIINERATORS:** Average dimensions for incinerators—18” wide, 36” high, 24” deep. Both gas and electric models are available. Most new gas models are double-burning, resulting in “smokeless-odorless” operation. Both types require a Class A flue. Nearly all types are sold with a one-year warranty. Check local codes for rules on installation.

**GARBAGE DISPOSERS:** Are from 12” to 13” in length. Most operate with ½ HP, although ½ HP residential units are available. Need 115 volt 60 cycle outlet. Most disposers have a one- or more-year warranty. Average net weight is 25 lbs. Nearly all units are continuous feed types, and many have a safety mechanism to prevent jamming. Budget and deluxe models available.

**EXHAUST FANS:** Available for vertical or horizontal discharge of air from kitchen. Can be installed in ceiling; through wall; in cabinet. For vertical discharge of air from bathroom, units are available without extras; with light; with heat and light, and with infra-red sun lamp. Most kitchen units come in two sizes: with an 8” blade and with a 10” blade, and fit into openings 9” and 11”, respectively. Bathroom fans available in 10”-14” diameters, approximately.

**FOOD CENTERS:** Installs so that power unit is below surface of counter. Connects to 115-volt AC outlet. Generally has six speeds. Is sold with or without its attachments, which include a mixer, blender, fruit juicer, knife sharpener, and meat grinder.

**BARRBECUE GRILLES:** Are built for both indoor and outdoor use. Units in sizes calling for rough openings of from 22” to 36” long; from 17” to 22” wide and approximately 11” deep. Some are made with electric rotisserie, hood, timer and storage drawer, or any combination of these. Often installed with gas jet to start charcoal.

**RANGE AND OVEN HOODS:** Available with and without exhaust fans, light. Also available from some manufacturers with built-in radio-intercom, and range controls. Units produced for use over range tops, free-standing ranges set against wall, and for range tops built-in to counter island. Oven hood generally made in 24”, 27” and 32” lengths. Range hoods made in lengths from 2’4” to 4’8”.

**INTERCOM SYSTEMS:** Most popular units have radio (some are transistor type), inter-communication system for each room in the house and for front door. Other models have clock with alarm and timing devices, 115 volt 60 cycle outlets, and phonograph jacks. Average outside panel size is 9” x 11”.

**APPLIANCE CENTER:** Generally installed on wall over kitchen counter. Fitted with circuit breakers, clock and automatic timers. Has pull-out plugs and sockets. Range from 30 to 45 amp service.

**BUILT-IN VACUUM SYSTEM:** Canister and power units are generally installed in basement, garage, closet or utility room. Ducts run under floors, between studs. Three to five outlets are sufficient for the average home. Units vary from ½ HP to 1½ HP. Operates on 115 Volt, 60 Cycle current.

**DOOR CHIMES:** Available in a variety of styles and sizes from about 4” x 7” to 8” x 15”. Can have two notes for front door, one note for back door, up to eight chords for front door, four chords for back door, and a number of combinations of these arrangements.

**BUILT-IN SCALES:** Fits into bathroom wall recess. Housing for unit is roughly 14” x 23”, with outside dimensions, 16” x 25”. Lowers to floor on spring.

**TOWEL DRYERS:** Designed for use in kitchen, unit is cabinet with heater and fan built-in—9” to 15” widths. Also available: a bathroom towel rack with heating unit built-in to bars: 28” x 14”.

**BUILT-IN SCALES:** Fits into bathroom wall recess. Housing for unit is roughly 14” x 23”, with outside dimensions, 16” x 25”. Lowers to floor on spring.

**NOTE:** For information on manufacturers of any product described here, check the yellow pages or write to Buyers Guide Editor, American Builder, 30 Church Street, New York 7, New York.
### Dimensions of Small Appliances

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blender</td>
<td>(6&quot;-8&quot;) x 8&quot; x (14&quot;-16&quot;)</td>
</tr>
<tr>
<td>Deep Fry</td>
<td>(8&quot;-11&quot;) x (7&quot;-13&quot;) x (9&quot;-13&quot;)</td>
</tr>
<tr>
<td>Coffee Pot</td>
<td>(9&quot;-13&quot;) x 14&quot; x 9&quot;</td>
</tr>
<tr>
<td>Iron</td>
<td>(8&quot;-10&quot;) x 4&quot; x (4&quot;-5&quot;)</td>
</tr>
<tr>
<td>Pressure Cooker</td>
<td>(9&quot;-10&quot;) x (15&quot;-16&quot;)</td>
</tr>
<tr>
<td>Waffle Iron</td>
<td>(11&quot;-14&quot;) x (11&quot;-14&quot;) x (3&quot;-4&quot;)</td>
</tr>
<tr>
<td>Roaster Oven</td>
<td>(12&quot;-13&quot;) x (14&quot;-18&quot;) x (21&quot;-24&quot;)</td>
</tr>
<tr>
<td>Corn Popper</td>
<td>9&quot; x 14&quot; x 9&quot;</td>
</tr>
<tr>
<td>Grill</td>
<td>(9&quot;-10&quot;) x (13&quot;-18&quot;) x (2&quot;-5&quot;)</td>
</tr>
<tr>
<td>Toaster</td>
<td>10&quot; x 7&quot; x 6&quot;</td>
</tr>
<tr>
<td>Fry Pan</td>
<td>12&quot; x 12&quot; x (4&quot;-5&quot;)</td>
</tr>
<tr>
<td>Hand Mixer</td>
<td>6&quot; x 5&quot; x (2&quot;-3&quot;)</td>
</tr>
<tr>
<td>Saucepan</td>
<td>(8&quot;-14&quot;) x (8&quot;-10&quot;)</td>
</tr>
<tr>
<td>Rotisserie</td>
<td>(22&quot;-24&quot;) x (14&quot;-16&quot;) x (14&quot; x 18&quot;)</td>
</tr>
<tr>
<td>Coffee Brewer</td>
<td>6&quot; x 9&quot; x (10&quot;-12&quot;)</td>
</tr>
<tr>
<td>Mixer</td>
<td>(7&quot;-8&quot;) x (12&quot;-14&quot;) x 14&quot;</td>
</tr>
<tr>
<td>Ice Chopper</td>
<td>8&quot; x 4&quot; x 10&quot;</td>
</tr>
<tr>
<td>Knife Sharpener</td>
<td>6&quot; x 3&quot; x 3&quot;</td>
</tr>
<tr>
<td>Ice Cream Freezer</td>
<td>(8&quot;-12&quot;) x (8&quot;-12&quot;) x (12&quot;-19&quot;)</td>
</tr>
<tr>
<td>Slicer</td>
<td>13&quot; x 10&quot; x 10&quot;</td>
</tr>
</tbody>
</table>
Laundry Planning Standards

**WASHER**
Minimum work space for washer and dryer.

- **WASHER**: 26" to 32"
- **Depth**: 34" to 40"
- **Height**: 36" to 40"

**DRYER**

- **Width**: 28" to 31"
- **Depth**: 25" to 28"
- **Height**: 36" to 40"

**IRONER OPEN**
Minimum work space for ironer.

- **Height**: 36" to 38"
- **Width**: 33"
- **Depth**: 52"

**IRONER CLOSED**

- **Height**: 36"
- **Width**: 36"
- **Depth**: 36" to 38"

**IRONING BOARD**
Minimum work space for ironing board.

- **Length**: 54" to 55"
- **Width**: 42" to 53"
- **Height**: 28" to 36"

**BUILT-IN IRONING BOARD**

- **Length**: 34" to 53"
- **Width**: 30" to 36"
- **Height**: 36"
APPLIANCES

Planning for Kitchen Built-ins

DROP-IN RANGE (FRONT VENT)

12'-42" 18'-22''

10'-40'' 13'-21''
5'-37''

DROP-IN RANGE (NO VENT)

27'-42'' 18'-22''

16'-20'' 25'-40''

STACK-ON RANGE

20'-42'' 22'-25''

3'-4'' 5'-8''

BUILT-IN OVEN

21'-26'' 24'-38''

20'-31'' 25'-39''

STACK-ON OVEN

25'-31'' 22'-26''

22'-28''

COUNTER-TOP RANGE

24'-36'' 20'-25''

4'-8''

FOLD-BACK RANGE

42'-47'' 21'-23''

14'' 17''

NOTE

Both gas and electric models are available for each of the units shown here. Check with your supplier for exact dimensions. Oven measurements here only include single door integral broiler types. Double door (with separate broiler) and double oven types are also available.

For a list of manufacturers, check the yellow pages of this directory or write to the Buyers Guide Editor, American Builder, 30 Church St., New York 7, N. Y.

THREE BASIC KITCHEN PLANS

THE U-SHAPED KITCHEN

THE L-SHAPED KITCHEN

THE CORRIDOR KITCHEN

NOTE

Before planning your kitchen, divide the space into three general work centers: cooking and serving; food storage and preparation, and clean up. Ideally, these areas should be located at the points of a triangle.

The distance between each point of the triangle should be as small as possible, and at the same time allow enough space to move easily from point to point. There should also be adequate work surfaces and storage space at each center.
AN EXCITING, NEW FINISH!
"BRUSHED CHROMETONE"
LOOKS LIKE STAINLESS STEEL
... at a fraction of the cost!

IN FOUR SIZES, 30", 36", 42" ...
AND FOR THE FIRST TIME... 24"

This revolutionary new Brushed Chrometone finish, with a permanent abrasion-resistant coating, has all the soft, satin beauty of stainless steel, yet sells for a price only 5% more than Leigh's popular Coppertone. Now available exclusively with Leigh 5400 series economy Range Hoods.

FEATURES:
- GOLD ANODIZED TEXTURED ALUMINUM CONTROL PANEL.
- COMPLETELY ASSEMBLED AND WIRED.
- NOISELESS 6-BLADED FAN WITH 593 CFM FREE AIR.
- NO ADAPTERS NEEDED. FITS CONVENTIONAL 8" DUCT.
- TOTALLY ENCLOSED MOTOR.

Build bigger profits in '60! Contact your Leigh Dealer immediately or write for catalog #268-L.
A fun-filled trip to America's Paradise in the Pacific awaits the nation's top builders and their wives in the...

HOTPOINT MEDALLION HOME PROGRAM

Now, a complete advertising and merchandising program to help you cash in on the public preference for Hotpoint appliances, plus 1960's greatest sales-clincher—Hotpoint Electric Baseboard Heating. This dynamic program is power-packed with everything needed to give your home sales a sensational start in '60. Call your Hotpoint distributor for complete details today!

☆ DRAMATIC FULL-COLOR MAGAZINE ADVERTISING
☆ NATION-WIDE NEWSPAPER ADVERTISING
☆ PROSPECT-PULLING DISPLAY MATERIALS
☆ PROFESSIONALLY-PREPARED HANDOUT BROCHURES
☆ SALES-BUILDING KITCHEN PLANNING SERVICE
☆ PROVEN PUBLICITY PROGRAM
☆ PLUS SPECIAL MERCHANDISING ASSISTANCE

Hotpoint
A Division of General Electric Company, Chicago 44, Illinois

ELECTRIC RANGES • REFRIGERATORS • AUTOMATIC WASHERS • CLOTHES DRYERS • CUSTOMLINE® • DISHWASHERS DISPOSALLS® • WATER HEATERS • FOOD FREEZERS • AIR CONDITIONERS • ELECTRIC BASEBOARD HEATING
(Continued from page 15)
election year. Although Congressman Rains' "Emergency Home Ownership Act" was approved 18 to 7 by the House Banking Committee, there was doubt that the $1-billion bill to spur building would pass. And even if it should muster the necessary votes, predictions are that President Eisenhower would veto it.

Indications are that a bill merely extending FHA's insuring and repair loan authority may be all that will weather the election year.

**Apartment pace steps up**

More builders are putting up apartments this year than last. And according to predictions of building economists, this is a trend that will continue through the sixties. Basic reason is that sharp increases are taking place in the number of both young families and older families both want small apartments.

Capitalizing on these trends, many home builders are diversifying their activities by building a few apartments in addition to their single-family houses. In some cases this is done as an investment for themselves; in others, as a joint investment project with others. In either case, builders tend to construct apartments with the same crews and techniques employed in their home operations.

Key to the apartment building business is equity money. Assemble data on local profit potential to invite participation of investors as a joint venture.

**Tight money costing $1,200 a house**

Builder Herbert Sadkin of Long Island told the House Banking Subcommittee that the tight money policy of the government is adding an average of $1,200 to the cost of building and selling the typical $15,000 house.

**Predict 3.8% rise in home prices**

The average retail sales price of new homes will rise 3.8% in 1960, reports the Federal Home Loan Bank Board. Its survey of 2,000 member associations indicated an average retail price of $18,360.

**Outlook for spending: Bullish**

U. S. Consumers are bullish, and their optimism over business conditions is at a new high, a survey by National Industrial Conference Board, sponsored by Newsweek, indicates. Builders will learn with interest that the survey shows new home buying plans up 18 per cent, and plans to buy old houses up 10 per cent, over last year. NICB economists think tight money isn't as big a deterrent as expected.

**20 homes—typical NAHB builder**

After polling 16,000 of its builder members on their activities, NAHB reports its "typical" builder is 41 years old, has been in business 11 years, builds 20 houses a year. His major price bracket is $18,000.

**Expert to train modernizers in new techniques and methods**

A new approach to modernization on a national scale is being launched by Herbert Richheimer, one of the country's largest and best known home improvers. He plans to help 1,000 selected contractors set up systematized home improvement firms, aiming at a minimum volume of $750,000 for each. Richheimer's remarkably successful methods will be employed through a franchise management plan. This will make available:

- Estimating procedures that maintain a record of less than 1 per cent error in price.
- Accounting and cost control methods that assure 5 per cent net profit.
- Merchandising and sales techniques that have doubled the Richheimer business in each of the past three years.
- Training of management, sales and supervisory personnel.
- National advertising of the entire franchise network, plus a monthly advertising service for participants.
- Instructions in a variety of unique building methods, including the addition of an entire second story to trussed-roof ranch homes.
- National financing to supplement local sources that are inadequate.
- Continuing management assistance, including on-the-spot consultation and analysis.

Initially, Richheimer said, RMS will train a "pilot group" of 15-20 modernizers and launch each in his system this spring. On the basis of this experiment, RMS hopes then to train as many as 25 other franchised modernizers per month, starting July 1st.

Contractors or builders who are interested should write or contact Richheimer Modernizing Systems, Inc., 280 Madison Ave., New York 16, New York.
Rangaire Builder-Engineering-Research brings you of products... to please your prospects and

Rang
Builder-Engineered Products!

Designed, Engineered, Manufactured, and Priced to give you the Quality, Style, and Features you need for maximum sales appeal... with a range of prices to fit any budget.

Rangaire Builder-Engineered Products are designed to help you “upgrade” your homes for more buyer appeal—yet keep you in the market you’re trying to sell. You get Top Quality Products, Easy Installation, Trouble-Free Performance, and Competitive Prices.

With Nationally advertised Rangaire you can offer your prospects exactly what they want, since Rangaire offers you complete flexibility in styling, sizes, and prices. Rangaire Hoods and Radio-Intercoms can be color-matched to all major appliances.

Rangaire Builder-Engineered Products are designed to add to your reputation as a quality builder. Call your Rangaire Dealer today.

RANGAIRE KITCHEN VENTILATING HOODS Come complete, right down to the screws, in one package. Hoods and accessories color-match perfectly with all major appliances. Permanent, Washable Filters, Recessed Frosted Glass Lights, Powerful Exhaust Units. America’s most complete line, with sizes and models to fit any kitchen.

RANGAIRE OVEN HOODS Newest addition to the Builder-Engineered line and designed for flexible installation, the Rangaire Oven Hood requires minimum cabinet space. The powerful exhaust vents through either wall or roof. Perfectly styled canopy color-matches all major appliances accurately at no extra cost.

RANGAIRE RADIO INTERCOM SYSTEMS A complete line of models and prices to choose from. Whether you select the economical WR90 or the luxurious AM-FM High Fidelity RI-95, each Rangaire intercom system is Builder-Engineered for easy installation, smart styling, simple operation, and maximum performance. They add new charm and sales appeal to your homes.

For additional information write Roberts Manufacturing Company Cleburne, Texas Dept. A12
The new Magic Control Center with clock-controlled oven starts and stops the Magic Chef Oven automatically; cooks an entire meal while the housewife is away from home.

New MAGIC CHEF Built-in ranges put a Touch of Magic in the homes you build . . . with new, automatic features, new installation economy and outstanding consumer acceptance.

Today, more than ever, the consumer acceptance of MAGIC CHEF is an invaluable sales asset to you. As an extensive national advertising campaign further expands MAGIC CHEF's outstanding consumer recognition, today, MAGIC CHEF is the name the modern homemaker knows . . . the range that puts a Touch of Magic in your sales.

New Magic Chef Countermasters with recessed controls in the counter top reduce carpentry to a single rectangular cut.
CUSTOM KITCHENS FOR CUSTOM HOMES...

WITH NATIONAL DISPOSER'S NEW

Citation

POWER SERIES MODEL 744-P

- New Triple Sound Barrier Acusti-Shell for whisper quiet operation!
- New Styling—fresh, clean, modern!
- New Power—1/2 H.P. Capacitor motor for more efficient performance than ever!
- Power Surge Reversing—the most effective means of clearing a jam!
- New Lok-Top Cover Control—one-piece cover rotates to "grind" (safer—unit operates only with cover locked in "grind"), to "seal" (new positive cam-locking action for leak-proof seal), and "drain" for open drain sink use!
- New, new "Lazy Susan"
- The handiest "extra" ever devised—holds bottles, brushes, cleaning materials, sponges, etc. Keeps under-sink area clean and clutter-free!

Other National Models
- New Supreme Model—twin of the Citation in a continuous feed model!
- New Custom—Cover control model.
- New Super—Power Surge Reverse continuous feed model.
- New Sprite—continuous feed model.

THERE'S A NEW NATIONAL FOOD WASTE DISPOSER FOR EVERY HOME, EVERY KITCHEN

NATIONAL Instant-HOT WATER DISPENSER

Let's you "toss away the teakettle"... Pressure-free hot water (190°-200°F.) at a touch—so handy for preparing instant foods and for all the little chores that require “hotter-than-tap” water.

ANOTHER PROFIT BUILDER FROM NATIONAL

For detailed information about the NEW National Disposers and instant-Hot write.....

Dept. 1064

APRIL 1960
NEW HOTPOINT BUILT-INS

MAKE ORDINARY KITCHENS

1960 Hotpoint Extra-Value Oven
puts extra salespower
in your kitchen

NEW lift-off door makes oven cleaning easier and faster than ever before.
NEW ventilation system assures natural circulation for better baking on each shelf.
WIDE Super-Oven lets you cook banquet-size meals.
OVEN TIMING CLOCK and Minute Timer.
NEW extra-large Insulated Panorama Window.
REMOVABLE Calrod® bake and broil units.
INTERCHANGEABLE Oven Door Panels in Sunburst Yellow, Turquoise, Coral Pink, Copper Brown, Silver Satin and Classic White.

Offer the Extra Convenience
of Pushbutton Surface
Cooking—at no extra
installation cost!

Touch a button and Hotpoint Calrod® Recipe Heat Units give accurately measured heat for recipe-perfect meals every time. Surface section with built-in pushbutton controls needs only one cut-out, fits in a standard 30" cabinet.
Today's home buyer expects more for his money than an "ordinary" kitchen. And Hotpoint Extra Value built-ins in the kitchen take even the most moderately priced home out of the ordinary...and into a sale.

Compare these 1960 Hotpoint Extra-Value built-ins with any others and you'll find only the price is ordinary. Hotpoint's extra features say "better living electrically" the minute your prospects see them. Hotpoint's extra styling and design make any kitchen a showplace. Hotpoint's extra values mean extra salespower for you, extra satisfaction for your customers. For extraordinary results at no extra cost, call your Hotpoint distributor today.

**EXTRA CAPACITY**
Hotpoint Dishwasher holds complete dinner service for 10
See these Extra-Value Features:
- Two washes, two rinses
- Calrod® electric drying
- Front loading Roll-R-Racks
- Lifetime porcelain finish tub

**EXTRA powerful**
**EXTRA quiet**
**EXTRA easy to install**
Hotpoint DISPOSALL®
Designed by plumbers, for extra economical installation. Extra-strong nickel alloy grinding teeth give you added years of outstanding performance.

When you build in Hotpoint, you build in Public Preference
Hardwick, America's foremost manufacturer of gas ranges, presents a new, greatly expanded line of beautiful Built-Ins—six fashion colors, two ovens and three surface unit designs. The most complete, trouble-free, salable line ever offered. Hardwick Built-Ins accent ease and economy of installation—for budget and luxury homes.

Dazzling Decorator-Design, Six Sparkling Fashion Colors!
Yellow • Pink • Turquoise • Coppertone
Brushed Chrome • White

Hardwick offers three styles of surface units for maximum flexibility in price and kitchen design. A new, economical Drop-In Unit has controls on the cooking surface, necessitating only one cabinet cut-out. A Divided Unit consists of two, high-speed burners. Two or more of these can be installed. The Cluster Unit, with four, high-speed burners, has control panels in front and is used alone or with Divided Units.

No other manufacturer offers anything like the Hardwick two-oven installation. One oven features the famous Hardwick EquaFlo burner for perfect balanced-heat baking and broiling. The other has MicroRay, the sensational ceramic burner, with the thermostatically-controlled rotisserie. This unique combination speeds sales of luxury homes, such as shown in the illustration below.

Write for full information

Please send me a full-color folder on the new line of Hardwick Built-In Gas Ranges.
I am a BUILDER □ BUILDING SUPPLIER □ KITCHEN SPECIALTY FIRM □
ARCHITECT □

NAME
ADDRESS
CITY STATE

Hardwick Stove Company
Cleveland, Tennessee
More popular with Mrs. Home Buyer—because women everywhere prefer LP-Gas appliances. They like the quicker-cooking automatic ranges and clock-controlled ovens, more economical LP-Gas water heaters and clothes dryers, silent, frost-free refrigeration.

More practical for Mr. Home Buyer—because he knows that the “Living Pleasure” fuel, LP-Gas, gives the cleanest, most economical and dependable heating and air conditioning of all.

More profitable for you—because LP-Gas homes take less expensive insulation—cost less to build—give you a competitive head start on sales. LP-Gas helps you sell more and make more with homes everywhere—town, suburb or farm. Your local National LP-Gas Council dealer will be glad to show you how. See him this week! You’ll know him by this seal:

Now, from Westinghouse, comes this exciting new 14 cu. ft. refrigerator with revolutionary pull-out Center Drawer, so easy to use...see into...reach into. Use it as a powerful demonstration in your model homes. Special compartments in the exclusive new Center Drawer keep meats and vegetables fresh for days...even hamburger stays fresh a full week without freezing. Moreover, this new Cold Injector Westinghouse is Frost-Free throughout. There's no defrosting in the refrigerator...the freezer...or the Center Drawer. Doors open 90 deg. within cabinet width, and there are no coils on the back. In addition to 5 Cabinet colors* and 8 Choose-N-Change Door Panels—40 combinations in all—there are doors in Coppertex and Brushed Chrome, enabling you to carry out any kitchen color scheme.

*Mint Aqua (shown opposite with Westinghouse Heirloom Maple Wood Cabinets), Frosting Pink, Lemon Yellow, Sugar White, Coppertan.

Newest Advance in Home Appliances

CENTER DRAWER REFRIGERATOR
FROM WESTINGHOUSE

Westinghouse Refrigerators come in all sizes from 9 to 16 cu. ft., and may be installed free-standing, or built-in. Accessory Trim Kits are available for all except the 9 cu. ft. models, for which trim may be made locally. All units have doors that open 90 deg. within cabinet width.

(Left)
14 cu. ft. capacity, including 161 lb. bottom-mounted home freezer • Cold Injector System • Meat Storage Pan • Twin Porcelain Crispers. Dimensions: 33" w x 65½" h.

(Right)
12.6 cu. ft. capacity, including 101 lb. top-mounted home freezer • No coils on back • Cold Injector System • 5 Colors, plus 8 Choose-N-Change Door Panels. Dimensions: 30" w x 64¼" h.

WATCH "WESTINGHOUSE LUCILLE BALL-DESI ARNAZ SHOWS" CBS-TV ALTERNATE FRIDAYS

You can be sure...if it's Westinghouse

Send coupon for complete information on Westinghouse Appliances and Cabinets.

Westinghouse Electric Corp., Contract Sales Dept. AB-1
216 East Fourth Street, Mansfield, Ohio.

☐ Please send descriptive catalog on Westinghouse Refrigerators, plus the complete line of other Westinghouse Appliances.

☐ Please have a representative call.
New space-saver kitchen for $10,000 homes

The luxury of a Suburban built-in range plus unique stow-a-wall cabinets—both practical and profitable

Designed by Bruce McCarty, A.I.A.

1st in a series of best-seller kitchens—all blueprinted and ready to use—each designed to give you the most value, the most sales-talk for a home in a specific price range. Suburban’s Idea Kitchen shown here is for homes in the $10,000 price range—a kitchen pre-engineered especially for a home of that price, a kitchen you can easily recreate in the home you build. The plans—complete with specifications, product lists and all the know-how—are yours free for the asking. Just mail the coupon at the bottom of this page.

New cook-tops—a blessing to home buyer and builder

These beautiful, new Suburban thin-line units with recessed controls on top will allow full, useable drawer space underneath—and pots and pans can’t be knocked over by accidentally brushing against knobs.

Gas or electric, Suburban cook-tops are quickly installed (only one cut-out necessary) and easily removed or interchanged. All mounting screws are accessible from the top—no concealed mounting lugs, no special lugs needed for extra-thick counter tops.

These cabinets built on the job, save space, cost; add storage

Now you can use the kitchen wall, ceiling and studs as part of your cabinets. This unique stow-a-wall design not only saves space and materials but adds extra storage that home buyers love. The combination of stow-a-wall cabinets and a Suburban built-in range adds glamour that is otherwise difficult to achieve in a $10,000 home.

Free plans; free "Ideas File"

The sketch above shows how easily the Idea Kitchen presented on these pages may be adapted for varying space requirements. The details on design, equipment, sizes, dimensions and approximate cost are yours for the asking.

A specially prepared expansion-file, "New Home Ideas Kit," is also available for you to collect other ideas, articles and product dope with separate indexed sections for every room in the house. Just say "send it!"

Samuel Stamping & Enameling Co., Department AB, Chattanooga 1, Tenn. I want more information on Suburban:
Built-in Electric Ranges □
Built-in Gas Ranges □
I am an architect □ realtor □ kitchen remodeler □ builder (sales mgr.) □ builder (chtg. of purchasing) □
Please send me free Kitchen Plan & Specs for $10,000 Home □
free New Home Ideas File Kit □
Name ____________________________
Firm ____________________________
Street ____________________________
City ____________________________ State ________

suburban
Built-in Ranges
LOOK FOR SUBURBAN IN YELLOW PAGES

APRIL 1960
New General Electric built-ins—the ranges with all

New! Cooktop with Sensi-Temp automatic unit

This new built-in makes top-of-the-range cooking completely automatic. Temperature is simply dialed, and the automatic Sensi-Temp* Unit maintains the perfect cooking heat.

Pushbutton panel with dial for automatic unit and other cooktop controls can be placed in back or side wall. Roomy 21-inch Custom oven has automatic timer and minute timer, charcoal-type broiler, automatic rotisserie and meat thermometer, floodlight, two shelves and removable door.

General Electric Built-Ins offer so many other wanted features. There are single and double ovens, 2 and 4-unit cooktops, a wide range of Mix-or-Match colors and a choice of three types of pushbutton controls. Figure General Electric Built-In Ranges into your plans for 1960!

For specifications and installation information on all General Electric Built-In Ranges, contact your local distributor, or write Range Dept., General Electric Co., Appliance Park, Louisville 1, Ky.

*Trademark of General Electric Company.
the most-wanted features!

Popular Mark 27
one piece
built-in

Practical glamour... that's the Mark 27. Compact, smartly designed, this one-piece built-in is easy to install in so many settings.

Features? Big capacity oven, removable oven door, automatic oven timer, minute timer, high-speed units with pushbutton controls—easy to see why more than 1000 builders have installed Mark 27's in the first four months of production alone.

Only one unit to install, one control to connect... needs space only 27" wide x 24" deep. Smart between cabinets or in island or wall installations. Leaves room for extra appliance or cabinet. Control mounts wherever convenient.

Hefty savings, too with the Mark 27. It takes one connection, needs no oven cabinet nor countertop base cabinet. And you save on costly countertop covering.

GENERAL ELECTRIC
APRIL 1960
with a new TAPPAN Gas built-in
that's won the Gold Star!

New features show you know quality!
This Tappan has the features women want—like automatic roast control, that turns Gas off when roast is perfectly done. Clock controls give perfect baking—and the famous Gas Burner-with-a-Brain® makes range-top cooking automatic, too!

Easy upkeep shows you know women's wants!
No messy boil-overs to clean up, when she cooks on the automatic Burner-with-a-Brain! This award-winning Tappan is easy-to-clean all over, too! Grates, racks, even the new button lift out easily; wipe clean. Rustproof, stainproof surfaces resist dirt!

Good design shows you know kitchen planning!
This sparkling automatic rotisserie is sure to be the center of many a party meal. Built in as a feature of your homes—at no extra construction cost—simply by choosing a modern, fully-automatic Gas range like this Tappan.

The Gold Star Award shows you know appliances!
This Gold Star is awarded by A.G.A. to the finest ranges of all. Each must be more automatic, more modern, better designed in every one of at least 28 specifications—to win a Gold Star. It means they cook faster, cooler, cleaner than ever—automatically!

The Gold Star sells for you, too! Most women judge your whole home by what they think of details like this—silly, perhaps, but true. When you build in a fabulous new Gas range, built to Gold Star standards they trust, you build your reputation for quality! The popularity of Gas helps sell your homes, too; remember, Gas is chosen to heat 8 out of 10 new homes! Call your local Gas company for help in planning better kitchens.

No wonder...
today more people than ever are cooking with GAS!
Fabulous '400' shown here on a base cabinet—also hangs on wall. 40 inches wide, 25⅛" deep, adjusts to any height. Self-vented, no fans or hood needed.

Tappan 'Fabulous 400'

Looks like a million
Saves you
$166
installation costs

THE TAPPAN COMPANY
Dept. AB 4-0
Mansfield, Ohio

ATTENTION: MR. KEN BERKEY
Tappan
30-inch wide
‘Debutante 400’
installs for
$166 less than
regular built-ins

QUICKEST, EASIEST BUILT-IN INSTALLATION YOU’VE EVER SEEN!

MAIL THIS COUPON for specific local material, equipment and labor costs

Please supply me with complete specification, installation
and model information on Tappan:

☐ ‘Fabulous 400’  ☐ ‘Debutante 400’  ☐ Electronic Range
☐ Built-In Gas Ranges  ☐ Built-In Electric Ranges  ☐ Built-In Refrigerators

NAME

ADDRESS

CITY  ZONE  STATE

PROOF: YOU SAVE $166
INSTALLING EITHER
‘400’ RANGE

Save*
Single conduit connection...........$25.00
No separate vent or hood............$50.00
No countertop covering..............$20.00
No oven cabinet needed..............$45.00
Labor saving.......................$26.00
$166.00

*Savings approximate

Gas, electric or electronic, nothing cooks or looks like a
TAPPAN
Mansfield, Ohio; Montreal, Quebec
17" and 24" built-in electric ovens

NEW
RCA WHIRLPOOL

BUILT-IN COOKING CENTERS

add a roomful of buying reasons to your homes!

Look at all these cooking extras. Balanced-Heat ovens that baste meats, make shish-kabobs, barbecue, bake, start and stop cooking, and signal when done . . . all automatically. Range tops feature automatic surface units that maintain constant heats, built-in griddle, infinite heat controls and exclusive Dispos-A-Bowls® for quicker cleaning. Gas or electric models in choice of colors.

Removable oven door
Eliminates tiresome stretching when cleaning oven interior. Lifts on and off easily.

New Thintop® design
Enables storage drawers to be placed directly under electric range top. No waste space.

Your family will love our family of home appliances

RCA Whirlpool

Products of WHIRLPOOL CORPORATION St. Joseph, Michigan

It's easier to sell RCA WHIRLPOOL equipped homes!

Contract Sales Division
Whirlpool Corporation, St. Joseph, Michigan
Please send me complete information on the new RCA WHIRLPOOL built-in ranges.

Name ____________________________________________ Title ____________________________

Firm Name ________________________________________

Firm Address ______________________________________

City __________ Zone __________

County __________ State __________

APRIL 1960
Builders say the new General Electric Dishwasher is the easiest, quickest dishwasher to put in its place. And it just happens to wash dishes better than any other dishwasher. So why break your back and waste valuable time with lesser machines? And why mess with dishwashers that lack the very essence of dependability and customer confidence embodied in the "General Electric" name. Why?
...you get out fast

WHAT COULD BE SIMPLER?

Saves time and work. Tub rolls out of cabinet while you make electrical and plumbing connections. (Four wood wedges let you shim and level cabinet while in place.)

Available in five colors, five woods and three new fashion finishes. It's the only dishwasher with Power Shower, top and bottom washing action and four cycles. Who knows, it might just help you sell your homes faster! General Electric Company, Louisville 1, Kentucky.

Sanitary Air Gap. Provides maximum sanitation, uses one drain for both dishwasher and sink. (Optional: sanitary drain which utilizes existing sink.)

Progress Is Our Most Important Product

GENERAL ELECTRIC
EACH MODEL HAS 2 FULL-SIZE 18 INCH WIDE OVENS.

MODERN MAID SCORES AGAIN WITH THE INTRODUCTION OF THE DOUBLE OVEN GAS BUILT-IN AND THE AMAZING NEW "INFRA-RAY" CERAMIC BURNER

"SUPER THIN" RANGE TOPS ONLY 3" DEEP DROP IN ABOVE DRAWER SPACE

36-INCH "SUPER THIN" BUILT-IN RANGE TOP WITH 4 SURFACE UNITS AND GRIDDLE.

GT-36 ET-36

30-INCH "SUPER THIN" RANGE TOP ALSO DROPS IN ABOVE DRAWER SPACE.

GT-30 ET-30

TWO BURNER "SUPER THIN" DROP-IN TOPS — COMPLETELY INTERCHANGEABLE

GT-16 ET-16

GRIDDLE UNITS WITH COVERS ALSO INTERCHANGEABLE

GT-G ET-G

CONVENTIONAL SINGLE OVEN MODELS ALSO INTERCHANGEABLE

GO-42PAR EO-82PR

4-UNIT COOKING TOPS WITH FRONT CONTROLS. NO EXPOSED BOLTS ON TOP. INTERCHANGEABLE

GT-21 ET-21

TENNESSEE STOVE WORKS CHATTANOOGA 1, TENNESSEE
How to plan a "Holiday from Apron Strings" Kitchen

one light-hearted center at a time

Here, in handy, easy-to-use form, is your 1960 Frigidaire Planning Guide to more usable, salable kitchens. All information is organized to help you plan the way women think—in terms of time-saving, step-saving work centers: Food Preparation Center, Kitchen Clean-up Center, Refrigerated Food Center, Laundry Center, and even a Kitchen Comfort Center. A feature-packed consumer version of this Planning Guide appears in many leading home building annual and semi-annual magazines. Your best prospects are directed to bring their ideas, along with this Planning Guide, to you for a modern, built-in "Holiday from Apron Strings" kitchen.

Built-Ins and Free-Standing Appliances...

Dimensions and Ideas! These 4 pages can help you...

Here's how—all the facts you need, including sizes, colors, models, and dimensions of Frigidaire Appliances to aid you and your architect. Advanced appliances designed to make women homemakers linger longingly in your model kitchen. No matter what price homes you build or remodel, new Frigidaire completeness of line gives you more flexibility, makes it possible for more families to enjoy modern living—Frigidaire-style!

Why choose Frigidaire?
- "Sculptured Sheer Look" styling that blends in beautifully with standard wood or steel cabinetry.
- Most models available in 5 lovely-to-live-with Kitchen Rainbow Colors: Sunny Yellow, Mayfair Pink, Turquoise, Charcoal Gray, and Aztec Copper—plus Snowcrest White and Satin Chrome.
- Products of General Motors, engineered and built to be a lasting improvement to your home.
- Factory-trained Service through Frigidaire dealers everywhere.

1960 FRIGIDAIRE Planning Guide
Good lookin', good cookin' and
Eight new wall ovens to fit any home, any budget!

Now easiest-ever oven cooking! Three beautiful new double-oven models! Controls are easy to read and reach. Automatic Cook-Master Control, simplest-to-set ever, turns oven on, cooks dinner, turns off when foods are done. Famous Frigidaire Spatter-Free Broiler Grill (standard on RBGB-99, RBB-99 and RBB-92, optional all others) for broiling time and again without cleaning the oven.

Frigidaire Wall Ovens are designed to end cleaning drudgery forever! Left—Imperial RBGB-99, (shown with Imperial Cooking Top RBB-101) and Custom DeLuxe RBB-98 Double Ovens offer two Drop-Leaf Doors that lower all the way down for easiest cleaning. Above left—DeLuxe RBB-94 (illustrated) and Super RBB-93 feature single Drop-Leaf Doors. Above center—Imperial RBB-90 has space-saving French Doors that take up to 10% less opening space. Above right—New Custom Imperial RBB-92 has French Doors on top oven, Drop-Leaf Door on the lower oven. RBB-92, RBGB-99 and RBB-99 models offer exclusive easier to clean Pull 'N Clean lower oven.

Frigidaire Features for gracious living. Eight double and single oven models only 23½" wide. Optional Automatic Rotisserie for all models except Super RBB-93. Meat Tender Roast Control and Broiler Grill Control included on Imperial RBGB-99 and RBB-99 and Custom Imperial RBB-92. Time Signals and Automatic Signal Lights on most models. Models RBGB-99 and RBGB-94 also have glass window doors. Simplified installation—RBB-90 and RBB-92 are mounted in minutes with new lever-action clamps, all others install in a jiffy with concealed screws. All models available in 5 Frigidaire Kitchen Rainbow Colors or Satin Chrome finish.

Cooking Top Convenience, Finger-tip Controls

Frigidaire Built-In Cooking Tops are available in 5 Kitchen Rainbow Colors or Satin Chrome. (Super RBB-102, Satin Chrome only.) Super model installs with spring-clips. All others mount with two clamps. Optional Hudee Ring, except RBB-102.


Fold-Back Surface Units for Extra Space

Frigidaire Fold-Back Surface Units install on the counter-top, fold back out of the way (even while hot). Smart Satin Chrome. Single 2-Unit (24"), or 4-Unit (48") Double Assemblies. 8" Heat-Minder and 6" Speed-Heat Units on RBB-82 and RBB-84.

such a joy to use and clean!

Eleven brand new Ranges...eight with Pull 'N Clean Ovens!

If she prefers a free-standing range for her new or remodeled kitchen, 1960 Frigidaire Automatic Electric Ranges offer cooking with confidence and cleaning without slaving! All 30" and 40" models feature the new "Sculptured Sheer Look" to make them the most feminine ranges ever. Clean, simple design eliminates dirt-catching cracks and crevices, gives that built-in look without extra construction expense. All are available in gleaming Snowcrest White, and many in choice of five Kitchen Rainbow Colors.

Features to make any woman feel like a Queen!

Pull 'N Clean Ovens slide out like a drawer for easiest cleaning. On all Custom Imperial (both ovens on RCI-75-60), Imperial, Custom DeLuxe (both ovens on RCD-71-60), and DeLuxe except RDA-38-60.

Cook-Master Automatic Oven Controls on most models.


Infinite Heat Surface Unit Controls (except RAW-3, RAW-4). Lift-up, Stay-up Hinged Units and Removable Porcelain Enamel Drip Bowls on all models.

Built-In Electric Clock and Separate Electric Time Signal on all models except RS-10-60, RS-30-60, RAW-3, RAW-4. All Frigidaire Ranges are wired for 115/230—120/240 volt, 3-wire service. 115/200 volt models are available on special order. Models operating on other electrical frequencies are available for export.

Frigidaire Dishwashers

Swirling Water Action scrubs and sanitizes every dish!

Here's real kitchen convenience! Front-loading Roll-to-You Racks glide out smoothly, load easily, hold a full day's dishes, pans and silver for average family of four. Swirling Water Action scrubs, rinses and sanitizes every dish from between the racks. No dish can hide!

Frigidaire Features for a "Holiday from Apron Strings"

Custom Imperial Models feature two fresh detergent washes, and three rinses (including final "Spots-Away" rinse) plus heated-air drying. DeLuxe Model has one wash. "Snap-on" lower panel speeds installation and service. New 1000-watt Radiantube Heating Unit for better washing and drying. New Drain-Guard and Strainer keeps food particles from being re-deposited on dishes. Under-counter models available in 5 Kitchen Rainbow Colors plus Snowcrest White and Satin Chrome. Free-standing in Snowcrest White only (colors optional). Custom Imperial Dishwasher-Sink Combination in Mayfair Pink, Turquoise, Sunny Yellow and Snowcrest White.

Frigidaire DISPOSERS

30% to 35% faster! Quiet—insulated jacket (FDZ-1) and rubber cushioned connections. Fits most 3½" drain-opening sinks.
**Frost-Proof Refrigerators and Freezers**

for the handiest, finest foodkeeping possible!

Guaranteed* Foodkeeping without Frost! "Sculptured Sheer Look" styling! Frost is stopped before it starts! No frost to defrost! So practical for recessed "built-in" installations. Many models in 5 colors or Snowcrest White.

**FRIGIDAIRE REFRIGERATORS**

Frost-Proof Freezer Section (FPI-15B-60, FPI-13B-60, FPI-13T-60, FPD-13T-60, FPI-12T-60)


Cycla-matic Defrosting in refrigerator section**

Completely separate Zero Zone Food Freezer**

Flip-Quick Ice Ejector (FPI-15B-60, FPI-13B-60, FPI-13T-60—optional in all other models)

Removable Full-Width Metal Shelves all models.


**FRIGIDAIRE UPRIGHT FOOD FREEZERS**


*Frigidaire Frost-Proof Guarantee—Without any cost to owner or user, at any time within one year from date of delivery, Frigidaire will make all necessary adjustments to the Frost-Proof Refrigerator-Freezer or Food Freezer to prevent accumulation of frost!

**FRIGIDAIRE STEREO-COOLING**

—a new dimension in room air conditioning that gently surrounds you with cool, dry, quiet comfort...now available in three smartly-styled Imperial models (AI-100, AI-100M and AIR-100). Attractive "thru-the-wall" application is easy with low-cost "pre-installation" kit.

Frigidaire reserves the right to change specifications and prices, or to discontinue models, without notice.

Frigidaire Automatic Washers and Dryers

No matter what she'll wash and wear...she'll feel like a Queen!

Designed for satisfaction—a "Three-Ring Agitator" Washer that bathes deep dirt out without beating! And a perfectly matched "Wrinkles-Away" Dryer. Equip your homes with the washer that's rated No. 1 for All-Around Performance by the U.S. Testing Co., Inc.®

Many models available in choice of 5 colors or Snowcrest White.

**FRIGIDAIRE ADVANCED APPLIANCES**

Advanced Appliances designed with you in mind.
Your built-in appliances go a long way in carrying the quality appeal of your homes to your prospects—especially a built-in KitchenAid dishwasher which says immediately and emphatically, “This is a quality house!” Home buyers want the convenience of automatic dishwashing and they know that KitchenAid represents the finest made.

KitchenAid’s reputation for rarely needing service is a very important long-range sales advantage for the builder. The word-of-mouth advertising of a satisfied homeowner pays off again and again in more homes sold.

Millions of home-buying prospects know about the superior features of KitchenAid through continuous national advertising ...through other satisfied users. They know that no other dishwasher can match its washing and drying features. And they know that the builder who includes a KitchenAid dishwasher in his plans is a quality builder.

Each time you specify KitchenAid...it starts to sell for you.
GENERAL ELECTRIC'S PPP
PROFIT THROUGH PLANNING

“Profit” is PPP's middle name and the name belongs to General Electric

PLANNED PROFIT PACKAGE is the way General Electric Major Appliances (The Golden Value Line of the 60's) can help you net more dollar profit.

A big part of the plan is Planning and Styling Help, and here's what it includes:
- Custom Kitchen Design Service, available at no cost to you through your General Electric distributor or dealer.
- Help with layouts and color coordination.
- Assistance from General Electric builder sales specialist in planning your kitchen — positioning of appliances to conserve maximum space; ways to get more use of space for your money; other tips on saving costs.

It all adds up to more profit for you!

Would you like to know the other ways you can save money through General Electric? Then send for the “PLANNED PROFIT PACKAGE” kit with information about planning and styling help, product availability, complete merchandising program, product service and much more.
The Golden Value Line of the 60's

GIVES YOU MORE AND STYLING HELP

As an authorized builder of "Live Better Electrically" MEDALLION HOMES, you get prestige and promotional advantages. Ask your local utility about this program.

Progress Is Our Most Important Product

GENERAL ELECTRIC

For information, mail coupon to: General Electric Co., Home Bureau, Appliance Park, Louisville 1, Ky.
Have local General Electric builder sales representative contact me.

NAME
ADDRESS
CITY
STATE
GENERAL CHEF combines six kitchen-essentials in one compact, efficient unit:

REFRIGERATOR • OVEN • SINK
STOVE • FREEZER • STORAGE

Every model available in white or several wood-grain finishes. Entire base unit factory-assembled and shipped in one crate. Available on all units: garbage disposal; one-piece stainless steel tops. And don’t forget: GENERAL CHEF is the only Complete Kitchen Unit with factory-owned, nation-wide sales and service.

For complete details write:
General Air Conditioning Corp.
Dept. J-14, 4542 E. Dunham St.
Los Angeles 23, California

Now, every kitchen can have

PURIFIED AIR
... with NO outside ducts!

DUCTLESS HOOD
banishes cooking odors...
removes smoke, grease—even
pollen—by a time-tested
scientific miracle. This is the
magic of Activated Charcoal
—the substance that purifies
the air men breathe in
atomic submarines.

SIMPLE TO INSTALL...
DUCTLESS HOOD
uses no expensive outside
vents or louvres. Instead,
powerful motor-blowers re-
circulate kitchen air through
filters to remove impurities.

For other rooms—the built-in
DUCTLESS AIR PURIFIER

Write for literature: THE DUCTLESS HOOD CO., INC.
Dept. 75, 601 Flindrome Rd., Manhasset, N. Y.

AMERICAN BUILDER
GAS GRIDDLE
Available with or without Thermostatic Controls

“SHADOW SLIM” 4-burner GAS DROP-IN UNIT.
Requires only single top cut-out.

and now for '60 . . .
THE BIGGEST NEWS IN BUILT-INS!

GAS OVEN
with low broiler

2-burner ELECTRIC COUNTER-TOP UNIT

4-burner GAS COUNTER-TOP UNIT

GAS COUNTER-TOP UNIT

BROILMASTER ELECTRIC OVEN
with high broiler

BROILMASTER ELECTRIC OVEN
with low broiler

MT. VERNON FURNACE & MFG. CO.
Mt. Vernon, Illinois

MT. VERNON “BUILDER’S SPECIAL”
Electric Oven with high broiler and automatic clock

MT. VERNON “BUILDER’S SPECIAL”
Gas Oven with low broiler

“SHADOW-SLIM” 4-burner ELECTRIC DROP-IN UNIT.
Requires only single top cut-out.

Some Territories Still Open for Qualified Distributors.

Gas and electric models — fully automatic, with clock controls
A wide, wide 18” — top oven 16” high, 19½” deep, lower unit 14” high
The only gas oven on the market with flame-set controlled broiling
Cast aluminum frame fits into 24” cabinet
Also promotional models for builders
Nationally advertised

LOOK FOR THE “BIG D” IN ’60!

Dealers and Distributors: Write Today for Literature and Prices.
For wooden shingles – shakes – siding and masonry surfaces

Cabot's OLD VIRGINIA TINTS®
A uniform oil base finish
- One coat usually sufficient
- Easy to apply and maintain
- Waterproof and weather resistant
- Preserve and protect wood

18 MODERN COLORS,
BLACK & OLD VIRGINIA WHITE

WRITE FOR COLOR CARD TODAY

SAMUEL CABOT INC.
424 South Terminal Trust Bldg.
Boston, Mass.

Please send color card on Old Virginia Tints

(Continued from page 372)

AMERICAN BUILDER
PAINTS, FINISHES, WATERPROOFING

Paints and Finishes

Suggested Exterior Color Schemes

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<thead>
<tr>
<th>If the roof of the house is</th>
<th>GRAY</th>
<th>GREEN</th>
<th>RED</th>
<th>BROWN</th>
<th>BLUE</th>
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<td>You can paint the body</td>
<td>White</td>
<td>Gray</td>
<td>Green</td>
<td>Red</td>
<td>Brown</td>
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<tr>
<td>If the roof of the house is</td>
<td>GRAY</td>
<td>GREEN</td>
<td>RED</td>
<td>BROWN</td>
<td>BLUE</td>
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<tr>
<td>You can paint the body</td>
<td>White</td>
<td>Gray</td>
<td>Green</td>
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<td>Brown</td>
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<td>Tips on Color</td>
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<td>If you have: And you want: Do this:</td>
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<td>Blue</td>
<td>Dark Blue</td>
<td>Add Black</td>
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<td>Blue</td>
<td>Light Blue</td>
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<td>Green</td>
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<td>Green</td>
<td>Light Green</td>
<td>Add Yellow or White</td>
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<tr>
<td>Green</td>
<td>Olive</td>
<td>Add Blue or Red</td>
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<tr>
<td>Orange</td>
<td>Brown</td>
<td>Add Blue</td>
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<td>Red</td>
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<td>Red</td>
<td>Light Red</td>
<td>Add Orange</td>
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<tr>
<td>(not Pink)</td>
<td>Brown</td>
<td>Add Green</td>
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</table>

Primary and Secondary Mixtures

Red plus Yellow makes Orange
Yellow plus Blue makes Green
Blue plus Red makes Purple
Orange plus Green makes Citron
Green plus Purple makes Olive
Purple plus Orange makes Russet
(Try a small sample first for desired color)

Natural Finishes

The following are natural-finish systems for outdoor use on redwood. WATER REPELLENTS: Easy to apply. Easy and inexpensive to maintain. No special preparation required prior to refinishing. Field experience indicates that paintable water-repellent preservatives provide the most satisfactory natural treatment for exterior redwood. Products meeting requirements of Federal Specifications TT-W-572 should prove satisfactory. BLEACHES and FLAT-PIGMENTED STAINS: Easy to apply. Easy and inexpensive to maintain. No special preparation required prior to refinishing. While these finishes give good service when applied to dressed surfaces, they may be expected to last over twice as long when applied to sawn surfaces. GLOSSY STAIN-AND-CLEAR COMBINATIONS and GLOSSY CLEARS: These are film-forming finishes and must be applied carefully to a properly prepared surface in order to obtain satisfactory results. If these finishes are used in protected locations, they may be expected to give good service. They should be used on exposed areas only with the realization that they may be expected to require maintenance in less than two years and that, after one or two maintenance coats, special surface preparation, involving complete removal of the old finish, probably will be required. For complete information and recommended products, write to the California Redwood Assn., 576 Sacramento St., San Francisco 11, Calif.

For additional information on natural finishes, see FHA Minimum Property Standards, Section 910, Painting and Decorating, or write The National Paint, Varnish and Lacquer Assn., 1500 Rhode Island Ave., N. W., Washington 5, D. C.

Tables Courtesy National Paint, Varnish and Lacquer Assn.

APRIL 1960
Foundations or footing drains connected to a positive outfall rock or blast-furnace slag. Provide approximately 2 inches of field office, in locations where well-drained soil exists or where joints in drain tile with 6 to 8 inches of coarse gravel or crushed of '2 per cent (approximately 1 inch in 20 feet). Protect top of pipe.

Placement of the drain tile has FHA approval for minimum acceptable protection. For maximum protection, tile should be laid on the same plane as footing. Joint between foundation and footing should be flashed.

**FHA REQUIREMENTS**

Foundations or footing drains connected to a positive outfall shall be provided around foundations enclosing basements or habitable spaces below grade. Install at or below area to be protected.

Clay or concrete drain tile shall comply with ASTM C-4 or ASTM C-412, or tile may be asbestos cement or bituminized-fiber pipe.

Drain tile shall be installed having a minimum slope to outfall of 1% per cent (approximately 1 inch in 20 feet). Protect top of joints in drain tile with 6 to 8 inches of coarse gravel or crushed rock or blast-furnace slag. Provide approximately 2 inches of aggregate material under tile.

Foundation drains may be omitted, when acceptable to FHA field office, in locations where well-drained soil exists or where ground or surface water will not present a problem.

**Foundation walls**

a. Apply at least 1 coat of Portland cement parging to wall from footing to finish grade. Minimum thickness, % inch.

b. Apply at least 1 coat of bituminous dampproofing material over parging. Apply at rate recommended by the manufacturer. Bituminous materials shall comply with 712-1 (FHA Minimum Property Standards).

**Concrete foundation walls**

Apply at least 1 coat of bituminous dampproofing material to wall from footing to finish grade. Apply at rate recommended by manufacturer. Bituminous materials shall comply with 712-1 (FHA Minimum Property Standards).

Foundation dampproofing may be omitted, when acceptable to FHA field office, in locations where well-drained soil exists or where ground surface water will not present a problem.

**Masonry water-repellent Specifications**

Shall be a clear, colorless solution in mineral thinner and shall have a flash point of not less than 80° F. It shall have a solids content of not less than 5%, of which 100% shall be silicone resin.

The water-repellent material shall not have an obnoxious odor either in the container or during application. It shall be of such consistency that it may be applied readily at sub-freezing temperatures, and shall leave no visible film after application.

**Scope**

It shall be used on all exterior above-grade masonry surfaces such as concrete, brick, stucco, concrete block, porous tile, stone and mortar joints in all types of masonry structures.

**Surface preparation**

Clean all surfaces to be treated until free of dirt, excess mortar, loose particles and all other foreign material. Remove salt deposits from previous efflorescence, by washing with dilute acid solution, such as muriatic, followed by thorough flushing with water. Grease or oil stains may be removed with mineral solvents, caustic cleaning compounds or detergent solution, followed by rinsing with clear water. Repair all joints where mortar is loose approximately 6 inches from the wall and make final pressure adjustment to completely eliminate or minimize splashing and formation of a mist or fog. The water repellent should be flooded on to the surface to the point of maximum absorption, as indicated by a run-down of six to twelve inches or more, depending upon the denseness of the masonry. Application should be made at the rate of 75-100 square feet per gallon on masonry of normal porosity. On dense masonry which will not accept and absorb the water repellent at that rate, the coverage may be extended to a maximum of 175-200 square feet per gallon. In such situations, two coats may be desired. At least two to four hours under good drying conditions should be allowed between coats.

Application by brushing is satisfactory if care is taken to apply a liberal enough coat to meet recommended coverage rate. Roller application at the same rate is also satisfactory if the surface is smooth enough for all areas to be reached. Most often, however, in masonry construction the mortar joints are inset to such an extent that low pressure spray or brush application is the only practical satisfactory method of application. The same would apply to coarse texture stucco.

Overspray or splashing on other exterior oil or water based paints is harmless and may be left without damage. The water repellent may be removed from glass or hardware at any convenient time with a cloth dampened with paint thinner.

**Safety precautions**

A dilute water-repellent solution prepared as indicated under "Material" constitutes no more of a hazard than any ordinary architectural paint when normal precautions are taken and "good housekeeping" is practiced. Because of the high-solvent concentration, prolonged breathing of vapors should be avoided and the usual precautions against fire should be observed. When spraying the water repellent, even at the recommended low pressures, the operator should be protected with goggles and a respirator that will prevent the passage of solvent mist or fog, which, when inhaled, is very toxic.

Courtesy: General Electric Co.
TUFF-BOND SUPER-STRENGTH ADHESIVES
Formulated for the Construction Industry

TUFF-BOND QUIK-SET ADHESIVE... An excellent all purpose FAST-SETTING ADHESIVE with neoprene base... brush consistency.

*TUFF-BOND GENERAL PURPOSE... An ALL PURPOSE water resistant adhesive that sticks almost anything to anything.

*TUFF-BOND NO. 2-S... An oyster white CERAMIC TILE ADHESIVE.

*TUFF-BOND NO. 4... A WALLBOARD AND A DRY WALL ADHESIVE. An economical adhesive with great strength and excellent aging qualities.

TUFF-BOND No. 5... A FIBRE AND ACOUSTICAL TILE ADHESIVE with strong bonding strength.

TUFF-BOND NO. 8... A CONTACT BOND ADHESIVE for bonding laminates to wood and to metal.

*Complies with Commercial Standard CS 181-52.
Recommendations for special adhesives made without cost or obligation.

Builders everywhere are finding that handsome, guaranteed-dry basements make homes easier to sell. And this can be your least expensive sales feature. Using our new long-handled broad brush, one man can coat the inside walls of the average new basement in less than one hour. A single coat will do except in extreme moisture conditions. Ask for a job sign, because we advertise nationally to prospective home owners. Thoroseal is available in white, pearl gray and a variety of attractive pastel colors. There is a dealer in every locality to insure prompt supply. Write for our new 20-page specification guide.

Please send me your free new specification guide.

Name:

Company:

Address:

Standard Dry Wall Products, Inc.
Box X, New Eagle, Pa.
There's no doubt about it... MILWAUKEE Circular Saws are built for the builder! Here's why:

- They're precision-designed for greatest accuracy...
- They're super-powered for high speed...
- They're day-in-and-day-out use...
- They're perfectly balanced for easier handling.
- They're rugged and functionally styled — with the capacity to handle any type of construction work faster and easier.

No other saws can match MILWAUKEE for dependability and quality. No other saws give you the performance advantages that pay off in superior workmanship and more profitable production.

See your MILWAUKEE Distributor or write for free copy of Bulletin SW-27.

Available in 3 popular sizes —
115 or 230 volts

- 6½'' Heavy-Duty Model - $69.50
- 7½'' Heavy-Duty Model - $79.50
- 8½'' Heavy-Duty Model - $89.50

All models furnished complete with combination blade and rip fence. Also available with steel carrying case.
### Recommended Extension Cord Sizes for Use with Portable Electric Tools

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<thead>
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<th>CORD LENGTH IN FEET</th>
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NOTE: Wire sizes shown are A.W.G. (American Wire Gauge).

Table courtesy of Thomas Y. Crowell Co.

### TYPICAL RUNNING CURRENT REQUIREMENTS OF MOTORS

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C — Full Rated Load Current in amperes (Amperes while starting are MUCH higher)

W — Minimum Wire Size permitted by Code; larger sizes often required — Check Distance for Voltage Drop.

AUGUST 1960
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<td>CYPRESS</td>
<td>2½ to 1½A</td>
<td>½ to 1/0A</td>
<td>2/0G</td>
</tr>
<tr>
<td>INDOAKO</td>
<td>1½A</td>
<td>½ to 1/0G</td>
<td>2/0 to 4/0G</td>
</tr>
<tr>
<td>FIR</td>
<td>1½ to 1A</td>
<td>½ to 1/0G</td>
<td>2/0G</td>
</tr>
<tr>
<td>WHITE PINE</td>
<td>1½ to 1G</td>
<td>1/0G</td>
<td>2G</td>
</tr>
<tr>
<td>YELLOW PINE</td>
<td>2 to 1½SA</td>
<td>½G</td>
<td>1/0G</td>
</tr>
<tr>
<td>WILLOW</td>
<td>2A</td>
<td>½ to 1/0G</td>
<td>2/0G</td>
</tr>
<tr>
<td>Removing Paint and Varnish</td>
<td>3½ to 2½SA Spaced Grain</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Symbols: G—Garnet for soft wood. A—Artificial for hard wood. SA—Spaced for paint or varnish.*

### Comparative Grading Chart for Abrasives

<table>
<thead>
<tr>
<th>GRAIN SIZE (mesh)</th>
<th>CORUNDUM AND EMERY CLOTH</th>
<th>FLINT PAPER</th>
<th>GARMENT, SILICON CARBIDE, ALUMINUM OXIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>320</td>
<td>10/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>5/0</td>
<td>7/0</td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>4/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 (fine)</td>
<td>3/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>3/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>2/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>2/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>2/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90 (medium)</td>
<td>½</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>1½</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>1½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 (coarse)</td>
<td>2½</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>24 (very coarse)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>3½</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*From "How to Use Portable Power Tools" by Maurice H. Reid, Thomas Y. Crowell Co., Publisher*
Shop Layout For Wood Working Machines

**CIRCULAR SAW**
- Enough room for long boards
- 36’
- Operator is protected since no one can pass on operating side
- Approach from circular saw
- Light

**BAND SAW**
- Light
- Permit about three feet on each side
- Outside feed

**SCROLL SAW**
- Light
- 6 feet all around this area
- Inside feed

**JOINTER**
- Provide ample light to read dimensional and angle dials and controls
- Wide aisle on this side

**SHAPER**
- Allow at least 5 or 6 feet in both directions for long work
- Direction of belt travel
- Standing room for operator
- Light

**PLANER**
- Allow 3 feet all around for mortising and routing
- Light
- Wide aisle is allowable here because stock worked is usually small

**RADIAL ARM SAW**
- Light
- Overhead light
- Head stock
- 12’ or less

**BELT SANDER**
- May be close to other machines
- Have well lighted
- Wide aisle is allowable

**WOOD TURNING LATHE**
- Light
- Overhead light
- Head stock
- 45°

**GRINDER**
- Light
- Have well lighted

**DISK SANDER**
- Light
- Allow 3 or 4 feet in these directions if sander runs clockwise

**DILL PRESS**
- Light
## MINIMUM CAPACITY TABLES FOR A.G.C. SELF-PRIMING CENTRIFUGAL PUMPS

The following tables have been adopted as minimum capacity standards by the Contractors Pump Bureau of The Associated General Contractors of America, Inc., and set forth the performance requirements under average job conditions for these pumps.

### MODEL 4-M—1½ in.—1 H.P.

The following table gives capacity in gallons per minute:

<table>
<thead>
<tr>
<th>TOTAL HEAD</th>
<th>INCLUDING</th>
<th>HEIGHT OF PUMP ABOVE WATER</th>
<th>10 Ft.</th>
<th>15 Ft.</th>
<th>20 Ft.</th>
<th>25 Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 ft.</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 ft.</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 ft.</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 ft.</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 ft.</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 ft.</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 ft.</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 ft.</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### MODEL 5-M—2 in.—2 H.P.

The following table gives capacity in gallons per minute:

<table>
<thead>
<tr>
<th>TOTAL HEAD</th>
<th>INCLUDING</th>
<th>HEIGHT OF PUMP ABOVE WATER</th>
<th>10 Ft.</th>
<th>15 Ft.</th>
<th>20 Ft.</th>
<th>25 Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 ft.</td>
<td>115</td>
<td></td>
<td>100</td>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 ft.</td>
<td>114</td>
<td></td>
<td>98</td>
<td>84</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>40 ft.</td>
<td>107</td>
<td></td>
<td>92</td>
<td>79</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>50 ft.</td>
<td>94</td>
<td></td>
<td>84</td>
<td>68</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>60 ft.</td>
<td>88</td>
<td></td>
<td>75</td>
<td>61</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>65 ft.</td>
<td>84</td>
<td></td>
<td>68</td>
<td>56</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>70 ft.</td>
<td>80</td>
<td></td>
<td>60</td>
<td>50</td>
<td>35</td>
<td>21</td>
</tr>
</tbody>
</table>

### MODEL 7-M—2 in.—3 H.P.

The following table gives capacity in gallons per minute:

<table>
<thead>
<tr>
<th>TOTAL HEAD</th>
<th>INCLUDING</th>
<th>HEIGHT OF PUMP ABOVE WATER</th>
<th>10 Ft.</th>
<th>15 Ft.</th>
<th>20 Ft.</th>
<th>25 Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 ft.</td>
<td>166</td>
<td></td>
<td>145</td>
<td>115</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>30 ft.</td>
<td>164</td>
<td></td>
<td>140</td>
<td>110</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>40 ft.</td>
<td>157</td>
<td></td>
<td>130</td>
<td>100</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>50 ft.</td>
<td>145</td>
<td></td>
<td>110</td>
<td>90</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>60 ft.</td>
<td>122</td>
<td></td>
<td>110</td>
<td>90</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>70 ft.</td>
<td>85</td>
<td></td>
<td>82</td>
<td>75</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>80 ft.</td>
<td>20</td>
<td></td>
<td>20</td>
<td>19</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

### MODEL 10-M—2 in.—3 H.P.

The following table gives capacity in gallons per minute:

<table>
<thead>
<tr>
<th>TOTAL HEAD</th>
<th>INCLUDING</th>
<th>HEIGHT OF PUMP ABOVE WATER</th>
<th>10 Ft.</th>
<th>15 Ft.</th>
<th>20 Ft.</th>
<th>25 Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 ft.</td>
<td>266</td>
<td></td>
<td>224</td>
<td>182</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>30 ft.</td>
<td>245</td>
<td></td>
<td>214</td>
<td>177</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>40 ft.</td>
<td>216</td>
<td></td>
<td>200</td>
<td>169</td>
<td>135</td>
<td></td>
</tr>
<tr>
<td>50 ft.</td>
<td>184</td>
<td></td>
<td>176</td>
<td>156</td>
<td>127</td>
<td></td>
</tr>
<tr>
<td>60 ft.</td>
<td>142</td>
<td></td>
<td>138</td>
<td>130</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>70 ft.</td>
<td>102</td>
<td></td>
<td>98</td>
<td>95</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>80 ft.</td>
<td>52</td>
<td></td>
<td>52</td>
<td>52</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>90 ft.</td>
<td>26</td>
<td></td>
<td>26</td>
<td>26</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

### MODEL 15-M—3 in.—5 H.P.

The following table gives capacity in gallons per minute:

<table>
<thead>
<tr>
<th>TOTAL HEAD</th>
<th>INCLUDING</th>
<th>HEIGHT OF PUMP ABOVE WATER</th>
<th>10 Ft.</th>
<th>15 Ft.</th>
<th>20 Ft.</th>
<th>25 Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 ft.</td>
<td>333</td>
<td></td>
<td>280</td>
<td>235</td>
<td>165</td>
<td></td>
</tr>
<tr>
<td>30 ft.</td>
<td>310</td>
<td></td>
<td>268</td>
<td>230</td>
<td>162</td>
<td></td>
</tr>
<tr>
<td>40 ft.</td>
<td>275</td>
<td></td>
<td>245</td>
<td>220</td>
<td>155</td>
<td></td>
</tr>
<tr>
<td>50 ft.</td>
<td>220</td>
<td></td>
<td>210</td>
<td>195</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td>60 ft.</td>
<td>160</td>
<td></td>
<td>156</td>
<td>155</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>80 ft.</td>
<td>90</td>
<td></td>
<td>90</td>
<td>90</td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>

### MODEL 20-M—3 in.—7½ H.P.

The following table gives capacity in gallons per minute:

<table>
<thead>
<tr>
<th>TOTAL HEAD</th>
<th>INCLUDING</th>
<th>HEIGHT OF PUMP ABOVE WATER</th>
<th>10 Ft.</th>
<th>15 Ft.</th>
<th>20 Ft.</th>
<th>25 Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 ft.</td>
<td>2100</td>
<td></td>
<td>1850</td>
<td>1570</td>
<td>1200</td>
<td></td>
</tr>
<tr>
<td>30 ft.</td>
<td>2040</td>
<td></td>
<td>1820</td>
<td>1560</td>
<td>1200</td>
<td></td>
</tr>
<tr>
<td>40 ft.</td>
<td>1960</td>
<td></td>
<td>1740</td>
<td>1520</td>
<td>1170</td>
<td></td>
</tr>
<tr>
<td>50 ft.</td>
<td>1800</td>
<td></td>
<td>1620</td>
<td>1450</td>
<td>1140</td>
<td></td>
</tr>
<tr>
<td>60 ft.</td>
<td>1640</td>
<td></td>
<td>1500</td>
<td>1360</td>
<td>1090</td>
<td></td>
</tr>
<tr>
<td>70 ft.</td>
<td>1460</td>
<td></td>
<td>1340</td>
<td>1250</td>
<td>1015</td>
<td></td>
</tr>
<tr>
<td>80 ft.</td>
<td>1250</td>
<td></td>
<td>1170</td>
<td>1110</td>
<td>950</td>
<td></td>
</tr>
<tr>
<td>90 ft.</td>
<td>1020</td>
<td></td>
<td>980</td>
<td>940</td>
<td>840</td>
<td></td>
</tr>
<tr>
<td>100 ft.</td>
<td>800</td>
<td></td>
<td>760</td>
<td>710</td>
<td>680</td>
<td></td>
</tr>
<tr>
<td>110 ft.</td>
<td>570</td>
<td></td>
<td>540</td>
<td>500</td>
<td>470</td>
<td></td>
</tr>
<tr>
<td>120 ft.</td>
<td>275</td>
<td></td>
<td>245</td>
<td>240</td>
<td>240</td>
<td></td>
</tr>
</tbody>
</table>
Rolling scaffolding... generally is built up into towers of varying heights set on steel casters. One of their prime features is that they straddle aisles, walks or equipment while they are being moved around a job.

Scissor scaffolding... can set a workman at a variety of stations. It is generally raised and lowered by pneumatic, hydraulic, and screw jacks. But some types are raised and lowered by hand and held positioned by bolts.

Adjustable work platforms... are made up of tubular scaffolding frames that can be built up or broken down to create a variety of fixed heights. These are engineered for easy erection, dismantling and stacking.

Suspended scaffolding... hangs by cables from outriggers anchored to a building. A hand or power winch raises and lowers them. They most frequently are seen in operation on multi-story buildings.

HOW TO HANDLE THEM SAFELY
- Make certain they have sufficient underpinning in addition to base plates when erecting them on soft ground.
- Compensate for uneven ground with adjustable base plates.
- Always level and plumb scaffolding thoroughly.
- Don't force braces to fit. Badly fitting braces usually indicate scaffolding isn't level.
- Check the cam lever on braces to make certain it is in a "down" position.
- Prevent scaffold structure from racking with horizontal braces.
- Check stack locks at the base of each panel leg to see that it engages holes in the stack coupling of panels.

GENERAL SPECIFICATIONS
Elyria grade steel is the metal most commonly used in tubular scaffolding. Other steels used are aluminum, magnesium, mild and carbon steels.

Tubing for scaffolding generally measures 1.625 in. in diameter. This standardized size permits the stacking of scaffolding made by different manufacturers.

The scaffolding generally is made up in panel frames of 5-ft. widths unless they are designed for some special purpose. The 5-ft. panel can carry six 2x10-in. edge-planed planks between its leg posts, to make up a standard-width scaffold platform. Panel heights vary from 1-ft. extension members to 10-ft.-high walk-through members. Standard panels measure 5 ft. wide and 6½ ft. high, though 4x4½-ft. frames are available. Usually, frame heights graduate in 1-ft. increments except where they are made for special purposes.

Governing frame spacing and brace lengths are the plank spans. Considered most practical and economic spacing: 7 ft.—when 2-in. planks are used. Shorter spacing is usually reserved for shoring and heavy loading. Employing 3-in. planks makes longer spacing of frames possible.

Bracing that goes into scaffolding can be both single and double. Staggering diagonal bracing between frames omits double bracing and serves light loading purposes. Double bracing forces leveling of frames, offers greater stiffness, and will serve as single tower frames, shoring, and elevator frames.

Inserting casters under the legs of rigid scaffold frames converts the structure into a rolling tower generally employed for interior work, concrete decks, and special shoring. Such towers will also be found in masonry and mechanical installations.
Tough loadtender...

1960 DODGE TRUCK

Pile it on! For here's a stake-platform you can load up with little fear of loading down. A tough truck, quality-built to weather big-load punishment.

Heavy-duty frame, springs and axles allow a top payload of nearly seven tons in the rugged D500 model shown below . . . and an all-steel underbody supports your cargo. Four engine options (two V-8's, two Sixes) let you pick the power that’s thriftiest for your kind of driving. Horsepower from 125 to 202.

Other models from 4,250 lbs. G.V.W. to burly new C500 Cab-Forwards rated at 19,500 lbs. maximum G.V.W. Stake body lengths from 7½ to 14 feet. Whatever your truck requirements, get in touch with your Dodge dealer soon. Let him give you the lowdown on why you can

DEPEND ON DODGE TRUCKS TO SAVE YOU MONEY IN

Quality Construction—Heavy-gauge steel supporting rails run full-length, full-width under the Dodge stake body for top strength and durability. Just one of a host of quality features exclusive with Dodge in the low-price field.

A PRODUCT OF CHRYSLER CORPORATION

APRIL 1960
MULLER MACHINES are RUGGED!

In addition to the units illustrated here, Muller also manufactures: Floor and Trowel Hoppers, Concrete Carts, Foundry Core Sand Mixers, and Space Heaters.

Ask for literature, prices and full details.

MULLER MACHINERY COMPANY, Inc.
248 Whitman Avenue, Metuchen 4, N. J.

Two tough new grading tools at surprisingly low prices!

New Lone Star Blade
We state flatly, this is the largest selling light blade in the country, because it is the greatest value. All welded, sturdy, 240 lb. construction 13" mouldboard plus 6" replaceable cutting edge of 9/16" grade-blade steel. 8 adjustments for angling and reversing. And... in most parts of the country it retails for under $100!

New Soil Scraper
At last, a scraper that really takes the ground. Can scarify and scrape at same time. Levels, grades, backfills. Curved mouldboard rolls dirt up for full load. 17 and 20 cu. ft. respectively in 66" and 72" models. A heavy duty tool, but favorable plant location means competitive delivered prices.

WRITE TODAY FOR MORE DETAILS

SERVIS EQUIPMENT COMPANY
1012 Singleton Blvd. • Dallas 21, Texas

(Continued from page 377)
A wide choice of materials-handling equipment is available for John Deere wheel and crawler tractors. Choose from gasoline or Diesel power.

John Deere Industrial Division
Dept. 2662 • 3300 River Drive
Moline, Illinois

John Deere
Power Steering
cuts work and saves time
on materials-handling

Masonry and mortar, panels and pipe are moved at minimum expense with low-cost John Deere fork lifts and materials-handling units. Advanced power steering and direction reverser insure smooth operation and all-day efficiency. Thrifty John Deere engines and simple maintenance requirements keep operating costs low. Parts and service available in major cities everywhere.

All John Deere Industrial Units can be purchased on terms of the John Deere Credit Plan. Terms are arranged confidentially with the John Deere Industrial Dealer. Contact him through the classified section of your telephone directory or write direct today.

JOHN DEERE
"Specialists in Low-Cost Power with a Heavyweight Punch"

APRIL 1960
TRIO OF "EXCLUSIVES"
FOR QUICKER MORE ACCURATE SURVEYING

NEW...Completely redesigned Dietzgen Builders' Transit-Level has three exclusive features that you should know about...

**EXCLUSIVE.** Totally enclosed leveling screws—removable and replaceable. To keep lubricant in—and the harmfully abrasive effect of dirt and dust out—leveling screws and threads are completely enclosed. They will last longer than any "open" kind. And they are removable and replaceable. When they have outlived their usefulness, just remove a cap and pull out the leveling screws and bushings. New assemblies may be purchased. Spare yourself the time and money involved in replacing an entire unit.

**EXCLUSIVE.** Side-mounted focusing knob for easier focusing. Now, the focusing of the telescope may be done without disturbing its line of sight. Located on the end of the horizontal axis of the telescope, not on the telescope itself, the focusing knob may be operated without inadvertently moving the telescope. Here is a practical feature with real convenience.

**EXCLUSIVE.** Top-mounted "rough" aiming sights for quick alignment. Because time is money on the job, the fast but reasonably accurate initial sighting by means of "rough" aiming sights is a cost-cutter. An operator can quickly and easily swing on target...lock the instrument in approximate position...and then make fine adjustments with the tangent screw.

This rugged, two-in-one instrument can do all your surveying work from start to finish...run boundary lines, lay out foundations, find elevation differences, level up excavation, align foundation piers, determine and set grades, plumb vertical lines, walls, uprights, chimneys and poles, run sewer and drainage lines, landscape...all kinds of jobs, big and small.

And, this all-purpose instrument is exceptionally simple and easy to use...no special mathematical or technical training is needed. Each Dietzgen Transit-Level is furnished with a free, easy to understand, self-teaching instruction manual containing complete operating instructions plus practical problems of many important applications.

For an instrument for all your surveying, with ease of operation, simplicity, ruggedness and accuracy, the Dietzgen Builders' Transit-Level is unexcelled. Write or call today for complete information. Ask for Bulletin N6385-D-23.
STANLEY
HEAVY-DUTY
BUILDERS SAWS

SPRING SPECIAL! Save up to $15.00
on complete Builders Saw Kits

Take advantage of these terrific savings
on Stanley Saw Kits for your busy sea-
son ahead. Saws pack nearly 40% more
cutting force, feature ball-bearing con-
struction, and weigh up to 2½ lbs. less
than previous models—advantages that
let you do more work with a lot less
effort. And just look at the time-saving,
work-saving advancements shown above.

Stop in and see these big bargains at
your dealer's today. For catalog on
Stanley's whole line of heavy-duty power
tools, write: Stanley Electric Tools, Div.
of The Stanley Works, 1004 Myrtle St.,
New Britain, Connecticut.

SPECIAL SPRING SAVINGS
Offer ends July 31, 1960

Prices slightly higher in Canada • Subject to change without notice.

TRY STANLEY ELECTRIC TOOLS—the complete line with new design

Extra-heavy-duty H76 saber saw speeds cutting of laths,
counter tops, wall and floor holes, laminates, hard plastics,
cable, sheathing. Cuts to 11/2" along a wall $59.95.

Stanley's powerful H31 belt sander rough-sands and
finishes wood, metal or plastic. Takes all the work out of
sandpapering. Includes fine, medium, coarse belts. $89.95.

Stanley's H36 orbital sander is tough, heavy-duty. Ideal
for small work areas, flush sanding. Comfortable, to-
ppered handle, perfect balance. Air-cooled motor: $49.95.

NEW REAR-POSITION CONTROL! You set depth
or bevel from the cutting position—fast!

Spring steel beam and wrought aluminum
base give saws extra strong structure.

Big window lets you see clearly. One notch
on base guides both 45° and 90° cuts.

Kits include saw, rip guide, wrench
and this sturdy steel carrying case.

AMERICA BUILDS BETTER AND LIVES BETTER WITH STANLEY
This famous trademark distinguishes over 20,000 quality products of The Stanley Works, New Britain, Conn. — hand tools • electric
tools • builders hardware • industrial hardware • striping hardware • automatic door controls • aluminum windows • stampings
• springs • coatings • strip steel • steel stamping — made in 24 plants in the United States, Canada, England and Germany.

STANLEY

APRIL 1960

389
ANNOUNCING THE NEW

America's lowest priced* pickup truck!

up to 30 mpg!
lowest priced* pickup!

Totally new for total savings! Ford's new Falcon Ranchero delivers up to 30 miles on a gallon, yet its new 90-hp Six is geared to do a real job! There are lower costs for oil, tires, brakes, parts... nearly everything!

The Falcon Ranchero is priced from $89 to $210 under competitive 3/4-ton pickups!* And that's just the start of your savings. Single-Unit construction saves on maintenance... it's tighter, quieter, with main underbody members zinc-coated against rust and corrosion. See your Ford dealer!

*Based on latest available manufacturers' suggested retail delivered prices with comparable standard equipment.
FORD Falcon RANCHERO

big 6-foot box!

Load capacity is more than ample for most pickup hauls—nearly 7 1/4 feet of load length with tailgate flat. And thanks to the low loading height, loading and unloading is faster, easier!

- Up to 30 miles on a single gallon of gas
- Up to 4000 miles between oil changes
- Diamond Lustre finish needs no waxing
- Low loading height
- Instant-lock tailgate opens, closes with a single, one-hand motion
- Roomy comfort for three passengers
- Styled to capture admiration

FORD TRUCKS COST LESS
LESS TO BUY...LESS TO RUN...BUILT TO LAST LONGER, TOO!

APRIL 1960
MORE FOR YOUR MONEY with a
WARREN-KNIGHT TRANSIT-LEVEL

NEW DESIGN
There has never been a Transit-Level like the 38-bF. Offers new usefulness — almost indestructible.

Model 38-bF $320.
Model 39-bF (Without compass) $295.

You've never seen a Transit-Level like the new Warren-Knight. It looks and is operated like a transit, yet it has the exclusive advantage of being adjusted like a level, and costs less than half as much as the average transit. The new design is so sturdy that maintenance and repair charges will be practically eliminated. Assures a LIFETIME of SERVICE. This expert new design includes such features as a steel center, 24x coated optics, covered leveling screws, and limb vernier reading to one minute.

Ask for Bulletin F-40 that lists Full Details.

COMBINATION SAWS can now be filed automatically
with the New Model 200 FOLEY Automatic SAW FILER

This is the FIRST and ONLY machine which will file the so-called "combination" (rip and crosscut) circular saws; also crosscut circular saws, band saws, all types of hand saws.

The new model 200 Foley Saw Filer files the first tooth in each segment of a combination saw, clear around the saw; then the second tooth in each segment, and so on, until the saw is finished. The exclusive Foley principle of jointing the saw as it is filed, keeps all teeth uniform in size, shape and spacing; keeps circular saws perfectly round, usually doubles saw life.

CONTRACTORS—CARPENTERS—CUSTOM FILERS—Here is the ideal machine for contractors to keep all their power and hand saws in top-notch cutting condition and greatly prolong their life. For the carpenter who wants to make from $3 to $6 an hour in spare time—and for the full-time custom saw filer—the new model 200 Foley Saw Filer turns out perfectly sharpened saws that build repeat business and quickly pay for the Filer. Time payments if desired. Send coupon today—no salesman will call.

FOLEY MFG. CO. MINNEAPOLIS 18, MINN.

- Please send full information and Time Payment Plan on New Model 200 Foley Automatic Saw Filer.

NAME:

ADDRESS:

CITY_________________STATE_________________
“Our OC-46 turns on a dime... and gives 9¢ change”

Work-test an Oliver OC-46 loader... see how “Spot-Turn” steering eases all your work!

This Oliver OC-46 works and ranges over hundreds of acres—moving, grading, loading thousands of yards. It’s one of six Oliver tractors owned by Baldwin Construction Company, Bloomfield, New Jersey.

Operator Nicholas Psiahas reports on its easy handling and maneuverability: “‘Spot-Turn’ steering is terrific—the OC-46 is so comfortable to operate. Controls are simple. Our OC-46 turns on a dime...and gives 9¢ change.”

Simple operation with low-effort steering is just the start of the OC-46’s benefits. This compact, easily transported, ½-yd. crawler loader is official champion of its class in pounds-pull—meaning greater work power.

It has the shortest turn radius. A factory-built, integrated tractor-loader, the OC-46 has low-profile design with shorter pedestals for greater stability and work safety.

Get all the facts on the OC-46 loader. Choice of 30-plus h.p. gasoline or diesel engine.

LOOK TO OLIVER FOR YOUR BEST BUY IN WHEEL AND CRAWLER TRACTORS

THE OLIVER CORPORATION

Dept. 2232, 400 W. Madison St., Chicago 6, Illinois

Most versatile, all-job crawler you can own

Double the work scope of your OC-46. Add the quick-hitch (only three minutes) Oliver backhoe and handle trenching, excavating and loading jobs of all kinds. Fully hydraulic operation with deep 12'8" digging and high 9'6" loading. Full 180° boom swing. A perfect low-cost digging-loading package for towns, parks, contractors, etc.

Jobs, jobs, jobs—See how valuable the OC-46 can be in your operations. Review its many important features and job advantages in this big, 16-page catalog.
Two of the work-savingest tools you can own!

NEW SKIL RECIPRO SAW
Cuts anything that can be cut by hand—faster, easier and better. Does the work of keyhole, hack and handsaws 5 to 20 times quicker.

Two separate speeds—LOW for fast metal cutting with minimum blade wear, HIGH for wood and compositions.

Off-center blade cuts close to walls and corners—blade reverses in clamp for right or left situations.

Saves blades, too! When one section wears, shoe easily repositions for cutting with unused part of blade.

NEW SKIL RIGHT ANGLE DRILL
Lets you drill freely between joists and studding, in tightest quarters. And with new self-feeding bits you drill large holes—from 1½" to 2½"—without bearing down on the tool!

Handles any drilling job—Right angle drive unit mounts two ways to give a low speed for boring large holes, or a higher speed for smaller holes. For straight-line drilling, simply remove unit. Comes complete with carrying case and 2½" self-feeding bit.

Ask your Skil distributor to demonstrate these work-saving Skil tools. He's listed under "Tools—Electric" in the Yellow Pages. Or write for full information to Skil Corporation, 5033 Elston Avenue, Chicago 30, Illinois, Dept. AB-40.
BRAND NAMES DIRECTORY

(Continued from page 386)

TIMBLEND Roddis Plywood Corp
TIMBLEND Roddiscraft Inc
TIME-SAVER Speckman Co
TIMFAST Timber Fasteners Inc
TIM JALOUSIES Regulux Sash & Door
TIN-O-LIN Calbar Paint & Varnish Co
TINTOT Extension Drawer Support Co
TIPIT Manning Maxwell & Moore Inc
TIP TOP Relton Corp
TITE KOTE Reeves Steel & Mfg Co Div
TITE LIFE Truscon Labs Inc
TITE-ON Rubberoid Co
TITEWALL A A Wire Products Co
T.M.T PLASTERING MACHINE Plastering Development Center
TOASTMASTER McGraw-Edison Co
TOASTMASTER HOT-FOOD SERVER
Toastmaster Div McGraw Edison
TOMAHAWK True Temper Corp
TOMBEI Allied Chemical Corp Barrett Div
TOMMY AXE True Temper Corp
TOOTHPICK Tilley John S Ladders Co
TOP-FLIGHT Mengel Co
TOP FLITE Eagle Rule Mfg Corp
TOP FLITE HEX Globe Roofing Products
TOPLITE Owens-Illinois
TOPPER A C SWITCHES Hubbell Harvey Incorporated
TOP-TY Woodmack Products Inc
TORIDHEAT Toridheat Div Cleveland
TORKMASTER Clock Time Controls Inc
TOMMY PUMPS Traxs Control Corp
TOOTOP Relton Corp
TOPTIER Pumping Service Co
TOURATTRACTOR LeTourneau-Westinghouse Co
TOWERMOBILE Miami Cabinet Div
TOWELINK Miami Cabinet Div
TOWERMOBILE Mixermobile Mfrs
T-Power Motorola Communications
TRACTAIR Le Roi Div Westinghouse Air Brake Co
TRACTAIR COMPRESSOR Le Roi Div Westinghouse Air Brake
TRACTOHOE Tractomatic Corp
TRACTO-LIFT Ottawa Steel Div Young
TRACTO-LOADER Tractomatic Corp
TRACTOR DONKEY Hyster Co
TRADE-WIND INTERCOM Trade-Wind Div Robbins & Myers
TRAFFIC-COTE John & Johnson's Wax
TRAFFIC GARD Dietz & Co
TRANSCRETE Construction Machinery
TRANSFALCO Forrers Div Spray-O-Bond
TRANSFALCO Johns-Manville Corp
TRANSITONE Johns-Manville Corp
TRANSPORTER Automatic Transport Co
TRAVERTONE Armstrong Cork Co
TRAV-MAR X-Pando Corp
TRAXCAVATOR Caterpillar Tractor Co
TRAY ROD Bridgeport Brass Co
TREADLITE Mrocalum-Nairn Inc
TREASURE TONES DeVoe & Raynolds
TREDON Sapolin Paints Inc
TRED-TEX Rockcote Paint Co
TREELIFE St Paul & Tacoma Lumber Co
TRELMIX Trecimo Mfg Co
TRENCHLAY General Cable Corp
TRENCHLAY-UP General Cable Corp

SPECIFY A K+E BUILDERS' TRANSIT LEVEL

Buying a transit level is an investment in your business. And buying a K&E Transit Level is the surest way to get maximum return on your investment. So simple to use yet with built-in precision that will last over years of rugged use, this sturdy instrument will help you lower labor costs, increase efficiency and worker output. Objects can be seen clearly even in poor, inside-building light... and you can get sharp focus on objects as close as three feet.

Price: (NP 5155) including new open-dome BOLTARON® carrying case $208.00*

For leveling and reading horizontal angles only, ask for the K&E Builders' Level. Except that the telescope doesn't tilt, it gives you the same fine qualities and service as the K&E Builders' Transit Level.

Price: (NP 5153) including new open-dome BOLTARON® carrying case $148.00*

*without tripod

For further details see your local K&E representative or write to Keuffel & Esser Co., Hoboken, New Jersey.
BUILT FOR THE TOUGH JOBS...

Porter-Cable PORTABLE SAWs

Take a close look at these professional saws and you'll see why they can handle the toughest jobs, day-after-day, without a whimper. Contractors and builders choose Porter-Cable saws for every type of cutting operation—from light trim work to hour-after-hour heavy construction projects. Check such quality features as... ball-bearings throughout, precision depth and bevel adjustment, blower to clear line of cut, safety kickproof clutch, exclusive gear lubricator, extra powerful motor.

See the most complete line of Builders' Saws at your Porter-Cable dealer or write for folder.

PORTER-CABLE MACHINE COMPANY
6014 Marcellus Street, Syracuse, N.Y.
PORTER-CABLE BRAND NAMES | HOW SCREDDING MONEY-SAVING SPECIAL!* ON HEAVY-DUTY SAW KITS

(Continued from page 395)

TRENDOR Farley & Loetscher Mfg Co
TRIADRY Triangle Conduit & Cable Co
TRIBATCH Koehring Co
TRI-BOND Mastro Plastics Corp
TRI-COATER PLASTERING MACHINE
Plastering Development Center Inc
TRICON Triangle Conduit & Cable Co Inc
TRILENE Calder Mfg Co
TRIM-BOY Coleman Co Inc
TUBELOX Patent Scaffolding Co
TUB-O-ROD Mirro Chrome Co Inc
TUCK-AWAY DRIVER United Metal Cabinet Corporation
TUDUCO Tucker Duck & Rubber Co
TUFBAK Behr-Manning Co
TUFORCO Cortland Grinding Wheels Corp
TUFDENSE Tufrete Co Inc
TUFCRETE LIQUITILE Tufrete Co Inc
TUFCRETE RESURFACER Tufrete Co Inc
TUFCRETE TUFDEK Tufrete Co Inc
TUFCRETE TUFDEK Moore Goodloe E Inc
TUFF-BOND Moore Goodloe E Inc
TUFF-FLEX Millers Falls Co
TUFF-FLEX Biddle Co
TUFFFLEX Serviced Prods Corp
TUFF-PLATE Doors Libby-Owens-Ford
TUFF-PLATE GLASS Libby-Owens-Ford Glass Company
TUFF-TRED Moore Goodloe E Inc
TUFF-WELD Moore Goodloe E Inc
TUFF-WOOD Wood Conversion Co
TUFSHEL Tufcrete Co Inc
TUFTAB Certain-Teed Sales Corp
TUFTITE Tufcrete Co Inc
TUFTOP Tufcrete Co Inc
TUFTY Manning Maxwell & Moore Inc
TURBINE TYPE Smith T L Co
TURBO Wood Shovel & Tool Co
TURNO-A-SHELF Amerock Corporation
TURNO-TORCHES Turner Corp
TURNOETTE Miami Cabinet Div
TURNOLOK Pass & Seymour Inc
TURNOLOK Benjamin Electric Co
TUSKY Tubular Structures Corp
TWIN General Electric Co
TWIN ANCHOR Manhattan Terrazzo
TWINBATCH Koehring Co
TWIN LeTourneau-Westhousen Co
TWIN MACHINERY Mackinairse-Duncan
TWIN DISH Gyro Brass Mfg Corp
TWINWOOD Pittsburgh Plate Glass Corp
TWINPLATE Certain-Teed Sales Corp
TWINPLATE Universal W E Co Inc
TWINSTREAM Cribben & Sexton Co
TWINSTREAM Johns-Manville Corp
TWINSTREAM Universal Ladder
TWINSTRAM Universal Atlas
TWINSTRAM LIGHTING DUCT Bulldog Electric Prods Div I-T-E Circuit Bkr
TWINSTRAM ROYO Universal Fabricators
TWINSTRAM Nuteo Corp
TWINSTRAM Permigale Corp of America
TWINSTRAM Yawkey Bissell
UPSON KUVER-KRAK Upson Co
UPSON STRIATED Upson Co
UPSON STRONG-BILT Upson Co
U/R Universal-Bundle Corp
USCOLITE United States Rubber Co
US Gypsum SHEATHING United States Gypsum Company
USM U S Mineral Wool Co

HOW SCREDDING SIDEWALKS SAVES 20 PER CENT IN PRODUCTION TIME

To cut production time in sidewalk construction, and eliminate bull floating, many contractors have begun to use the twin beam vibrating screed, manufactured by STOW. Through use of this screed, ordinary vibrators can be eliminated, and stiffer concrete can be poured since the STOW screed vibrates and strikes off at the same time. The twin beams actually give the effect of making two passes at once, result in really smooth surface.

Amplitude delivered by the screed is adjustable, can be varied so that the screed actually walks itself along the side forms, while operators simply guide it. Contractors report that the unit can keep up with the ready mix truck as it dispenses the concrete along the length of the sidewalk.

For additional information on STOW screeds, concrete grinders, tampers, roto-trowels, vibrators, contact your STOW distributor, or send in the coupon below.

STOW MANUFACTURING CO.
Dept. G-4, 142 Shear St.
Binghamton, N. Y.

Please send me your pamphlet titled "The Advantages and Use of the Vibrating Screed" and Catalog 580.

NAME

ADDRESS

COMPANY

CITY STATE

APRIL 1960

(Continued on page 402)
Loaders and backhoes mount separately or in combination. Backhoe can be equipped with regular, moles paw, bell hole, or street repair bucket.

Power up to fit

Supply 10 or more masons with fork lift-equipped International 340 or 460 Utility. Lifts 4,000 lb to 15 ft; 2,500 lb to the third tier of scaffolding with 21½-foot reach.

Fork Lift: Harlo
Keep both ends of your IH tractor profitably busy with a front-end loader and an International Danuser Terra-Scoop, blade, or Scarifier-Scraper (shown).

The husky, four-cylinder International T-340 develops 45 hp, delivers more than 6,400 lb drawbar pull, gives top fuel economy in its power class.

your jobs and your budget...

What a difference IH built-in brawn makes!

The first time you watch an International tractor at work, you'll see a big difference in the traction, the capacity, and the working speed, compared with that of the lighter weight rigs you've been used to. That's because these sturdy IH tractors have greater built-in weight. The result is an im-proved power-weight ratio for greater traction, as well as stamina, to keep you on the job under the pressure of tight schedules.

Whatever the size of your jobs and your budget, you'll find an International sized, priced, and powered to match. With six sizes of wheel tractors from which to select, you don't have to pay for a bigger unit than you need, nor slow down your work with an under-powered rig.

**KEY INTERNATIONAL TRACTOR SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. drawbar horse power*</th>
<th>Max. Drawbar horse power*</th>
<th>1P-Gas Diesel engine weight (lbs)</th>
<th>1P-LP-Gas Diesel engine weight (lbs)</th>
<th>Base working weight (lbs)</th>
<th>Speeds forward</th>
<th>Spooling capacity</th>
<th>Hydraulic pump capacity, gpm</th>
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<tr>
<td>Cub Lo-Boy</td>
<td>340</td>
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<td>6,500</td>
<td>6,500</td>
<td>36</td>
</tr>
</tbody>
</table>

*At standard sea level conditions.

**New International B-275 Diesel tractor** saves up to 50 per cent on fuel while delivering 29 drawbar hp. Exclusive differential lock pulls you through soggy footing.

Ask your IH Dealer to prove International tractor performance with an on-the-job demonstration. For dealer's name and full-line catalog, write International Harvester Company, Dept. AB-4, P. O. Box 7333, Chicago 80, Illinois.
Big, beefy bearings for longer life. (Lower left) double-size Onan bearings vs. small bearings (right) used in many other makes. Larger bearing surface reduces wear, stretches time between overhauls. Onan builds up to performance—never down-to-a-price.

The engine that ran equivalent to 487,888 automobile miles. Here’s endurance no auto could begin to match. Onan engine #1068 was operated for 12,197 hours. It was stop-started 100 times. At test’s end #1068 and generator were delivering their stated output.
Performance Certified only tester says O.K.

His job is to provide a double-check on Onan's own tests and testing methods

The man at the left is an expert from an independent testing laboratory. On the job, he believes nothing except what his trained eyes, ears and scientific testing instruments tell him.

He, and others like him, pay frequent surprise visits to Onan factories. He can pull any Onan plant off the test line. Put it through its paces. Recheck the checks Onan engineers and inspectors have already made. He has authority to pull a whole series of plants off the line if he finds one fault. He does all this even though every Onan plant is tested for hours by Onan personnel before it is shipped.

Onan takes these special precautions to make doubly sure that you get all that you pay for, and more, when you own a Performance Certified Onan. For more details—and an analysis of your primary and stand-by power needs—see the Onan distributor nearest you. He's listed in the telephone classified section in all major cities. Or write direct.

ONLY ONAN GIVES YOU THIS GUARANTEE

Performance Certified

We guarantee that when properly installed and operated this Onan electric plant will deliver the full power and the voltage and frequency regulation promised by its nameplate and published specifications. This plant has undergone several hours of running-in and testing under realistic load conditions, in accordance with procedures certified by an independent testing laboratory.

D. W. ONAN & SONS INC.
Minneapolis 14, Minnesota

World's Leading Builder of Electric Power Plants

D. W. ONAN & SONS INC., 2544 UNIVERSITY AVE. S.E., MINNEAPOLIS 14, MINN.
More finishing on the job

Cut to fit, plane to finish by just moving a step—you'll save money on trim and finish work with this rugged, compact unit. A Deluxe 4" precision jointer and Delta 9" Tilting Arbor Circular Saw mounted on a single stand, powered by a single motor give you capacity and performance you can't buy at anywhere near the same low price!

Let your Delta Distributor show you how this machine (and other Delta woodworking tools) can put more profit in your pocket. He's listed under "TOOLS" in the Yellow Pages. Write for FREE literature: Rockwell Manufacturing Co., Delta Power Tool Division, 646D N. Lexington Ave., Pittsburgh 8, Pa.

Delta Saw-Jointer Combination — available in 3 models.

(Continued from page 397)
SAFWAY STEEL PRODUCTS, INC., 6228 W. STATE ST., MILWAUKEE 13, WIS.

WRITE FOR FREE BULLETIN 64E

INCA PRENSA 2B
ELECTRIC POWER
SAVES up to 60% in FUEL COST

FULL POWER at either 115 or 230V from one outlet.
LIGHTER WEIGHT
SAVE TIME AND LABOR
PACKAGED POWER UNITS from 1500 to 10,000 Watts.

SAFWAY STEEL SCAFFOLDING
fits all your needs for residential, commercial and light industrial construction

4-BY-4 SCAFFOLD ADVANTAGES
- Used safely for work to 40 ft. high.
- Waist-level material platforms speed work.
- 4-ft. and 6-ft. high frames have built-in climbing ladder.
- Accessories to fit every job requirement.
- Parts are easy to handle, erect, transport and store.

Sold and rented everywhere.

BOSTROM LEVELING INSTRUMENTS
Are simple to operate, accurate as instruments costing twice their price, durable to withstand rugged use and are complete with Tripod, Rod, Target, Dust Cap and Sun Shade.
Thousands of contractors and builders are satisfied users of Bostrom Levels as they have found them to be the most dependable and cheapest instruments to operate.

WRITE FOR COMPLETE SPECIFICATIONS AND PRICES DEPT. AB 46

SAFWAY STEEL PRODUCTS, INC., 6228 W. STATE ST., MILWAUKEE 13, WIS.

WRITE FOR FREE BULLETIN

No. 5 BOSTROM Convertible Level
Detachable Compass when desired

No. 4 BOSTROM Contractors' Level

BOSTROM-BRADY MFG. CO.
Stonewall and Bailey Streets, S.W., Atlanta 3, Georgia

Please send catalog page on Bostrom Levels and name of your distributor near me.

Name:
Address:
City: Zone: State:

APRIL 1960
“We get profitable renovation jobs through the Yellow Pages”


“Our Yellow Pages advertising effectively reaches people in our area who want renovation work done. And we know it’s paying off! “Just at random, I can think of two commercial jobs, one for $7500 and the other $3500, that recently came to us as a direct result of our Yellow Pages advertising. And we just finished three different dormer jobs—all of which came in through the Yellow Pages, too.” Yes, Yellow Pages advertising does pay off. That’s because people turn to the Yellow Pages when they want renovating jobs done. To get more inquiries and jobs, be sure you are telling prospects what you specialize in and where you are located. Build AWHERENESS of your business by advertising in the Yellow Pages. Contact the Yellow Pages man at your Bell telephone business office to help you plan an effective Yellow Pages campaign in your selling area.
“More or Less”
THE BEST
DITCH WITCH
TRENCHER

Other trenchers cost "More or Less."
Other trenchers dig "More or Less."

BUT DITCH WITCH
PRODUCES MORE TRENCH FOR LESS MONEY

BIL-JAX

Whatever your off-the-floor job, there’s a Bil-Jax scaffold designed to save you most in time and money. What’s more, your men work in safety, at peak efficiency. Choose now the exact equipment best suited to you. Sales and rental outlets in principal cities.

Write for catalog.

BIL-JAX, INC. Archbold, O.
RENTAL AND SALES OUTLETS THROUGHOUT U.S. AND CANADA

SYMONS Steel Stake

Can Be Reused Indefinitely
Drives easily into hard earth. Can be used for practically any type of stake work. This popular item is available in 12", 18", 24", 30", 36" and 42" sizes.

FREE!
Stake Puller with order of 100
Sizes can be mixed
Prices and items shown are net F.O.B. Chicago, Illinois factory and subject to change without notice.

TERMS: (check one) Check enclosed___; If satisfactory mercantile rating or reference is furnished, net 30 days___, C.O.D.___.

Symons CLAMP AND MFG. CO.

4261 Diversey Avenue Dept. D0 Chicago 39, Illinois

Please ship the following Steel Stakes:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Size</th>
<th>Price Each</th>
<th>Total Price</th>
</tr>
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<tbody>
<tr>
<td>12&quot;</td>
<td>$1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
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<td>1.10</td>
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<td></td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

PLEASE PRINT Prices slightly lower in California

Firm Name_________________________
Address___________________________
City_________ State_____

By________________________

APRIL 1960
--there's a BERGER instrument for every builder...every budget

<table>
<thead>
<tr>
<th>Master Builder Convertible</th>
<th>Speed-A-Liner Builders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit-Level — Model 320</td>
<td>Transit-Level — Model 200</td>
</tr>
<tr>
<td>22-power telescope; coated optics, 3-ft. short focus. Vertical circle and vertical arc read to 5 min. Sliding bar-type level lock. $229.50*</td>
<td></td>
</tr>
<tr>
<td>New brilliant optical system. Horizontal circle; vertical arc; Plate and telescope fine motion controls. Built-in sunshade. $112.50*</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Heavy Duty 12&quot; Dumpy Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 150</td>
</tr>
<tr>
<td>24-power coated optics. Dust protected horizontal circle and vernier reads to 5 min. Rugged, accurate center construction. $174.95*</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Service Transit-Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 143</td>
</tr>
<tr>
<td>Reinforced one-piece yoke frame. 10-power. Fine motion controls on horizontal circle and telescope. Telescope and plate vial. $99.95*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Dumpy Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 110</td>
</tr>
<tr>
<td>12-power. Horizontal circle reads in degrees. Micrometer tangent screw and clamp for ‘on target’ pointing. Undergrad level vial.</td>
</tr>
</tbody>
</table>

**Prices include stiff leg tripod, plumb bob, and case—F.O.B. Factory**

Other Berger low-cost, easy-to-use instruments include:

- **Duplex Tilting Level** $79.95* SIGHT "n" SURFACE Pocket Level $3.85

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Send me literature on

- Convertible
- 12" Dumpy Level
- Speed-A-Liner Dumpy Level
- Service Dumpy Level
- Duplex Tilting Level
- Pocket Level

Name

Address

City Zone State

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BRAND NAMES DIRECTORY

(Continued from page 402)

- V-LINE Millers Falls Co
- VOGUE-LITES Swivelier Co Inc
- VOLTMASTER Pioneer Gen E Motor
- VONNEGUT Grinding & Polishing Machine Corp
- VOSS Pacific Pre-Cast Products Inc
- V-PLANK United States Plywood Corp
- V-PLY Plywood Midwest Plywood Co
- VU-ALL Cable Electric Products Inc
- VUDOR Hough Mfg Corp
- VULCATEX Horn A C Companies
- VUL CO-ETT Vulcan Metal Prods Inc
- VULCO STORM DURA DOOR Vulcan Metal Products Incorporated
- VYN-GARD O'Brien Corp
- WACO TRANSWALL Waco Transwall
- WACO Millers Falls Co
- WACO VOGUE-LITES Swivelier Co Inc
- WACO VOLTMASTER Pioneer Gen E Motor
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- WACO WACO TRANSWALL Waco Transwall
- WACO MILLERS FALLS CO
- WACO VOGUE-LITES SWIVELIER CO INC
- WACO VOLTMASTER PIONEER GEN E MOTOR
- WACO VONNEGUT GRINDING & POLISHING MACHINE CORP
- WACO VOSS PACIFIC PRE-CAST PRODUCTS INC
- WACO V-PLANK UNITED STATES PLYWOOD CORP
- WACO V-PLY PLYWOOD MIDWEST PLYWOOD CO
- WACO VU-ALL CABLE ELECTRIC PRODUCTS INC
- WACO VUDOR HOUGH MFG CORP
- WACO VULCATEX HORN A C COMPANIES
- WACO VULCO STORM DURA DOOR VULCAN METAL PRODUCTS INCORPORATED
- WACO VYN-GARD O'BRIEN CORP

(Continued on page 407)
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Name
Address
City  Zone  State
Type of Work

LION UNIVERSAL TRIMMER

Precision Miter & Joint Cutter

A multi-duty cutter for right or left hand 45° miters or any adjusted angle to 90°. Accurate, razor-like cut any way of grain. Fine tool steel knives. Compact design. 8" wide, 23" long. Portable. A time saver on every job!
QUALITY PAYS OFF

One of the longest standing gripes that builders have had against FHA and VA appraising is in the field of quality and reduced maintenance. "Why," goes the complaint, "should I put better materials and workmanship into my houses, when that other guy down the street is cutting all the corners, and still getting the same appraisal that I am? I just can't compete on this basis."

A LEGITIMATE COMPLAINT

Certainly you can't blame the builder for objecting. And, where the complaint has proven true, too often the solution has been to cut quality and compete with the other guy on equal terms. So a good house goes off the market, and the buyer gets it in the neck.

Now there are indications of things brightening up for the quality-minded builder. A recent memorandum issued from FHA's Washington office urges all field offices to consider such things as long-lasting finishes and low maintenance costs in making their appraisals. It points out that in many cases the increased cost of the house will be more than offset by the lowered cost of maintaining it.

THIS CAN HELP YOU NOW

Certainly you should hop down to your own FHA office and talk this over at the earliest opportunity. Quality and low maintenance are strong sales points, and you may be able to get them literally for nothing.

A question of identity

Do you ever get the feeling these days that you aren't quite sure just what you are? You have always considered yourself purely and simply a homebuilder. But from all sides you hear that the homebuilding industry is going through a revolution, and from now on you'll have to be an engineer, or a businessman, or a merchandiser, if you want to stay in business.

There's a certain amount of truth in all of this. Homebuilding is changing from a craft to a manufacturing process, and as a builder you'll have to change with it. But, if you're building and selling houses successfully right now, you're already playing several roles. You're a builder, a buyer, a designer, a salesman, and a businessman. And, while no one can be expert in all these fields, you're expert in some, and you have a good working knowledge of most of the rest.

In short, you're a professional—a professional builder.

Just what is a "Professional Builder"?

Let's consider the implications of this term. As a professional builder, you build a quality home and you stand behind it. As a professional builder you bear the ultimate responsibility for all phases of your operation. You probably hire some outside professions—architects, accountants, or sales help—but in the final analysis you are the one who decides what to build, how to build it, and how to sell it.

And, as a professional builder, you plan to stay in the building business.

It's getting tougher all the time

This last point is a critical one. The so-called homebuilding revolution is in its early stages; as it moves faster, you're going to have to move faster too to keep up. So let's add one more definition: the professional builder keeps up with his profession. He knows what new construction techniques can help him most. He knows what new products are available. And he knows and builds what his market wants.

So whether you build new homes, remodel, or do commercial work, remember: you have to be a professional builder. The 60s will be the decade of the professional builder.
Now, Congoleum-Nairn creates new seamless glamour, inlaid linoleum with flashing metallics (plus vinyl magic).

Add something new and exciting – that's how you sell homes faster! For instance: Congoleum-Nairn's Ultima, an entirely new inlaid linoleum (the SEAMLESS type of flooring everybody knows) with vinyl...plus sparkling, locked-in metallics...a smoother, glossier finish...and lovelier decorator colors. There's a real talking point! See all the popular Ultima colors and learn everything Congoleum-Nairn offers to help you sell—in their complete Builder's Program.

ALL PATTERNS ACTUAL SIZE. To the left 1803, upper right 1804, lower right 1805.
SPECIFICATIONS: By the yard, 6 feet wide. May be used on above-grade floors of wood, concrete or ceramic tile, with or without radiant heating.

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Today's home buyer has some very definite ideas about color, style, and finishes. That's why so many builders choose National of Sterling cabinet pulls, ornamental hinges, door butts and other items that help make a sales impression. You can please them all from the big selection of styles and finishes you will find at your National of Sterling dealer. Look for the familiar blue cartons... they're your guarantee that the hardware inside is quality you can rely on.