Experts report on air conditioning

HOUSEPOWER sells houses

Levitt’s latest building tricks
Your Kitchen Sells the Home

And

NuTone In-Builts

Sell the Kitchen

Keep your sales at a high level with the NuTone Kitchen IN-BUILTS. Thousands of leading Builders agree... they are the greatest "sales-makers" in the new home market today.

1. 2-note IN-BUILT Door Chime and Clock all in one. Recessed—no clock outlet needed. $19.95 list. Also 3 "in-built" and 16 surface mounted chime models.

2. IN-BUILT Range Hood and Powerful Exhaust Fan. New pre-wired Hood and Fan Combination, both $43.95 list. Matching Splash-Plate, $3.00 list.

3. This fabulous, new NuTone IN-BUILT Food Mixer, Blender and Sharpener is quickly installed underneath any kitchen counter. U.S. & Foreign Pats. Pend. $69.95 list.

Free Catalogs... Write NuTone, Inc., Dept. AB-8, Cincinnati 27, Ohio

NuTone In-Builts

Food Center - Exhaust Fans - Range Hoods

Door Chimes - Ceiling Heaters
CLOUD'S K.D. METHOD

MEANS SUPERIOR KILN DRYING FOR

Lockwood
OAK FLOORING

ALL OF CLOUD'S KILNS ARE THE MOST MODERN CROSS-CIRCULATION, REVERSIBLE FAN-TYPE, USING COMPARTMENT-DYING METHODS ONLY.

THE RESULTS ARE—

- Lockwood Oak Flooring neither shrinks, nor warps, nor buckles.
- The natural soft texture and resilience is accentuated, making it easy to work with, saw and nail.

Only Cloud's scientific heat-and-humidity controlled kiln-drying will produce an oak flooring of such permanent precision uniformity, yet so wonderfully workable, too!

AND THERE'S MORE YET

You sell homes on sight, thanks to the beauty of color and grain of Lockwood Oak Flooring.
And you make more profit on the installation, because Lockwood affords lower laying-through-finishing costs, thanks to Snap Side-Match design, the Nail Groove feature, and Precision Milling which holds your sanding to a bare minimum.

SEE YOUR LOCAL DEALER

Cloud Oak Flooring Co.
Springfield, Missouri

AUGUST 1956
sliding door hardware is a better buy in price, too!

Feature for feature
STERLING 600 SERIES is better by comparison than any other brand of sliding door hardware.

Sterling aluminum track is extruded, tempered, etched and anodized. Easier to paint. Looks good unpainted. Engineered to permit hanging or removing of doors with hangers attached. No other brand offers these Sterling features.

Twin Nylon wheels with OILED-FOR-LIFE bronze bearings are the quietest. Cadmium plated steel hangers with slotted screw holes permit easiest plumbing of doors. No other brand offers these Sterling features.

Nylon and steel door guide takes only two screws ... installs in seconds. No other brand with these features.

Door stop included in set ... limits sliding action so rear door pull is always accessible. No other brand with such quality features.

Send for our new 24-page catalog and detailed information or see our catalog in Sweet's Files.
The Opportunity Page

Beat the weak weekends
If weekend sales in your area fall off during hot summer weather, adopt this idea: the HBA of Greater Cincinnati is cooperating with the Cincinnati Real Estate Board on a “family buying night.” Under the plan both new and used homes are open for public inspection on Wednesday nights to give potential buyers added “shopping time.” This eliminates conflict with weekend activities during summer months.

To cool or not to cool?
NAHB’s first air conditioning seminar (scheduled for July 30) points up the importance of this question to builders in their search for new merchandising features. To learn what AB editors found out during a grass roots tour, see p. 67.

Cash in on remodeling
Announcement that OHI has been extended through mid-1957 gives builders who have been fence-straddling the remodeling issue a chance to take second look. Especially during the winter months, remodeling is a good way to keep your men busy, put some extra dollars in your pocket. And for those builders who have adopted a remodeling program, FHA recently issued a booklet, “ABC’s of FHA for Home Repairs.” These folders are available at small cost (imprinted with company name) for use as mailers. Contact Kaufmann Press, Inc., 25 Massachusetts Ave., N.W., Washington, D.C.

Promotional pay-off
Local builder associations might take a tip from the Austin (Tex.) HBA which sponsors a Home of the Month promotion. Builder-members submit photos and plans of their latest houses to an association committee. The house selected receives good newspaper coverage which results in prestige and increased sales for the builder.

Teamwork brings results
If you’re a small builder wondering whether to handle house sales yourself or engage a salesman, you’ll be interested in an idea advocated by Al Miville, Wichita (Kan.) builder. Get together with two or three other small builders in your area who are non-competitive in regard to price. Have the same salesman work for all. You’ll save time and be sure you’re getting fair representation. The time you save in not having to “show” your own homes can be spent building others.

What’s in a name?
Des Moines HBA was glad to show its civic mindedness by agreeing to sponsor a Little League baseball team. But they did a double take when the kids came out on the field in uniforms lettered “HBA PIRATES.”
GRAND RAPIDS HARDWARE COMPANY

THE ONLY MANUFACTURER OF A COMPLETE LINE OF OPERATIVE WINDOW HARDWARE FOR THE RESIDENTIAL FIELD

GRAND RAPIDS HARDWARE CO.
GRAND RAPIDS 2, MICHIGAN

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101 Park Ave., New York 17, N. Y.
Murray Hill 3-4555

DANBURY WAREHOUSE
19 Bridge St., Danbury, Conn.
Phone Pioneer 8-2198

"Quality Leaders in Sash Hardware for Over 50 Years"
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AUGUST 1956

AUGUST

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Cover photo: Maxwell Hunton

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Cover photo: Maxwell Hunton
Home-buyer prospects like them... homeowners love them. That's the story of Lupton Aluminum Windows. And here are some of the reasons why: easy operation and snug fit, smart appearance, no-painting aluminum, rugged construction, and sound designs based on fifty years' manufacturing experience.

There's a Lupton Window, readily available, for any project you plan. Choose from casements and ranch windows, with integral fins to help speed installation... double-hung, jalousie, picture and projected windows in a wide range of sizes. Whichever you use, you'll be adding recognized value to your houses.

Make selling easier by adding these Lupton Window sales features: Beauty — Easy Operation — No Maintenance. Ask your nearest dealer for all the facts, sizes and prices.

MICHAEL FLYNN MANUFACTURING COMPANY
700 East Godfrey Avenue, Philadelphia 24, Penna.
Member of the Steel Window Institute and Aluminum Window Mfrs. Assoc.
# Reader's Guide to Advertising

“The better you plan—the better you buy—the better you build—the better you sell” ©

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## National Electrical Manufacturers' Association

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## National Gypsum Company

| National Gypsum Company | 43, 204 |
Now, you can fasten to concrete or steel with 3 or 4 hammer blows by using Omark Hammer Drive fastening tool. Do a job in seconds and inexpensively that previously required minutes or expensive drilling and fastening equipment.

The Omark Hammer Drive tool is easy to use: Insert the special Ballistic Pointed Drivepin into the tool, hold Hammer Drive on the surface of the receiving material and hit the head of the tool with a hammer. This gives a strong fastening in concrete, steel and other non-brittle materials.

Omark Hammer Drive is small and compact with only one moving part. Not powder actuated — can be used anywhere. No air hoses, wires. No maintenance.
To The Editors:

AMERICAN BUILDER
30 Church Street
New York 7, N. Y.

On Aesthetic Zoning

Sirs: In your June issue (by John F. McCarthy) there were some rather sweeping conclusions made on aesthetic zoning from the recent Fox Point case.

It is hardly conceivable that the refusal of the Supreme Court to review the case from the Supreme Court of Wisconsin could be considered a definite acceptance in our jurisprudence of aesthetic zoning as a proper field for governmental use of the police power. First, a denial of certiorari does not and never has meant acquiescence in a decision. Second, the action of the Supreme Court should have been expected because of the policy of the Court since the Nebbia case in 1937 to refuse to decide which areas of economic control are improper for use of the police power under the due process clause. The case follows a long pattern of cases in allowing the states to decide which area of economic intervention is proper under their respective state constitutions and due process clauses.

Since Wisconsin has accepted aesthetic zoning does not mean that... any other state Supreme Court will follow their reasoning. Even though a great number of municipalities around Cleveland are attempting aesthetic regulation, almost all attorneys I have talked to on the question are very dubious about the validity of their actions, even in light of the Fox Point case.

—Charles F. Johnston Jr., attorney-at-law, Chagrin Falls, O.

Mr. McCarthy will comment in a forthcoming issue.

"Concise and Complete"

Sirs: It was indeed thrilling for me to finger through the 19-page resume on Hardwood Plywood. I am sure the industry will benefit considerably because of the concise and complete manner in which this information has been put before the nation's builders. The builders will benefit because certainly houses with some beautiful wood in them are more saleable... as more and more builders experiment with small surfaces of beautiful Hardwood Plywood, they become increasingly enthusiastic and hence are able to do a better job in merchandising their houses.


Tangible demonstration of U. S. Ply's enthusiasm was an order for 25,000 reprints.

A Small Contractor Speaks

Sirs: I think there are a great many of us that would like new ideas on row houses... I also would like to say this—the builders are getting away from stone work... most concrete porches crack and they look terrible. Stone mason work should be stimulated. No one is learning the trade.

—Arthur Contarini, Baltimore

From the Dry Grass Roots

Sirs: I've been in the lumber business here (pop. 145) for 36 years and have never seen it so slow... as slow as the 7 yrs. itch, if you ever had it you know exactly what I mean. If you are not big nowadays in U.S.A. you are nothing. It seems as though farmers are all hibernating; they won't even buy a 2x4... and if they want to build a house or whatever, they go to a town where they have a good up-to-date contractor, he brings the material from the city...

—J. H. Schmidt, Craig Lumber Co., Craig, Iowa.

Sound testimony that when one section of our economy suffers building suffers too.

More Logic on "Coverage"

Sirs: I have read Mr. Gavin's editorial in June ("Mortgages Must Cover Appliances") with real interest. We believe you would come to the same conclusions if you substituted "carpet" for "appliances."

—Robt. D. Thompson, president, Luxor Products Co., Akron, O.

Especially when carpet-cushion combination has 100% area bond, as in the Luxor product.

"One more crack like that and I walk off the job!"

(Cartoon by Virgil Partch—Courtesy Pomona Tile Manufacturing Co.)
Announcing

THE PUBLICATION OF

"Heat Flow by Radiation in Buildings"

SIMPLIFIED PHYSICS

by Alexander Schwartz

Member, American Society Heating & Air-Conditioning Engineers
President, Infra Insulation, Inc.

A discussion of the newest theories and practices, with simple experiments and explanations of the fundamental laws of physics involved, in the field of heat flow, vapor flow, and condensation.

Here is a manual invaluable to the architect, engineer, builder, contractor, dealer, and also the professor of technical subjects and students. Of scientific exactitude, yet so simply written and clearly presented, even the layman can read and profit from it. Its scope is broad, ranging from the laws of Nature which underlie the subject, to illustrated techniques for installing insulation under many normal and unusual conditions.

In this one, handy 48-page brochure, are assembled in condensed, easy-to-read language, facts, figures, scientific theories, and reports of experiments obtainable otherwise only through years of intensive study and the consultation of hundreds of books, articles, reprints and other publications. It contains current material which is the fruit of the author’s vast experience and contact with scientists, engineers, architects, builders, mechanics, home-owners, directors of research, and government officials. It is liberally illustrated with drawings, photographs, charts, diagrams, and tables.

ABOUT THE AUTHOR

Mr. Schwartz, a well-known figure on the lecture platform before professional societies and in technological institutes, has a rare gift for presenting his material in an interesting way that makes it easily grasped—and remembered. He is the author of “Simplified Physics of Vapor and Thermal Insulation,” hundreds of thousands of copies of which have been used throughout the years by the building industry, and as a text by scores of universities, colleges, schools of architecture and engineering.

For a free copy of “Heat Flow by Radiation in Buildings,” send the coupon.

Infra Insulation, Inc.,
525 Bway., N.Y.C., Dept. B-8

Please send “Heat Flow by Radiation.”

NAME

FIRM

ADDRESS
The Building Outlook

SMALL TALK

THAT VANISHING LAND
More and more pessimistic views are heard about the land shortage. Typical of the nation-wide problem is situation in Detroit where Wendell O. Edwards, director of FHA’s insuring office called the lack of building sites suitable for FHA or VA-insured homes “alarming.”

RECORD BUILDING YEAR
Revised government figures now indicate total new construction outlays in 1956 will reach a record $44.5 billion, bearing out AB’s November forecast that building in 1956 “will be merely terrific.”

NEW “OLD” LOOK
If you build with brick, chances are you’ll soon be using new brick processed to look like used brick. Under a new ruling FHA-financed homes cannot be built of second-hand brick unless it has been examined and approved by building inspectors. Reason: appearance on the market of large quantities of used brick not of good quality when originally manufactured.

MUSHROOMING SUBURBS
A period of sensational growth is predicted for suburban areas, says Urban Land Institute. Since some of these places will be new towns not yet thought of, this means there will be a continued demand for new houses, shopping centers, schools, all of which carries fine prospects for builders.

SCHOOL DAZE
Look for increased pressure on home builders to pay for new schools, donate sites. Now that Congress has shelved the “aid to education” bill, communities will be more hard-pressed than ever to supply adequate school facilities.

NORTHERN EDITION

GROWING CONCERN is being voiced by builders over increased number of zoning laws which require half or one-acre lots for new homes. In Allegheny County (Pa.) for example, builders say officials are motivated by aesthetics without regard to economical use of available land. They point out there is much marginal land where lot widths could be as little as 40 feet without fear of creating slum areas.

YOU’VE PROBABLY BEEN WONDERING about the effects of a prolonged steel strike. Should basic industry be curtailed to a large degree, look for increased availability of mortgage money for home financing. There will be less demand from other quarters. However, a drawn-out strike—one causing widespread layoffs in allied industries (railways, e.g.)—will decrease home-buying potential.

WHAT’S THE LATEST WORD ON MORTGAGE MONEY? With reports from all over the nation indicating a continued tight supply for some time to come, look for increased attention to focus on fast-growing pension funds as a possible new source. Builders and lenders feel the main task is to “sell” pension funds on value of putting their money in mortgages. One problem exists. Certain state laws restrict operations of pension fund trustees. Generally, investing in mortgages by pension funds is not forbidden, but transactions with out-of-state concerns are tightly proscribed in many states.

OPTIMISTIC REPORTS ON HOMEBUILDING’S OUTLOOK continue despite the decrease in starts this year over 1955. A survey conducted by Alfred Politz Research, Inc., for Look magazine indicates 4,500,000 U. S. families are seriously considering buying or building a home by Feb., 1957. Of these 2,250,000 said they were thinking in terms of newly-built houses; 1,200,000 wanted older homes.
For Genuine Beauty . . . specify

new "TERRAZZO" pattern

There's more vinyl in every tile of Bolta Floor... stays beautiful longer ...with or without wax!

Also available in 22 marbleized and solid colors!

Here is the rich, authentic beauty of old-world terrazzo—in wonderful, modern, "soft-to-the-step" Bolta-Floor vinyl tile! Bolta-Floor is a high-content, homogeneous vinyl floor tile that assures longest wear and lowest possible maintenance costs. Bolta-Floor will keep its gleaming beauty through years of hard use!

"Terrazzo" Bolta-Floor is produced in 15 beautiful decorator colors—and in 6 x 6, 9 x 9, 12 x 12 and 18 x 18 tile sizes (¼" or .080" gauge).

Don't settle for less! Get the genuine beauty of new Bolta-Floor "Terrazzo."

For samples write:

THE GENERAL TIRE & RUBBER COMPANY
FLOORING DIVISION • AKRON 9, OHIO
WHAT’S AHEAD

Pulse of Building

Interpretation

June homebuilding weakness combined with substantial declines in VA appraisal and FHA mortgage insurance applications, indicated a further drop in starts. By end of June, units begun under VA-FHA had dropped about 30% as compared with the 18% overall decline. Downward trend in total starts has been twice as great proportionately in metropolitan than non-metropolitan areas where VA-FHA loans are not as widely used.

15 LEADING HOME BUILDING AREAS

Dwelling units built in Metropolitan areas during 1956 (BLS) % Change Jan.-March 1955-56

<table>
<thead>
<tr>
<th>City</th>
<th>1956</th>
<th>1955-56</th>
</tr>
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<tbody>
<tr>
<td>Los Angeles</td>
<td>26,546</td>
<td>-6</td>
</tr>
<tr>
<td>New York</td>
<td>17,119</td>
<td>-20</td>
</tr>
<tr>
<td>Chicago</td>
<td>12,148</td>
<td>+9</td>
</tr>
<tr>
<td>Detroit</td>
<td>8,182</td>
<td>+3</td>
</tr>
<tr>
<td>San Francisco</td>
<td>5,928</td>
<td>-25</td>
</tr>
<tr>
<td>Miami</td>
<td>4,290</td>
<td>-12</td>
</tr>
<tr>
<td>Washington</td>
<td>3,591</td>
<td>-39</td>
</tr>
<tr>
<td>Baltimore</td>
<td>3,187</td>
<td>-37</td>
</tr>
<tr>
<td>San Diego</td>
<td>3,142</td>
<td>+6</td>
</tr>
<tr>
<td>Cleveland</td>
<td>2,716</td>
<td>-12</td>
</tr>
<tr>
<td>Atlanta</td>
<td>2,588</td>
<td>-18</td>
</tr>
<tr>
<td>Denver</td>
<td>2,500</td>
<td>-42</td>
</tr>
<tr>
<td>Buffalo</td>
<td>2,310</td>
<td>+11</td>
</tr>
<tr>
<td>Phoenix</td>
<td>2,274</td>
<td>-25</td>
</tr>
<tr>
<td>Boston</td>
<td>2,079</td>
<td>-20</td>
</tr>
</tbody>
</table>

DECLINING MORE THAN SEASONALLY, June's 104,000 starts lowered annual adjusted rate (Jan.-June) to 1,150,000 units. Total starts were 18% below 1955's first six months.

EDGING OFF SLIGHTLY to 130.6, June’s wholesale price index reflected lower dimension and plywood prices. This offset small Portland cement rise. May hourly earnings: 151.6.

NEW RECORDS IN TOTAL CONSTRUCTION WERE SET—$3.9 billion for June and $20 billion for first six months. Dollar outlays for housing are 8% below 1955's first half.
Guido Antonelli, President, Guy Antonelli, Inc., Detroit, Mich., says, "The Andersen name helps sell our homes. Quality Andersen features such as insulating glass, fitted screens, weatherstripping are important parts of our sales story. Another important feature is the ease and speed of installation. And we have learned from experience that Andersen Windows are going to give a lifetime of reliable service to our customers."

Saul Fox, Fox Brothers, Englewood, N. J., says, "'Homes by Fox' have used Andersen Flexivent since 1953. We like them because they help establish ours as quality homes—and their horizontal lines blend with the 'long, low look' of the houses we build. We have found that our customers know about Andersen Windows—and recognize the Andersen name as a mark of superior quality."

In Michigan and New Jersey, buyers of upper bracket homes tell builders...

Andersen Windows

These two successful builders of quality homes are using Andersen WINDOWALLS to help close sales! Their discriminating customers are quick to recognize the window beauty, the convenience, the year around protection that only windows of wood can offer. Everywhere, men who build fine homes for sale are turning to Andersen WINDOWALLS for their versatility, precision manufacture—and most of all, for their powerful sales appeal to customers who recognize the very best! For the next project you plan or build, look into the sales-closing advantages of Andersen WINDOWALLS. You can get more information from your lumber and millwork dealer, from Sweet's Files, or by writing Andersen. WINDOWALLS are available throughout the country, including the Pacific Coast.

Andersen Casement Window Units in $43,000 to $48,000 suburban Detroit homes. Eugene Anderson, designer.

say "quality homes"

Andersen Windowwalls

ANDERSEN CORPORATION • BAYPORT, MINNESOTA
**New Roltite Ceramic Tile Adhesive has cleared away all the obstacles**

<table>
<thead>
<tr>
<th>the old way</th>
<th>the Roltite way</th>
</tr>
</thead>
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<tr>
<td>you practically have to build the house to suit the tile</td>
<td>install tile anywhere, anytime—in new construction or remodeling</td>
</tr>
<tr>
<td>elaborate, expensive, heavy, bulky base construction a must</td>
<td>install tile over almost any clean, smooth, structurally sound surface</td>
</tr>
<tr>
<td>considerable experience and special skills required of workmen</td>
<td>no previous experience or special skills required—a man who can install any</td>
</tr>
<tr>
<td>bulky materials to handle, messy mortar to mix</td>
<td>tile can install ceramic tile</td>
</tr>
<tr>
<td>a long, complicated, costly installation job</td>
<td>Roltite Ceramic Tile Adhesive is ready to use as it comes from the can</td>
</tr>
<tr>
<td>mortar a mess to clean up</td>
<td>the average installation can be done easily in a single day</td>
</tr>
<tr>
<td>mortar cracks, tiles come loose</td>
<td>no clean up problems</td>
</tr>
<tr>
<td>high installation costs limit applications to the more expensive homes</td>
<td>resilient mastic stretches under stress, retains adhesion</td>
</tr>
<tr>
<td>low installation costs make ceramic tile practical for homes in every</td>
<td></td>
</tr>
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<td>price level</td>
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**SEE YOUR ROLTITE DISTRIBUTOR OR SEND COUPON FOR DETAILS**
Don't let this house fool you: it may look like a prediction for 1980, but in a few short years you may well be using the construction and product ideas designed into it. In this case-study house sponsored by *Arts & Architecture*, the basic design concept centers about this prediction: that the increasing cost of labor is forcing more and more construction into the factory; that in 10 or 15 years, houses will be built from pre-cut and prefabricated components manufactured for fast assembly. Catalogs will offer a choice of metal, wood or plastic structural frames which will be easily bolted together.

In Case Study House #18, architect Craig Ellwood specified an 8' modular structural steel tube frame made up of 2x2” columns, 2x5½” beams. Roof decking is Fenestra “Holorib” inverted steel building panels which span 8’ beam to beam, for maximum bonding area. Telescoping end laps and interlocking side laps allow quick and easy installation. Steel frame sliding-door units are Steelbilt. Prefabricated wall panels are faced with ¼” “Harborite,” a DF marine plywood with resin-impregnated overlays. Finishes and equipment include Philippine mahogany cabinetwork, “Dormetco” steel sliding doors.
NOW... Western-Holly
Queen of the Western Ranges
the leader in style
and design
brings
to you:

the new...
practical...
king size...
built-in...

ROTARY BARBECUE - BROYL OVEN

Outdoor barbecue flavor with indoor broiling ease!
You can enjoy backyard barbecuing the year 'round
with the NEW WESTERN-HOLLY "Easy-to-clean"
"Easy to operate" Built-in motorized rotisserie.
WESTERN-HOLLY'S NEW KING SIZE Rotary Barbecue
Broyl-Oven gives you more baking and broiling ca-
pacity than any other oven.
WESTERN-HOLLY has the only built-in Barbecue Oven
with a Built-In window . . . Actually see your food
cooking and browning without opening the oven and
letting the heat and flavor escape.

LOOK FOR THE ROUND WINDOW . . .
for the NEWEST-LARGEST-KING SIZE-
Built-In Rotary Barbecue Broyl-Oven.

NATURALLY IT'S GAS

Western-Holly
Queen of the Western Ranges
CULVER CITY, CALIFORNIA • McGREGOR, TEXAS
4 BIG REASONS
WHY
NATIONAL LOCKSET
Patent Applied For
IS AMERICA'S OUTSTANDING
LOCKSET VALUE

QUICKLY INSTALLED
Only 7 simple steps are required. Slot-engagement of lock and latch ... clamp plate assembly with key-slot design ... snap-on rose ... all are special features that save valuable installation time.

DISTINCTIVELY STYLED
Lockset trim, including different knob styles, decorative escutcheons and handles, blends with every type of architecture. Brass, Bronze, Chrome and Aluminum highlight the excellent array of lasting finishes.

ASSURES POSITIVE SECURITY
Full 7/16” latch bolt throw, five-pin tumbler cylinder, independent knob action, solid brass bolt and dead latch make NATIONAL LOCKset ever dependable in protection performance.

PRECISION ENGINEERED
One-piece knob, full length cams, case hardened pusher plate, rust-proofed selected cold rolled steel lock case and mechanism are engineered to reduce wear and to resist wear.

You put extra value into your homes ... at no extra cost ... when you choose NATIONAL LOCKset. Dependable security and service ... complete owner satisfaction ... bigger builder profits ... these, and many more plus benefits, are yours by installing NATIONAL LOCKset exclusively. Ask your building material supplier for details. Write us for catalog No. 400 describing the complete line.

ORDER IT WITH CONFIDENCE • SPECIFY IT WITH PRIDE
NATIONAL LOCK COMPANY
ROCKFORD, ILLINOIS • MERCHANT SALES DIVISION

AUGUST 1956
You can't see the Lif-T-Lox balance until you lift out an R.O.W sash. But you certainly can feel it take the work out of raising and lowering windows.

Yet, Lif-T-Lox does not interfere with immediate removal or with the pressure-tight weather seal. It works independently and automatically.
Even before the Lif-T-Lox improvement, R.O.W removable wood windows were the world's favorite. The modern convenience of removable sash eliminates more than half the work of washing or painting windows. That's why millions of American women insist on homes with R.O.W windows.
WARDROBE
GIVE HER THE SPACE SHE WANTS

GLIDE-ALL doors installed in Parkwood Vista, La Mirada, Calif.
Builder: Devon Construction Co., Los Angeles
Architect: Herman Charles Light, A.I.A.

In designing and building homes to sell you certainly try to meet the customer's demands—to give them major features they want. The most house for the money is the important thing. More easy-to-use wardrobe and storage space has a most important "buy appeal" today, and the simple, low-cost way to give "Mrs. Home Buyer" the space she wants is with GLIDE-ALL Sliding Doors.

GLIDE-ALL Doors make floor-to-ceiling, wall-to-wall expansive wardrobes, huge closets in corners of small rooms, full-length, full-height hallway storage space, entrance-way guest closets, and in many other waste-space areas. GLIDE-ALL Doors save construction time and dollars too...they're installed quickly, adjusted easily to fit the opening, decorate with the wall, and give a life-time of trouble-free performance. They are available in standard 8' and 6'8" heights, flush or recessed panel models, overhead or bottom roller types...and in special sizes for unusual jobs. Write for complete details, specifications and prices.

GLIDE-ALL Doors are available from distributors throughout the United States and Canada. For information write Plant nearest you.

GLIDE-ALL Doors are the result of extensive research by Woodall design and production engineers to provide modern, versatile "package" sliding doors at low cost to the Building Industry. They are unique in their design, Woodall-Quality built and guaranteed. Six modern Woodall plants, coast-to-coast, produce GLIDE-ALL Doors and distribute them through a broad national network of sales and service organizations backed by the reputation of Woodall Industries, Inc.
How to be ready when the hurricane hits

1. Anchor roof to masonry
2. Bolt down carports
3. Favor pier foundation
4. Remove loose materials
5. Waterproof brick
6. Maintain skeleton crew

The East Coast has a new name: "Hurricane Alley."

With the critical season for hurricanes at hand, the American Red Cross has issued the ominous warning that "what seems to be a change in weather patterns" has made the entire eastern seaboard of the United States "vulnerable" to these destructive tropical storms.

A ten-step general program designed by the Red Cross to preserve life and property during such an emergency suggests that there is still more that builders can do to help themselves and their new homes weather the crisis. What changes in building techniques, for example, will reduce the possibility of damage? And—what precautions can a prudent builder take before such storms strike to protect materials and equipment?

American Builder asked these questions in a special "hurricane belt" survey of prominent builders. Here are some of their replies:

- **Anchor roof to masonry:** Good builders in seashore hurricane area are paying more attention to the following:

  "In masonry construction—pouring a continuous reinforced bond beam at each ceiling level with anchor bolts installed at the roof line."

- **Bolt down carports:** "We employ a vertical anchor bolt on all carport post structures, thereby permanently fastening roof beams to footings. We apply Teco anchors to all rafter and joist intersections with supporting members."

- **Favor pier foundation:** "Builders in coastal areas have abandoned slab construction in favor of pier foundations with crawl space and, in some instances, on pilings several feet above the ground."

  "Hurricane Hazel in 1954 was the first that did severe damage anywhere in North Carolina in the past 20 years, or more. The controversy and apparently ineffective VA requirements of anchor bolts, we understand, will be eliminated in the new minimum property requirements for the state. FHA does not require them."—Robert W. "Bob" Barker, executive secretary, HBA of Charlotte, N. C.

- **Remove loose materials:** "On receiving storm warnings, we immediately remove loose doors, windows, ladders, etc., into a covered permanent building, where they can be locked. We cover all piles of lumber with felt and tie down securely with tie wire."

- **Waterproof brick:** "About the only damage we suffered was the rain driving through brick walls. The FHA calls hurricanes an act of God, but last year we went back and put colorless waterproofing on all our brick houses on a 50-50 basis with the purchasers. They seemed to feel that this was all that could be expected."—Edward R. "Eddie" Carr, Washington, D. C., former president of NAHB.

- **Skeleton crew handy:** "There's little offered in the way of hurricane protection, other than the bolting down of sills, and insurance. In this area, hurricanes have struck with little warning, but we had time to secure everything that could possibly move."

  "We kept a skeleton crew on hand with fire-fighting equipment to handle emergencies. Houses in framing stages were thoroughly braced and all partially sheathed houses were completed. Large glass areas facing northeast were protected with sheets of plywood. The net results of our efforts is that damage resulting from hurricanes has been very small."—Lawrence J. Goldrich, president, Leslie Construction East Corp., Norfolk, Va.

- **Hope luck continues:** "To my knowledge, builders in this area employ no special technique to reduce hurricane damage. Perhaps we are a little lax since we have had only two bad hurricanes in the last 16 years: in 1940 and 1947."

  "Only precaution that I know of is not to have excess materials stored in the area during August and September. If a hurricane threat is imminent, equipment and materials are lashed down, windows covered with plywood or similar material. Just hope our luck continues."—Cecil H. Mason, president, HBA of Savannah, Ga.

- **Move to Florida?** "South Florida construction codes have reduced the possibility of serious damage by hurricanes to practically zero, as shown by experience in 1947 and 1950 storms. Entire situation as regards Florida is greatly exaggerated. Suggest Northern builders who are worried move down here."—H. A. Ross, West Palm Beach, Fla.
To pep up sales...add merchandising

More merchandising, with emphasis on sounder advertising practices, extension of trade-in facilities and promotion of brand names, is the ammunition many builders are now using to combat lagging sales.

Sales were noticeably below par in late May and early June, reports Edward R. Carr from Washington, who attributed it to excellent weather at that time following a "very miserable, wet spring."

"We re-examined our entire advertising approach," he said, "and substituted some really sound advertising for a haphazard and ineffective approach in previous weeks... On weekends of June 16th and 23rd, we found sales substantially back to normal."

Carr, like many other builders used advertising to shout that his homes represented "what American women want in housing," according to findings of the Women's Housing Congress. Features emphasized were: established community, room for eating, backyard recreational area, children's entertainment, sidewalks, unaffected exteriors, trees and space.

Trade-in appliances

Geeraert Construction Corp., also in the Washington area, using the same technique, introduced a new development and sold out half its first section before the official opening.

In Salt Lake City, Alan E. Brockbank reports sales are "somewhat slower because fewer buyers have the down payment and sufficient incomes to qualify under stricter credit requirements."

His solution: "We are accepting some trade-ins of older houses and also making allowances on owner's old appliances as part of the down payment... It is requiring more and more advertising."

Brand names help

Brockbank's current models are as-described as "Wife-saver 1956 Western Horizon Homes."

"Built-ins and nationally known brand names have helped continue volume for us," says Irving R. Stich of West Hartford, Conn.

The big build-up of your own brand name is an important thing to remember, advises Joseph Eichler of Palo Alto, Calif.

"We started to combat lagging sales in 1949," he said, "when we started to build our brand name: Eichler Homes. We have consistently tried to improve every succeeding group of houses that we built. Present prices range from $19,000 to $22,500. Our sales are holding up very well."

Change the Size

A change in size and price of house might be helpful.

L. R. "Andy" Latch, president of the Metropolitan Building Co. in Tulsa, Okla., says: "We have gone to a seven-room house, which includes den and living room with fireplace, kitchen with range, dishwasher and disposal built-in. Sales are good. We believe this new house will be accepted wherever built; we are still stressing good location and a livable house."

Taking a completely opposite view toward a change is Alan Carnoy of White Plains, N. Y.: "For our company, I believe building in a lower price range will maintain regular sales. For the national economy, I believe 40-year mortgages only for lower incomes will maintain the level of production."

Jersey builders win court fight against revenue-producing fees

New Jersey builders are breathing easier today following a Superior Court order outlawing an ordinance, adopted by a growing number of local communities, which required fees as high as $500 for a home building permit.

With excessive fees "due to cost of the builders in 1956 alone several millions of dollars," the New Jersey Home Builders Assn. brought about a test case in which it was joined by the New Jersey Shore Builders Assn. In it, Raymond J. Daniels, builder of Point Pleasant, N. J., complained that his community recently adopted an ordinance setting up a new fee schedule which created a hardship by cutting sharply into his profits.

Minimum fee was $200.

The average new home permit cost $18 before the amendment, he said, whereas the new standard called for 25 cents per square foot of floor space, with a minimum fee of $200. He pointed out that he made a profit of about $900 on each $12,000 house and that the new permit cost of $244 would have to come out of this.

Judge Howard Ewart suggested that the municipality look toward the Legislature to make laws providing for more income, rather than to the courts. He concurred with the contention of the builder associations that the ordinance was passed clearly to raise revenue to meet rising school costs, although under the state constitution that cannot be done in any way except through taxation.

Mayor Ralph A. Carlson, himself a builder and association member, testified the amendment was intended to help keep the tax rate down. He said that the Borough Council had anticipated the new fee schedule would realize $70,000 this year, compared with only $9,000 in 1955.

The problem had been aggravated, it was pointed out, by residents of the borough who had twice rejected a proposed school budget, including the cost of a new building.

In addition, the ordinance had called for fees of 5 cents a square foot for business construction and 10 cents for additions to existing buildings.

Problem of all people

The court decision declared that the ordinance discriminated against home building and held that community facilities such as schools were not the problem of any one industry, but were the responsibility of all people and must be settled through state legislation.
Blue ribbon panel to judge Home Week contest

Five nationally-prominent leaders in the home building industry, representing construction, architecture, government, research and home magazines, have accepted invitations to judge American Builders' 1956 National Home Week contest (see page 77 for rules and other details). A sixth member of this blue ribbon jury will be announced next month. The selections include:

- Joseph B. Haverstick, Dayton, Ohio builder and president, National Association of Home Builders.
- Neil A. Connor, director, Architectural Standards Division, Federal Housing Administration, Washington, D. C.
- John Normile, building editor, Better Homes & Gardens, Des Moines, Iowa.
- William H. Scheick, executive director, Building Research Institute of the National Academy of Sciences, Washington, D. C.
- John Highland of Highland & Highland, Buffalo, N. Y., architectural organization.

Dickerman's Column

By John M. Dickerman, Executive Director, National Assn. of Home Builders

Financing aid needed by modest-income families

A builder friend of mine recently put his finger on a social and economic problem of grave import: the financing of housing for the substantial families with modest incomes found in every community.

"I'm having great difficulty in qualifying public school teachers, postal employees and others holding steady and responsible positions at modest salaries for FHA-insured loans," he said. "Some are able to obtain conventional financing, but far too many cannot.

"Can anything be done which will make it possible for these highly responsible families to finance the homes they need and want? I'm sure there must be hundreds of thousands of such families throughout the country with good credit standings in their communities who can't qualify as home buyers under the present financing arrangements."

The answer, I told him, lies largely with Congress.

As this is written there is a strong presumption on the part of qualified observers that the GI home loan program will be extended for one year, to July 25, 1958. Any further extension now appears unlikely.

Major change next year

The expiration of the GI program, which last year accounted for 30 percent of our new housing starts (and as much as 50 to 60 percent in some areas) will, it seems to me, require Congress to reassess the present FHA program and take a long and careful look at the nation's overall housing position.

I am not overstating the importance of the matter when I say that the nation will reach a major crossroads on housing legislation next year.

It is of great urgency that the new 85th Congress, which convenes next January, should immediately set about the task of drafting legislation which will make it possible for veterans and non-veterans alike to avail themselves of some government assistance in the financing of new homes.

In this legislative process the "viewers-with-alarm" will, undoubtedly, see an opportunity to seek to eliminate entirely the time-tested financing arrangements, not perfect to be sure, which have enabled 60 percent of our families to own their own homes. On the other extreme, will be those visionaries, albeit some well meaning, who will suggest that the answer lies in more public housing—public housing for modest income groups—a concept repugnant to the free enterprise system on which our nation has been built.

Middle course desirable

I believe that somewhere between these two highly untenable positions an enlightened course can be found which will make home ownership available to modest income families; a course which will contribute to, and not endanger, the health and vigor of our economy. A liberal dose of daring and imagination may well be required to chart such a course, but it can be done!

While the year-and-a-half between the convening of the new Congress and the expiration of the GI program may seem like a long time, it is in fact an all-too-brief period for the enactment of sound legislation of the national importance of housing. Those of us in and associated with the home building industry must lay the groundwork now.
9% rise in brick production seen

Continued expansion of the brick and tile industry led to a post-war high production of nine billion brick equivalents last year—a 14 percent increase—and is expected to lead to another rise of 9 percent or better this year.

Dr. Robinson Newcomb, market analyst for the Structural Clay Products Institute, revealed the figures after completion of a year-long study of reports representing 85 percent of the industry.

To achieve this high mark, he said, the industry expanded more in proportion during the past two years than producers of any other major building material. In 1955, the study estimated cement capacity was up 7.4 percent, steel, 2.1 percent, brick, 9.9 percent.

This year, he forecast cement capacity would show the greatest increase—about 14.8 percent compared to 4.2 percent for brick and tile—which he pointed out reflects anticipation of a sharp rise in Federal-aid highway work.

Late in June, the Structural Clay Products Research Foundation of SCPI opened its 16-acre research center near Geneva, Ill., with Robert B. Taylor heading a staff of 27 scientists and technicians. Formal dedication is planned for early 1957.

The SCPI annual convention, to be held Nov. 12-14 at Boca Raton, Fla., will feature for the first time an exhibition by manufacturers of equipment and supplies for the industry, according to Joseph W. Stryker, executive director. Some of the exhibits, he said, will be outdoor displays, and all will tie in with the convention theme of "mechanize and modernize."

DEALER'S VIEWPOINT


Non-builder customers pose merchandising problem

The retail lumber dealer is being told by the Chicago Tribune research department and others, too, that if he wants to make the most of the sales opportunities in his trading area he must appeal to four separate types of customers. These are:

- Home builders and contractors—who buy materials to be used in building for someone else.
- Home owners—who want to have their homes repaired or modernized.
- Do-it-yourself customers—who buy for home improvement or hobby use.
- Impulse buyers—who buy items they see on display.

Some dealers make a determined effort to attract customers in each group and some cultivate all four types and then go after individual and commercial business as well. Others, for one reason or another, do not care to go out actively after consumer sales.

Going after home modernization, do-it-yourself and impulse business in a serious way is no simple matter. The techniques are quite different from those used in serving the builder-contractor trade.

Consumers require advice

Among other things, the dealer who decides to make an aggressive try for consumer business finds himself faced with totally new problems of advertising and store merchandising. He has to take on new lines of merchandise and find it necessary to hire more salesmen and then train them for consumer selling.

In addition, if he hopes to build a flourishing home improvement business, he must go beyond merely selling the right kind and quantity of materials. Those customers want help with plans, time payment financing and labor to do the work.

Extra selling time

Cultivating the do-it-yourself trade means more selling time per customer because weekend carpen-

NRLDA to display model showroom

One of the special features planned for the National Retail Lumber Dealers' Exposition in Chicago next December will be a full-scale model showroom complete with store front. Called the "Profitmaker," the 35x90-foot store will be the center of a program consisting of several clinics designed especially for store-minded dealers, reports Watson Malone III, exposition clinic chairman.

"Merchandising is apt to steal the show this year," he said.

Other merchandising clinics in the planning stage include a power tool show, a morning workshop on kitchen merchandising, a study of Operation Home Improvement selling methods, and reports on the management side or merchandising.
K. C. builders plan golf links homes

A Kansas City golf star, Robert P. Leacox, has joined forces with William J. Miller, veteran developer, to create a par-72 championship golf course with 500 luxury homes built around its perimeter.

Their Leamill Development Co. has acquired a 450-acre tract, on which the first homes are already under way for showing during National Home Week. A 158-acre section in the center will become the Spring Valley Country Club, ready for play by June, 1957.

Club plans call for a private membership of 1,500 persons, plus 500 social members restricted to home owners in the Klapmeyer Estates subdivision. The course will be improved with an $850,000 clubhouse and swimming pool. Over two miles of bridle paths will serve as a buffer between homes and fairways.

New St. Louis suburb

Birth of a new St. Louis suburb will be recognized late this month, when Fischer & Fritchel, Inc., open the first display homes in their 410-acre Carrollton subdivision.

Ranch and split-level contemporary styling will be featured in the $14,000-$19,000 range. Many buyers will receive a packaged set of plans allowing them to add a room in the future at minimum expense.

Edward F. Fischer, president of the sponsoring firm, reports that buyers will also be part owners of a large recreation area to be built around a community center building.

HBA of Greater St. Louis has split its executive leadership between two men, reports Gene Vescovo, president. Robert J. DeSutter is the new executive director, while Mel Doernhoefer will be home show director and have charge of the National Home Week program.

Cleveland display Aug. 19

Twelve home builders in Cleveland are completing model homes to participate in a Good American Homes program beginning Aug. 19. "We must convince families now spending their money in other ways that they'll be happiest if they place home ownership first," declares Robert L. Sill, chairman.

Bill Hanna has resigned his post as executive director of HBA of Greater Cleveland and is considering a return to Pittsburgh to form his own building firm. Jim Leibrock, Cleveland executive secretary, is his successor.

The 1957 Idea Home to be featured next April at the home show of the Builders Assn. of Metropolitan Detroit, will be erected jointly by two members: Joseph F. Slavik and James Rossin. Slavik, whose firm is now building in Detroit, Ann Arbor and Livonia, was recently elected a director of Modern Homes Corp., prefabricated housing manufacturer.

Long Island builders will have a display and information center at Hempstead, N. Y., starting next winter. Norman M. Obedin Associates are erecting a four-story building for that purpose and also to provide office suites for firms associated with the building industry.

Max Odlen of Collingswood, N. J., has been elected president of the Home Builders League of South Jersey. He will serve an 18-month term as a result of the association's decision to change its fiscal year to conform with the calendar year. He was installed June 26 of this year.
that's the beauty of Marlite® plastic-finished wall and ceiling paneling
In crawl spaces, for example, gallons of water can extrude from the ground every day to condense on joists and flooring. A covering of 4 mil VISQUEEN keeps it away from this vulnerable area permanently.

VISQUEEN film is the best permanent protection against moisture you can use under slabs, on the warm side of stud walls and top floor ceilings, between subfloor and floor. Dozens of money-saving on-the-job uses, too. Close openings in bad weather. Cover tools, equipment, mill work, easily-damaged materials. Use it again and again to cover incompleted work. Use it as a tent over a whole structure to speed winter work. A roll containing 2000 square feet of 4 mil VISQUEEN weighs less than 40 pounds.

Only VISQUEEN film is AVAILABLE in all these sizes: 3, 4, 6, 8, 10½, 12, 14, 16½, 20, 24, 25, 28 and 32 feet.

Important! VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. Only VISQUEEN, produced by process of U.S. Patents No. 2461975 and 2632206, has the benefit of research and resources of The VISKING Corporation.

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Plastics Division, Terre Haute, Indiana

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World's largest producers of polyethylene sheeting and tubing
Are we overlooking the sales potential of the old standby—the two-bedroom house—in an attempt to build more and more three- and four-bedroom houses? Roy H. Davis and his son Bill thought so. They built the two-bedroom, low-pitched contemporary house above to test the theory. Then they built a similar model with three bedrooms. (Davis Home Builders put up 25 to 30 houses a year.) They had not planned to sell out a year's production with this model, but had hoped they would cause quite a stir in their local Deerfield, Ill., market. They offered the house shown for $12,700 on an owner's lot, or on one of Davis's lots which range in price from $2,500 to $4,700.

Davis Home Builders sold three of the two-bedroom version and two of the three-bedroom version during the first five days after the house was opened for inspection. The Davis' feel that their theory was right: there is a good market for a two-bedroom house that has a livable floor plan.

KITCHEN in Monterey Suburban is in "L" of open kitchen-dining living room area. Kitchen cabinets are Youngstown's "Diana" units in color. Counter tops are Formica. Kitchen also has double-bowl sink.
**The MONTH for August**

**TWO-BEDROOM CONTEMPORARY** sells for $12,700 without lot, was built by Davis Home Builders for market which led in three- and four-bedroom houses. Three-bedroom version was $1,000 more.

**MONTEREY SUBURBAN** offers a big “livable floor plan” for small house. House has forced warm air under-floor perimeter heating. Exteriors are Redwood or Douglas fir siding, Crab Orchard stone.

DINING AREA is just off kitchen area. Note open-beamed ceiling, flexibility that is offered by the open plan. Heat is by Radair with forced warm air under-floor perimeter system. Screen divider is Ratox.

LIVING ROOM gives illusion of space. Long wall of windows are by Fenestra. Fireplace is Uni-Built prefab unit. Visqueen vapor barrier is beneath slab. Note beamed ceilings. Doors are flush birch.
THE NEWEST IN
BATHROOM LUXURY

New One-Piece Emperor

Here's the latest in fixtures for your new bathroom—the beautiful Emperor Closet. Its low, massive, one-piece design is both distinctive and luxuriously modern. The non overflow feature and quiet operation set it apart from conventional units. Precision internal mechanism assures extremely smooth, trouble-free operation. A specially designed solid plastic Olsonite Seat is furnished.

ENGINEERED INSTALLATION — QUIET, DEPENDABLE OPERATION

TWO BOLT PRINCIPAL—There is no need for extra floor screws. The precision positioning of the two bolts assures rigid anchorage of the closet—saves time and labor.

THE CARLTON—available in either elongated or round-front designs with syphon-jet bowls. These deluxe models are ideal for quality home installation.

THE PRINCE—a close-coupled design with reverse-trap bowl. One of the industry's most popular closets with both home builder and home owner.

BRIGGS Beautyware

BRIGGS MANUFACTURING CO., 300 Buhl Building • Detroit 26, Michigan
Novoply Ends Sticking and Warping of Sliding Doors

Closets with sliding doors save valuable floor space, so they appeal to today's home buyers. But complaints of sticking, warping, and twisting of sliding doors have always been a problem to builders.

That problem is solved now. For sliding doors made of Novoply® are guaranteed not to warp in excess of 1/8". Textured Novoply is a wood panel made from resin-impregnated wood flakes and chips fused under heat and pressure. Because of this construction, Novoply is the flattest, most dimensionally stable wood panel ever made!

Novoply comes in panels from 1' x 6' to 4' x 16'; and in thicknesses from % to 1".

Handsome Novoply may be finished natural—with 2 coats of Satinlac®—for an unusual textured effect, or may be painted easily.

Builder Saves Money with Mineral Core Doors

"YOUR STAY-STRATE DOORS have saved us more than their cost over standard doors," says Illinois builder Kimball Hill. The saving, Mr. Hill declares, is a result of "eliminating replacements and servicing of complaints in respect to warping and sticking."

Stay-Strate® flush doors just won't warp. For Stay-Strate doors have a core of Weldrok—the incombustible mineral material that can't soak up water—so it can't warp. In fact, Stay-Strate doors are guaranteed for life against warping, twisting or manufacturing defects. And that guarantee includes all labor costs of hanging and refinishing involved!

Stay-Strate doors come with faces of oak, birch, walnut, and many other fine woods. They're handsome, dependable and rugged...able to stand up to slam-bang treatment or to extreme moisture and humidity conditions.

There's an extra saving in Stay-Strate, too. Because they're "weatherproof," they eliminate the need for separate, unsightly storm doors.

Is Kimball Hill completely satisfied with the Stay-Strate doors he's used? Here's how he ends his letter: "With this record in mind, we...will appreciate your furnishing figures for a thousand additional homes." Need we say more? Better do yourself a favor and investigate Stay-Strate doors today.

Popularity of PERFOWOOD Soars

Now it's possible to add a "custom touch" in your homes at low cost, with Weldwood Perfowood*, a perforated hardboard panel. In kitchen, workshop, even in the living room, everything from power-drills to paintings are being displayed on Perfowood. Look around and you'll find places in your model homes for top quality Weldwood Perfowood.

New Kind of Exterior Plywood Needs no Sheathing

Now you can cut costs without cutting corners, by using new Weldwood® Duraply® for exterior siding. Duraply is exterior grade plywood with a special permanent overlay that's tough, smooth and completely weatherproof. Nail Duraply right to studs and you'll not only save the price of sheathing, but also the labor cost of installing it. And this type of construction meets government requirements in many areas. For this use Duraply should be used in a minimum of 3/4" thickness. Duraply is also finding wide use for soffits and gable ends. Duraply is available in plain panels and v-grooved panels in other thicknesses from 3/8" to 3/4" and in panel sizes 4' x 8', 4' x 9', 4' x 10'. Duraply is also available in pre-cut lap-siding. The lap-siding panels are cut 12" x 8' and 16" x 8' in 3/4" thickness.

Duraply cuts painting costs too. No primer! No sealer! Two coats of paint on Duraply give the same protection as 3 coats on ordinary wood.
No wonder 4 out of 5 home buyers want

oak floors

Natural Beauty
Beauty is a matter of taste . . . but almost everyone agrees that the rich natural coloring and grain of Oak enrich every home style. Oak Floors have a warm, comfortable, livable look that appeals to buyers of all types of homes . . . in every price range.

Lifetime Durability
Home buyers want a floor that will last, and give them lasting enjoyment. With Oak Floors there's no doubt about durability . . . no skin-deep beauty to wear out or fade away, and upkeep is extremely easy.

Practical Economy
With all its advantages, Oak is priced within range of every home. It costs less than most floors, assures more buyer-appeal than any. No wonder 4 out of 5 builders and architects . . . as well as home buyers everywhere . . . prefer beautiful Oak Floors.

You know you're RIGHT when you specify Oak Floors

National Oak Flooring Manufacturers' Association
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“American
LUSTRACRYSTAL* will substantially cut glass costs”

“And it meets all other requirements, too!”

Economy-wise architects and builders, nationally, are specifying and using American Lustracrystal instead of costlier plate glass for many glazing applications. Builders following this practice have reported saving as much as 35% on glass costs.

Economy is only part of the Lustracrystal story. Greater strength, more resistance to wind pressure and impact, makes Lustracrystal a very dependable structural glass.

Lustracrystal provides unimpaired vision and is produced with a fire-finished luster that adds external beauty to modern structures.

Always specify and use AMERICAN for:

- True Economy
- Dependable Strength
- Crystal Transparency
- Lustrous Beauty

AMERICAN PRODUCT LINE
American manufactures sheet glass with the least distortion and the greatest clarity, whiteness and luster.

LUSTRAGLASS—single and double strength for conventional glazing.

LUSTRACRYSTAL—economical heavy sheet glass for larger openings and many other applications.

* MAX. SIZE—72” height x 120” width. Information on larger sizes available on request.

THICKNESS — %”, %”, ½”.

LUSTRAWHITE—a picture glass of exceptional clarity and flatness.

LUSTRAGRAY—for better television viewing; and special glazing.

BULB EDGE GLASS—for use as counter dividers, wind deflectors and shelves.

THIN GLASS—for microscope slides and covers. Extremely flat and true to tolerance.

SUPRATEST—a laminated safety glass.

PANAL—a fiberglass-reinforced plastic structural panel.

WATCH OUR PRODUCT FAMILY GROW

AMERICAN WINDOW GLASS CO., PITTSBURGH, PA.
PLANTS: ARNOLD, PA. • ELLWOOD CITY, PA.
JEANNETTE, PA. • OKMULGEE, OKLA.
“We’re happy because we have quality fixtures and appliances throughout our home.”

THREE GOOD REASONS WHY BUILDERS PREFER INGERSOLL “Engineered-Economy”

1. The lower cost and high quality that is provided by mass production methods lets the builder put more into his houses.
2. The durability and beauty of the acid-resisting, stainproof finish coupled with an appealing design gives complete customer satisfaction.
3. The lighter weight of porcelain-on-steel saves hours of installation and handling time . . . reduces shipping costs substantially.

Merrick Park Estates, Merrick, Long Island
Architect: Stanley Klein
Builders: David Taub and Julian Klein
Plumbing Contractor: Lakeville Plumbing Co.
Wholesaler: Edw. Sherman Supply Co.

INGERSOLL PRODUCTS DIVISION
Borg-Warner Corporation
1000 WEST 120TH ST., CHICAGO 43

Others are benefiting from Ingersoll “Engineered-Economy” plumbing fixtures . . . why not you?
Write, now, for complete information.
No jump track design. TRACK OT 200 works for all doors, single or by-passing.

NEW HANGERS FOR 13/4" DOORS
Note: Two holes in hanger top for additional strength in mounting.

ACCESSORIES

GUIDE NO. 14
GUIDE NO. 13

When desired, attach Guide Strip No. 15 to rear of door. Requires no grooving.

MACKLANBURG-DUNCAN CO.
BOX 1197 — OKLAHOMA CITY 1, OKLAHOMA
NEW Improvements make Hardware greater than ever!

NEW WIDER HANGERS
★ Less Headroom
★ Easier Adjusting
★ Twice as strong

ONE TRACK FOR ALL DOORS
By-passing or single
From 3/8" to 1 3/4" thick

WALLPOCKET HANGER TH2
For top mounting on doors.

Completely Packaged Hardware
for 3/4", 1", 1 1/8", 1 3/8", and 1 3/4" Doors
Also Wall Pocket Hardware

*Note: Guides No. 13 and 14 are packaged with M-D Sliding Door Hardware. Other accessories optional. May be ordered separately.

FLOOR TYPE Sliding Door HARDWARE

Two silently operating Sheaves. No. SW-1 is 2 3/4 long by 1 5/16 high. No. SW-2 is 2 1/2 long by 1" high.

STYLE A TRACK
Brass, Aluminum or Stainless Steel, 1" wide. 4 other styles available in single or double track from 5/16" to 1 3/4" wide.

BUILDERS
Sold by all Hardware, Lumber and Building Supply Dealers.

DEALERS
ORDER TODAY — your order will receive prompt shipment.
Owner's report on molded plastic drawers:

New versatility...unmatched cleanliness!

Mrs. Remington used over 50 drawers molded of Bakelite Phenolic Plastic in her new home. Here are her comments: "These drawers allow infinite arrangements. We saved space by using them in closets in the place of bureaus...44 drawers in four closets! And, in this climate, the plastic eliminates swelling and mildewing.

"The fact that they are seamless helps in cleanliness. I think it is marvelous that I can take a damp cloth and clean them without a worry. The big thing is that I don't have to put paper in the drawers and there are very few spots where insects can hide."

Here's proof that these molded plastic drawers will appeal to your customers. They give you that "built-in" sales advantage. You, the builder, gain, too. Drawers molded of Bakelite Phenolic Plastic require no finishing, are shipped ready to install. You just add handles, slide into place. Runners and center guides are molded in, the satiny black finish goes all the way through, and they are tough, durable. Best of all, the cost is competitive!

For further information, see your building supply dealer, or write Dept. SF-5.

BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation 30 East 42nd Street, New York 17, N. Y.
The term Bakelite and the Trefoil Symbol are registered trade-marks of UCC
Cuts 7-10 times faster than power hand saws!

DeWalt saves on practically every cutting job inside or outside. Arm raises, lowers, swings 360°. Powerful DeWalt-built direct-drive motor rides on arm, rotates 360°, tilts down past 90°, accommodates any circular tool. Join the hundreds of builders who have learned a DeWalt pays for itself on the very first job—in faster, more accurate work, reduced tool maintenance, greater operator efficiency—in dollar savings by the hundreds!

Job-size GW-I illus.—1 1/2 hp motor, 10" saw blade cuts 3" deep, rips 26" wide...$395. Smaller MB-F, with 3/4 hp motor, 9" blade, cuts 2 1/2" deep, rips 24" wide...just $239.

As little as 70c a day in monthly payments after 10% down puts a GW-I on your job. Use DeWalt's Easi-Budget Payment Plan.

See your supplier or send for FREE BOOKLET.
Simplest to install

TRAVERSE
Horizontal Sliding
WINDOW
with Integral Fin Trim

...a beautiful, extra-low-cost addition to

REYNOLDS ALUMINUM WINDOWS

Ease of installing this window still further reduces its exceptionally low cost. The integral fin trim is the secret—siding materials simply butted against it. (Wood buck model also available.) Precision engineered! Corners are dressed welded, smooth and strong. Louvered weep holes assure complete drainage. Completely weatherstripped. Easy-sliding vents lift out for cleaning...lock tight. Besides single-sliding-vent type shown, strip type is also available...sliding vents flanking a fixed center light. Check your usual supplier. For detailed literature write to Reynolds Metals Company, Window Division, 2003 South Ninth Street, Louisville 1, Kentucky.

REYNOLDS Lifetime ALUMINUM GUTTERS AND DOWNSPOUTS
Rustproof permanence and handsome design in rain-carrying equipment...at low cost. Ogee embossed in 4", 5", 6" sizes. Half-round in 5" and 6" sizes.

REYNOLDS Lifetime ALUMINUM FLASHING
Rustproof and non-staining, this flashing looks better and costs less, 14", 20" and 28" widths, .019" thickness.

REYNOLDS ALUMINUM REFLECTIVE INSULATION and Vapor Barrier
Developed especially for professional use...foil bonded to 40 lb. kraft paper. Foil on one side and two sides, in rolls of 250 and 500 sq. ft., 25" and 36" widths.

REYNOLDS ALUMINUM BUILDING PRODUCTS

See "FRONTIER", Reynolds great dramatic series, Sundays, NBC-TV Network.
Board and batten building means new design and long lasting beauty—with Gold Bond Asbestos-Cement Permaboard it means economical construction, too!

You save on building costs—and you offer prospective homeowners beautiful sidewalls that last for the life of the house. You can paint Gold Bond Permaboard any color you wish and it's fireproof...rotproof...and resistant to insects and rodents.

Permaboard is made in large sheets that are easy to handle. Saw them—or fit them to size with the "score and snap" method. One side of the board is smooth, the other slightly textured—you can use either side for the exterior.

Long popular for use in farming and industrial building, Permaboard and Pliaboard are unharmed by weather, salt air or fumes of corrosive acids or alkalis.

For more information about Gold Bond Permaboard or Pliaboard, write: National Gypsum Company, Buffalo 2, New York.

ASBESTOS PRODUCTS

NATIONAL GYPSUM COMPANY

Gold Bond
BUILDING PRODUCTS
The woman you want to sell is already sold on this monogram.

dream big with the big plus that only G-E home heating and cooling gives you

And add to this Big Plus such exclusive features as the General Electric Air-Wall* System and you have a sales package that can put wings on your sales program. Yes, the builder who installs General Electric Home Heating and Cooling can dream big—and sell big! He has installed the best! And the world-famous G-E monogram flashes “quality” to every prospect that reads his ads and enters his houses.

You’ll be offering more for the money—space-saving advantages, complete design freedom and a convincing warranty. And your prospect will know it! So call in your G-E Dealer. He’s listed in the yellow pages of the phone book and he’s geared to talk “builder language” in products, costs, savings and profits.

HOME HEATING & COOLING DEPT., BLOOMFIELD, N. J.

Progress Is Our Most Important Product

GENERAL ELECTRIC

*REG. TRADEMARK OF GENERAL ELECTRIC CO.
NEW! International® 300 Utility Tractor now with POWER STEERING

Steer single-handed, maneuver in cramped quarters... keep the other hand free to control equipment! The new International 300 Utility with power steering gives the operator finger-ease control of the wheel—even with heaped half-yard bucket on a heavy-duty loader. One-hand steering lets him load, doze, backfill, grade and level on the go. With the 300 Utility built-in strength and stamina, users report they move up to 25 per cent more dirt in a day than with lighter-weight, harder-to-handle outfits.

IH power steering blocks kickbacks from the front wheels to lessen operator fatigue—yet retains the "feel of the wheel" and normal self-return. It is powered from the tractor's regular Hydra-Touch hydraulic system, eliminating the cost of a separate pump.

IH utility tractor power to your job.
For free specification folders, write International Harvester Company, Dept. AB-8, P. O. Box 7393, Chicago 80, Ill.

See your INTERNATIONAL HARVESTER DEALER

International Harvester products pay for themselves in use—McCormick Farm Equipment and Farmall Tractors ... Motor Trucks ... Crawler and Utility Tractors and Power Units—General Office, Chicago 1, Illinois
"We Cut Labor Costs 50% with our SKIL Radial Saw

...and what's more, accurate SKIL cuts give us better quality work!"

Says Mr. V. K. Nelson, Home Builder
Speedway City, Indiana

Savings in time and labor! These advantages put builders and contractors "on record" in favor of SKIL Radial Saws!

SKIL gives you much faster cutting than any other radial saw on the market. Exclusive "Retracto-Glide" Arm provides clear work area, eliminates over-arm interference, reduces set-up time as much as 30% because cutting head retracts all the way. Controls are within easy reach of operating position. No time is wasted making adjustments.

Let SKIL break your wood-cutting bottle-necks, and improve the quality of your work, too! Quickly and easily sets up for bevel, miter, compound or any complicated cuts. See how a performance-proved SKIL Radial Saw can simplify your material handling, reduce costs and increase output for you!

NOW! AN ALL-NEW PORTABLE SKIL RADIAL SAW!

SKIL Model 649 delivers 25% more power to blade than any other 1½ HP radial saw!

Lightweight, compact, versatile SKIL Saw goes directly to the job, eliminates material handling work. Can be carried through doors for trim cutting after framing is completed. More power, makes bigger cuts than any other radial saw in its class. Handles tough bevel miters even on 2 x 8's or larger. Makes every type of cut through all sizes of lumber used in home building, light construction and general woodworking. Operates from any AC or DC portable generator set of 1500 watts output. An excellent value for top efficiency at low cost!
Model 450
SKIL RADIAL SAW
Available from 2 to 7 1/2 HP.
Depth of cut to 5 3/4", 19" cut-off
capacity on 1" stock, 33" rip
capacity. Greater capacity at
optional cost.

Clear work table! Provides plenty
of layout room, more usable work
area than other tables. No blind
spots! No "ducking" under overarm!

Greater rigidity and support! Exclusive
wide spacing of 8 grease-sealed ball
bearings in the supporting head gives
maximum strength and support.

Easy cut changeover! Because of short
radius, cutting head is always moved back
of fence through complete 180° arc. Any
angle cut may be set up in one quick step!

SKIL PORTABLE TOOLS
Made only by SKIL Corporation
formerly SKILSAW, Inc.
5033 Elston Avenue, Chicago 30, Illinois
3601 Dundas Street West, Toronto 9, Ontario
Factory Branches in ALL Leading Cities

Over one million SKIL Saws in use
HOMESEEKERS WANT CLEAN, ECONOMICAL HOT WATER HEAT

YES, HOT WATER heat is a big feature in selling a home... it's the quietest, cleanest, mildest and most flexible modern heating method. Thrush Radiant Hot Water Heat is the most completely automatic and convenient. It maintains an even temperature, never varying more than a fraction of a degree regardless of outside weather.

It works equally well in basement or multi-level homes and can be installed inexpensively with panels in the ceiling or floor, radiant baseboards, convectors or radiators. Upkeep cost is low. If you haven't been specifying hot water, investigate the many sales advantages of Thrush Heating now.

See our catalog in Sweet's or write Department G-8 for more information.

H. A. THRUSH & COMPANY
PERU • INDIANA
FORD TRACTOR CUTS COST OF LATERALS AND FOOTINGS

—speeds backfilling, too!

The right combination of capacity and mobility makes a Ford Tractor a better power buy for excavating plumbing laterals, foundation footings, basements and service connections. Here's what we mean:

Equipped with a backhoe, a Ford Tractor will dig 10 feet or more below grade. Fast, positive hydraulic control makes accurate digging easy. Equipped with an angle dozer, the same Ford Tractor can be used for backfilling, grading and dozing. Hydraulic cylinder control provides positive blade down pressure.

And, Ford Tractors are highly mobile. They speed from job to job, let you handle several jobs a day in scattered locations. On the job they're easy to maneuver in close quarters and over rough ground.

Yet, for all the time and labor they can save, Ford Tractors are priced exceptionally low. Let your local dealer give you a demonstration . . . check his complete line of Ford Tractors and Equipment, or write direct to:

TRACTOR AND IMPLEMENT DIVISION
FORD MOTOR COMPANY
Birmingham, Michigan
$7,500,000 worth of homes sold in two and one half days must be something of a record for fast selling!

Obviously, many factors influenced such a demand for these homes in the Winston Park project at Melrose Park, Illinois. Not the least is the fact that they are equipped with baseboard forced hot water systems using B&G Hydro-Flo equipment. The appeal of controlled radiant heating, plus a year 'round supply of domestic hot water, are plus selling values builders are rapidly discovering.

The major problem of the large scale builder is to create homes with features which raise them out of the commonplace. The versatility of water as both a heating and cooling medium—its ability to provide the ultimate in comfort and convenience at low operating cost—its flexibility, offer the builder a new selling lift.

All the advantages of a B&G Hydro-Flo System can be included when building...or the owner can add them to the basic heating system as his budget permits. Summer cooling—zoning—snow melting, are all available at the owner's convenience for further contribution to luxurious living. In the meantime, he enjoys the best in heating...comfort with economy.
heated homes sold over one week-end

THE B&G BOOSTER
Engineered for compactness, silent operation and years of service, this electric pump circulates water for heating the house in winter, cooling it in summer and for snow melting panels. The B&G Booster has a solid reputation for dependability ...that's why over 2,000,000 have been sold to date!

The heating plant, equipped with B&G Hydro-Flo Products, as installed in Winston Park Homes. Note the compact space saving arrangement. The boiler has a built-in domestic water heater.

BELL & GOSSELT
C O M P A N Y
Dept. EL-11, Morton Grove, Illinois
Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, W. Toronto, Canada
"The new 2-4-1 panel and girder system saves us up to $500.00 per house over shiplap and joist construction," reports Ken Larsen, president Continental Construction Co., Seattle.

"Cost studies show two kinds of savings. First, in labor and materials on the floor itself. Second, contingent savings on heating and plumbing contracts, plus lower costs on sheathing, siding, painting, concrete steps and landing, due to 12" less exterior wall height."

The exact amount you can save with new 2-4-1 plywood depends on local costs and the type of construction you are now using. But whether it's fifty or five hundred dollars, 2-4-1 panel and girder floors will save money ... provide truly superior construction ... give your houses a "close to the ground" look previously possible only with slabs. Write for proof.

FOR MORE INFORMATION, write Douglas Fir Plywood Association, Tacoma 2, Washington
1. Your prospects are about to discover the newest idea in home comfort... in LIFE

The newest comfort for up-to-date homes is sound conditioning with Armstrong Cushiontone... and now the multi-million audience of Life is reading about this new idea every month. This new LIFE campaign will make sound conditioning with Cushiontone one of the most worth-while extras you can add to your new homes. On the next two pages, you'll find how you can take advantage of this new home comfort and the Life campaign promoting it.
2. Now **LIFE** helps you sell homes sound conditioned with **Cushiontone**

Life's nation-wide impact will help sell the newest idea in home comfort—sound conditioning with Armstrong Cushiontone. Every month, the 26,000,000 people who read Life will see full-page ads that tell how Cushiontone ceilings add quiet and smart appearance to any interior.

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3. **New ceilings add quiet and beauty**
   to contemporary or traditional interiors

Full Random® Cushiontone is equally at home in new houses or old... in modern or early American settings. This smart ceiling design belongs as much in the living area and family room as it does in the kitchen and game room.

In new homes, Cushiontone quiets noise in open planned areas or where appliances pose a noise problem. If an older home is being re-modeled, Cushiontone will cover cracked plaster ceilings quickly and without mess.

Your prospects will be impressed with the difference a Cushiontone ceiling makes—even on normal conversation. Cushiontone takes the sharp edge off noise and keeps it from spreading around the house.

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*TRADE-MARK*
4. Install complete ceiling—and quiet, too—in one operation

Armstrong Cushiontone provides a complete ceiling that's quick and simple to install. Apply furring strips to joists, then staple or nail Cushiontone. The tongue-and-groove joint speeds installation and levels each tile. All painting, plastering, and joint treatment are eliminated. Although Cushiontone costs a little more than regular ceilings, the difference is minimized when you consider the extra beauty, comfort, and sales appeal it brings your homes.

5. Put LIFE into your home promotion

You can take advantage of this new Life campaign by including Cushiontone in your fall building plans. Put signs in front of your model home, display posters in every sound-conditioned room, and hand out free literature to prospects. For a complete supply of Cushiontone promotional materials, see your Armstrong dealer or write Armstrong Cork Company, 3708 Rider Avenue, Lancaster, Pennsylvania.

6. Four top home magazines also presell prospects on Cushiontone

The millions of readers of American Home, Better Homes & Gardens, Home Modernizing, and Sunset are already familiar with Cushiontone sound conditioning. And now that Life's huge audience has been added, almost every new home prospect in your area will regularly see full-page Cushiontone advertising.
This cab lets you TAKE IT EASY on tough jobs!

Modern features in new Chevrolet truck Flite-Ride cabs make your work easier and safer than ever before . . . give you the pleasure and prestige of style that equals many passenger cars!

Those numbers in the picture (right) point out features that make business almost a pleasure when you work behind the wheel of a modern Chevrolet Task-Force truck! Here are some of the reasons why hauling in a Chevy is easy on you:

1. Concealed Safety Steps—located inside the doors—stay clear of snow, mud, and ice, give you firmer, safer footing.
2. Spacious leg room helps keep you comfortable all day long, brings you home fresher and more relaxed.
3. Nu-Flex seat design means comfortable hauling! Jack-stringer springs give ideal body support; seat back adjusts easily.
4. High-Level ventilation system keeps the cab interior clean, cool, comfortable. Intake is at the bottom of the windshield—away from road heat and dust.
5. No-Glare instrument panel, with handsome two-tone finish, puts instruments and controls within easy sight and reach.
6. Panoramic windshield provides a full 1000 square inches of forward viewing area to make driving safer, easier.
7. Full-View rear window* adds to safe, convenient viewing as well as truck style.

And you'll find bright, stylish interior appointments that add to your sense of pleasure on the job. If your work calls for long hours on the road, you'll enjoy life more in a Flite-Ride cab! Check one over for yourself at your Chevrolet dealer's . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

They're the work champs of their class—with new V8's, automatic transmissions for every truck model!

You get modern power-performance in these Chevy medium-duty models! Compact short-stroke V8's do more work yet keep costs down. Hydra-Matic transmission† gives you no-shift hauling, reduced maintenance. And there's great Powermatic‡—the first automatic transmission designed specially for big trucks!

They're the work champs of their class—with new V8's, automatic transmissions for every truck model!

*Optional at extra cost.

NEW CHEVROLET TASK-FORCE TRUCKS

Anything less is an old-fashioned truck!
Clear sailing with this children's bathroom idea by ELJER

Now! Eljer launches an all-out advertising and promotion drive to tell your prospects that this children's bath is more than a second bath. It's a practical, hard-selling idea from Eljer that's certain to move your houses faster... certain to brand you a man who builds more value into his homes.

Look to Eljer for every type of plumbing fixture (china, steel, cast iron). Eljer means more quality in the homes you build. Eljer Division of The Murray Corporation of America, Three Gateway Center, Pittsburgh 22, Pennsylvania.

Now earned by Eljer products, the Good Housekeeping Guaranty Seal is a powerful buying recommendation for millions of homeowners—a potent selling tool for you!
5328 Truscon Series 138 Double-Hung Steel Windows used in Winston Park Subdivision where ... 

IN 1955 THEY SOLD OUT 300 

600 additional homes are now under construction for 1956—using 10,000 Truscon® Double-Hung Steel Windows—Series 138.
QUALITY HOMES IN 1½ DAYS

- Prices averaged $24,000
- 1500 buyers on waiting list

The builders of Winston Park in Melrose Park, Illinois (near Chicago), broke all known national sales records for homes in their price class. They sold out 300 over one week end and had buyers standing in line for more.

The Winston homes are the split-level type with 2000 to 2150 square feet of living area, priced from $21,500 to $28,500. They contain three bedrooms, 1½ to 2½ baths, finished recreation rooms, basements, attached one- and two-car garages, built-in oven with counter-top range. Truscon Series 138 Double-Hung Steel Windows are featured.

The Truscon "138" is the trouble-free window. It is delivered assembled. Simple anchors allow fast, easy erection in any type of wall. All hardware is attached. Your only field work is glazing and painting to match your own color styling.

Stainless steel weather stripping and stainless steel sash balances are built-in. The window is ready to receive standard Truscon full or half screens, storm sash or KoolShade Screens.

A wide range of types and sizes is quickly available through Truscon dealers, backed by all the facilities of Truscon's nation-wide warehouse service. Send coupon now for complete Truscon Metal Window Catalog.

HIGHEST QUALITY REPUBLIC STEEL KITCHENS now available to builders in Turquoise, Pink, Yellow—or Classic White. Republic Steel Kitchens are loaded with selling features to give you the "custom kitchen" look at standard kitchen price. Special cabinets for built-ins. See your Republic Steel Kitchens Distributor, or send coupon.


QUALITY ROOF DRAINAGE PRODUCTS now are made of stainless steel. Republic's Berger Division manufactures a complete line of ready-to-use drainage items and accessories—all made of Republic ENDURO® Stainless Steel. And competitively priced. Stainless resists rust and corrosion, resists damage, cannot stain painted siding, lasts for life. Send coupon for facts.

STEEL and Steel Products

REPUBLIC STEEL CORPORATION
Dept. C-2212
3128 East 45th Street, Cleveland 37, Ohio

Please send me more information on these Republic Steel products for quality home construction:
- Truscon Steel Windows
- Republic Steel Kitchens
- Truscon Welded Wire Fabric
- Stainless Steel Drainage Products

Name__________________________Title__________________________
Firm_____________________________________________________
Address__________________________________________________
City__________________________Zone____State_________________
Goes places a standard station wagon can't... carries up to 50% more payload!

Take a good look at the new Dodge Town Wagon—the ideal low-cost vehicle for your business! It's a double-duty carrier of passengers, cargo, or both. And with Forward Look styling it's as handsome as it is versatile!

The Town Wagon is built on a rugged 1/2-ton Dodge truck chassis, giving you extra ground clearance for off-the-road driving. It's powered by either the famous Dodge L-head Six or the new Power-Dome V-8.

With seats in place, one model carries six passengers, the other eight. In the six-passenger model you've got about 90 cubic feet of load space in the rear compartment. The same amount of space is available in the eight-passenger model with the rear seat removed. You can also take all extra-passenger seats out of either model, leaving clear, unobstructed room for a big, truck-size payload of 1575 pounds.

You can see... and drive... the Town Wagon at your Dodge dealer's now.

DODGE TOWN WAGON

WITH THE FORWARD LOOK
GOOD workmanship is one of the most important factors in preventing leaky brick walls.

Good workmanship includes wetting the brick—completely filling the head and bed joints—and back-plastering the face brick before the back-up units are laid.

Expect trouble when the face brick are not parged. Even if the space between the face brick and the back-up units is slushed, it cannot be completely filled with mortar. Voids are left between the mortar and the brick, through which water may enter, trickle down and leak to the inside of the wall.

Brixment mortar enables the bricklayer to back-plaster quickly and easily. Brixment mortar has great plasticity, high water-retaining capacity and bonding quality, great resistance to freezing and thawing, and freedom from efflorescence. Because of this combination of advantages, Brixment is the leading masonry cement on the market.
"For my money—

Automatically saves work, time and money every minute of the day!

Owners everywhere are now recognizing FORDOMATIC as one of their biggest business assets in a day's operation. Pictures on these pages give you an idea why.

You'll find FORDOMATIC literally pays for itself. Drivers make more calls, more sales with FORDOMATIC and with less effort! You cut route delivery time with faster getaway; eliminate waste of gas through faulty gearshift judgment. And FORDOMATIC boosts trade-in value too. Ask your Ford Dealer for a demonstration.

"We've spent practically nothing for maintenance in over 2 1/2 years," says Mr. Max Rapezyk of Rosedale, Long Island. "With conventional transmissions you can't avoid drive-line shocks. Fordomatic ends all that."

"No more clutch expenses," because there is no clutch with FORDOMATIC. From start to finish shifting is smooth and automatic. Big loads get rolling easily—with no strain on driver or truck.

"Fordomatic ends costly shocks to drive line." Especially over rugged "washboard" roads. FORDOMATIC eliminates shock damage to transmission gears, to differential, to rear axle. Maintenance costs are cut to a minimum.

"I save valuable time in traffic." FORDOMATIC saves 16 hand-and-foot motions every traffic stop—over 2000 in a typical day of city driving. Delivery time is speeded up all along the way.

"Terrific off-the-road performance." FORDOMATIC delivers low wheel-speeds that a conventional transmission can't match for power. It carries you through sand and mud easily with no fear of stalling.
Fordomatic pays for itself

BIGGEST-CAPACITY Pickup in half-ton field. New 8' box on 118" wb. available at low extra cost. 6½' box on 110" wb. standard. FORDOMATIC drive, power brakes at worth-while extra cost.

With FORDOMATIC (Ford's automatic transmission) you enjoy all the money-saving features pictured at the left. Ford's 1956 Pickup also offers other features to cut hauling costs, time and work.

Two Short Stroke engines! Ford gives you a choice of two gas-saving Short Stroke engines, either the 167-h.p. Power King V-8 or the 133-h.p. Cost Cutter Six. Ford's Cost Cutter is the only modern Short Stroke Six in the ¾-ton field!

Most Capacity! Ford's new 8-ft. box, available on the 118-in. wheelbase, is the biggest found on any ¾-ton Pickup. And the standard 6½-ft. box, on the 110-in. wheelbase, gives you a full 45 cu. ft. of loadspace. Slanting flareboards offer more load-space, more load protection. Exclusive Toggle-type latches hold tailgate tightly sealed to body sides. Both come on either size box.

Most Comfort! Only Ford has Driverized Cab comfort. Seat shock snubbers to smooth the ride! Level-action cab suspension for longer cab life.

Most Safety! Ford's new Lifeguard steering wheel helps protect you from the steering column in case of an accident. Lifeguard door latches help guard against doors springing open. Ford seat belts available at low extra cost. Test Drive a dependable Ford Truck today.

FORD TRUCKS LAST LONGER

Using latest license registration data on 10,068,600 trucks, life insurance experts prove Ford Trucks last longer.
FIRST IMPRESSIONS ARE LASTING... that's why many volume builders today are using original Schlage entranceway designs... combining modest cost and house-to-house versatility with striking eye appeal. Characteristic of Schlage's practical, progressive designs, two new open-back escutcheons — the Manhattan and Continental — introduce a welcome “color-accent” to help individualize homes... create an even wider design selection for every taste and budget. But whatever the style, function or finish you select for your homes, you can always count on Schlage quality.

COMPACT TOOL KIT CUTS LABOR COSTS
For new construction or remodeling jobs, Schlage's tailor-made kit lets your carpenters handle Schlage wood-door installations quickly and easily — contains all the tools necessary for handy and accurate lock installation!
For complete information on Schlage lock installations, write for Installation Tool Book #651-Y-8

Send for New “Lock Fashions” Brochure #651-Y-8
For attractive suggestions in doorway decoration and colorfully illustrated applications of Schlage residential lock and escutcheon designs, write today for this handsome 4-color, 12-page brochure.

SCHLAGE LOCK COMPANY
SAN FRANCISCO • NEW YORK • VANCOUVER, B.C.
Address all correspondence to San Francisco
CATCH HOLD
of this BALANCED LINE
of Gas Fired Products for
MORE PROFITABLE BUSINESS

Now available under one brand name is a fully integrated line of modern gas-fired boilers, unit heaters, conversion burners and heat distributors to meet all central heating system requirements of every size and type of home and building.

A quality line—recognized for high standards of quality and service—easy to sell—with good profit margin—easy to install—readily accepted—assuring long, dependable performance and satisfaction.

National - U.S. Radiator
CORPORATION
HEATING AND AIR CONDITIONING DIVISION
Johnstown, Pennsylvania
Sales Offices and Representatives in principal cities

Write for Bulletins giving full information and engineering data with ratings on each individual series of National-U.S. Gas Boilers.
3 All-New Lines
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"It definitely helped sell $17,000 houses, but you have to get the price so far down you can’t make any money." Vernon L. Mudd, Tulsa.

"I put it into some $18-20,000 houses and couldn’t get a chance to explain the $1000 extra. Now I price the house without it." Jimmie Adair, Norman.

"Anything over $30,000 has it; down to $20,000, it’s 50-50, but all houses are readied... anyone can get units at the price we do." Claude Martin, Wichita.

...they’re talking about air conditioning, and they want some questions answered

It’s no secret that air conditioning has not thus far lived up to its advance billing. Here’s a major improvement in home building that is simply not making the progress everyone had expected a few years ago. To find out what was wrong, I met with groups of builders in areas which—by virtue of climate and other factors—should have embraced air conditioning as standard in all new home construction. We pinned down exactly what problems are holding them back. It seemed reasonable to assume that these would be the same problems that are holding back builders everywhere. We list those problems—and some of the comments from builders that helped us pin them down—on the next nine pages. We think that getting them out in the open will help manufacturers and lending agencies solve the basically ironic situation in the air conditioning industry today: as demand for air conditioning makes itself more strongly felt in less and less expensive houses, builders find themselves penalized when they try to supply that demand.

This situation won’t straighten itself out over-night. But the goal will be reached when (1) demand for a/c as a necessity permeates the mass market; (2) manufacturers continue to develop cheap yet efficient units; (3) lending agencies cooperate more sympathetically.

Ed Harin

NINE PAGES OF QUESTIONS...AND SOME ANSWERS
Builders want answers

1. Does central air conditioning help sell houses?

Customers for houses under $15,000 are not yet going for central cooling. This report tells why the air conditioning industry's golden promise of "year round equipment in every home" needs much hedging.

American Builder editors recently drove through five states in what should be "a/c country" and listened to the builders who have to make the decisions (and to their wives, whose opinions bear weight). They spoke frankly, from hard personal experience. They hope new technical developments becoming available will permit the under-$20,000 buyer to translate desire into demand. Meanwhile, they've got these problems:

1. The $800-1,000 differential is a barrier.
2. The argument "pay it out in the mortgage" kicks back: for $5 added mortgage load, FHA requires $25 more income qualification.
3. Customers make do with exhaust fans, window refrigeration or evaporative coolers, planning to add central a/c later—perhaps.
4. Operating costs are the big bogey.
5. Manufacturers' service programs are spotty. Builders often choose equipment according to dependable local service.

Mike O'Neill, Kansas City: If I put it into a house, they usually take it. If I don't, they won't ask for it. It runs to about $1,000 for a 3-ton air-cooled installation, in houses at $21,500 up. Customers just sort of expect it in my jobs.

Lloyd Forsse, Wichita: Most of us have given up on cooling the moderate priced house. We automatically put in a plenum sleeve and plan our ducts to take care of later add-on, and the customer knows he can carry on from there.

T. R. McNeal, Des Moines: Last year there were only 29 days over 90° here, needing air conditioning. My wife thinks it hurts her hay fever; I like a fan. But I run a motel, and there refrigeration cooling is a must, so guests will know you're modern.

"Pat" Harness, Houston: Over $20,000, air conditioning is usual; over $16,000, you duct for it; under that, a house will have an exhaust fan, may be ducted, and will be wired for 220 amps, for window units. It's too humid for evaporative coolers.

2. How do fans affect air conditioning sales?

The exhaust fan, which need not be in the attic, cannot do all that central a/c can—but it can cool a house enough to permit sleep. Builders like to include a fan because it shows an interest in the home-buyer's comfort without a big financial involvement; and the investment pays off again if a/c is added later, (see p. 75).

As the tricks of climate control become more widely known, the exhaust fan grows in importance. Attic and roof account for much of the heat load (40%, says Jack Beattie of Hunter Fan and Ventilating Co.). So a well-placed fan (not to speak of shade for glass areas, plus a light colored roof) can mean a delay in the demand for central a/c, but also a greater satisfaction with it when it is finally installed in a well-prepared house.

Erle Jennings, Wichita: I tell customers who plan to use fans in duplexes to open their windows just a little, to get more air movement. Humidity is moderate, but there's enough so people can't depend on evaporative coolers.

John Regier, Wichita: A house that would have featured an attic fan five years ago is likely to include air conditioning today. But many buyers depend on fans for cooling, even if the nights seem to be getting hotter every year.

NEAT TRICK WITH A FAN
ON QUESTIONS BUILDERS ARE ASKING

before tackling the mass market

3. What are the facts on operating costs?

Costwise, the striking fact about the Austin Air Conditioned Village was the spread in operating expense among the 22 houses, reflecting differences in living habits of occupants as well as construction, orientation and landscaping of houses and efficiency of equipment.

Honest builders do not minimize operating cost to their prospects. Many admit skepticism about the current two-year tests by Owens-Corning Fiberglas Corp. in 125 houses over the U. S., to see whether an average size home can be heated and cooled for $120 a year.

Lester Matlock, Wichita: Operating-cost test houses are supervised by experts, under ideal conditions. But home owners never clean a filter; and they should handle cooling the way they should a furnace—leave it on as much as possible.

Jim Stanton, K. C.: I've been investigating air conditioning for four years, and I don't know one qualified person in Kansas City who can tell me what it costs to operate. I've kept figures on my home, and electrical charges vary in a crazy way.

Sid Platt, Wichita: I never found a field condition that meets the manufacturer's claims on upkeep. People won't let the unit run all day; and you can't turn it on at 2 and expect a cool house by 4, and the humidity to stay down.

Gene Elgin, K. C.: Commercial air conditioning fought the same problem as residential today. Now show me one store without it, and the cost is an operating expense. Cooling my car is worth $400 today. Soon people will accept a/c costs.
BUILDERS WANT ANSWERS TO AIR CONDITIONING QUESTIONS, continued

**Lending agencies—help or hindrance?**

Central air conditioning is still not a necessity for most people, although every year it broadens out from the luxury class. Its in-between status is reflected in its treatment by Federal and loan agencies.

As an integral part of construction, it can be included in the mortgage, but that does not make the house easier to sell. Even if the down payment is not increased, the larger monthly carrying charges will require a recalculation of the buyer's financial status. And many simply cannot turn up the $30 extra monthly income to qualify for the $6 extra payment that a central unit is likely to entail.

Few builders think of actually making money out of an a/c installation. They're lucky if they don't have to shave the added price under the price of the equipment. And then they find lending agencies often reluctant to approve the added cost. So it's natural for them to make central a/c optional at a safe charge.

**How are manufacturers helping builders sell a/c?**

At last manufacturers are turning their attention to builders' a/c problems. The 1956 estimate by the A/C and Refrigeration Institute of 150,000 central installations, only half in new homes, is painfully low for a market that's only 4% saturated. Steps being taken include marketing cheaper, packaged units requiring little field work; reduction of noise; improved advice and service programs. (Also see p. 76.)

Builders, to whom the home buyers run with their gripes, demand more reputable franchised service people to deal with, "or cut out the glamorous advertising of new equipment."

**Where do the utilities stand?**

Week after week this summer the records for all-time electrical peak load will be broken as more and more a/c units go into operation. The power companies are not completely happy with this pile-up, and push electrical heating to equalize the load.

But a/c also indirectly adds profit and problems for the power company. The heavier wiring required for a/c permits a house to handle more appliances without popping circuit breakers. In some areas, the Live Better Electrically and Adequate Wiring programs may outstrip the local utility's capacity to keep up with the newly induced demand.

Larry Winn, K. C.: We figured costs on an a/c deal for Nall Hills; FHA liked the $500 price we got it down to. But with a 5-to-1 qualification on income, we could not risk losing buyers on monthly charges, so we made it optional at $700.

Al Miville, Wichita: Of a group of 8 FHA houses I offered last year, only two buyers took a/c at $12,350 with, $11,700 without, even with no additional down payment. It's a close squeeze to keep up payments, plus extra utility cost.

Fred Hornaman, K. C.: And if you put it into a GI house at cost you have a warranty situation to face for a year. They don't go to the sub, but to you. The loan companies won't recognize your cost; your best bet is to make it optional.

Carson Cowherd, K. C.: One drawback is that the a/c sales season is only three months long. And the manufacturer often does not have competent personnel to increase public confidence. Maybe the heat pump will make a basic change.

Jimmie Adair, Norman, Okla.: Manufacturers should get their service in order, and be more particular whom they pick for a franchise—best a firm dealing with a/c and heating only. And they're finally beginning to solicit builder business.

Dewey Hicks, Amarillo: The power company is on the right track in giving builders a bonus for installing 100 amp. Custom builders do it anyway, but you can put in a/c with more confidence when the wiring is right.

Erle Jennings, Wichita: The electrical utility is alive and pushing, and the telephone company too. But the gas company still wants a $40,000 deposit to extend a line, plus $15,000 for a reduction valve off a high pressure line.
How does a/c complicate construction?

Growing knowledge of home climate control (LOCI—landscaping, orientation, construction, insulation) is a healthy result of a/c. Builders are learning to work scientifically to reduce heat gain (and heat loss in winter) even when not planning for a year-round system. Rational placement of glass (with protective overhangs); louvered gables; screened soffit vents; placement of stacks or carports to foil the hot southwest sun; trees to cut or channel wind and sun in proper season; light colored roofs to reflect radiation—all these devices are touched on in the summary report "Residential Air Conditioning" of the Austin A/C Village project (p. 23 treats orientation).

What do the ladies think of central a/c?

If it were merely cooling that central units had to offer, most women would at this point settle for a refuge or den made tolerable by some kind of fan or window cooler, and spend the money on other things. But central a/c is a new way of life, and as its benefits become better known, women exert more demand.

Generally, it is the husband, concerned with gadgets and equipment and resale value, who initiates a remodeling including a/c. Women are more likely to say, "Maybe our next home should be air conditioned." Reports from the Austin village experiment support the claims of manufacturers: cleanliness, better appetite, better sleep, less need to go out for entertainment, better family life. These are the results of what Dr. Clarence Mills of the U. of Cincinnati calls "exfiltration"—the greater inside pressure in a closed house keeps dust and pollen out, supporting the coil-saving filters.

At a gala dinner meeting of the Texas Panhandle HBA—at which Dick Hughes got a lifetime membership plaque and Ed Gavin got more than his usual warm welcome for his invigorating talk—we seized the opportunity to talk a/c with the wives of prominent builders, and got some sound thinking.

WILL NEW TRENDS OPEN THE MASS MARKET?
AIR CONDITIONING: GRASS ROOTS REPORT

Four major trends in equipment

1. Air cooling

GROWING MORE FAMILIAR is the sight of the outside condenser-compressor housing, taking the place of the old splash-towers of water-cooled units. This house, by builders Swenson and Hutchison, is one of eight models in Houston's 1956 Parade cooled with new Rheemaire.

DISCREETLY SCREENED near back door of Muncie house (see p. 71) is "high side" of the Marvair unit in picture below, left.

SLIDE-IN COOLING COIL by Marvair adapts easily to use with Majestic counterflow furnace, distributing through ducts in slab, from utility room of Muncie brick ranch. Circle No. 8001 on reply card, p. 148.

2. ... and lets

bring the mass market closer
puts condensers on the outside . . .

If central year-round air conditioning is to achieve its full market potential, it must meet three requirements: lower price, easier installation, feasible operating cost. The last is a broad problem, involving utility policy and greater mastery of climate control. But the first two are well on their way to solution.

The old American technical devices of factory standardization and interchangeable parts are now at work in a/c. Greatest strides have been made in gas warm air heating territory. Manufacturers now design furnaces to receive add-on cooling units—their own or another brand.

Builders find the equipment itself becoming simpler, more flexible. The summary report on the Austin Village project says: "As with other housing components, the trend in heating and cooling equipment is toward increased packaging and simplified installation methods, all aimed at reduction in field installation costs."

The reported average of $285 for direct labor costs, including ducts, electrical, etc., already seems high, only a year later.

Builders who design houses with enough space for a/c, sizing well for ducts and blowers, find first costs coming under control.

**ONE BUILDER TAKES IT, ONE LEAVES IT**

Shirley C. White, Austin: What decided us to include a/c in all 1152 Barton Hills houses was the feeling we could depend on a specific type of installation, an easily set-in closet coil and an outside condenser unit, with all details worked out ahead.

Reed Byers, K. C.: So far I haven't made a cent on a/c, and it hasn't been a help in selling. I displayed models at $13-16,500, and sold one with optional cooling, at $900. Luckily, air-cooled units involve little extra investment for optional offering.

builders put cooling coils anywhere inside

**AT RIGHT** of year-round Crane unit is cooling coil. Builder: Floyd Harrison (left), Okla. City. No. 8003.

**HANGING** from basement ceiling, Bryant "Suspendaire" fits plenum in Shelbyville, Ind. home. No. 8004.

**REMODELING JOB** includes attic installation of all-in-one air-cooled Lennox unit. (New Products, p. 151.)

**MORE MAJOR TRENDS . . .**
3. New gas equipment may break the operating cost barrier

WHAT the two 5-ton gas-propelled condensing test units look like outside the Sheldon Coleman residence, Wichita—a total of 7500 sq. ft. zoned floor space to cool.

WHAT the inside components look like. Two furnaces have add-on cooling coils. At extreme left are two extra coils and blowers to balance cooling and heating.

HOW units look with noise-absorbing panels off. The 2-cylinder Onan gas engine powers the wet-bulb evaporative condenser. Factory-enclosed freon cycle cools...

...insulated chiller (right), which sends water with anti-freeze to coils in basement. (Shot shows improvement on original unit at left.) Circle No. 8005 on reply card.
to sales for the mass market

The cheapness of gas in some regions and the desire to build summer load have encouraged research in how to use gas as the energy source for a/c. The American Gas Association is sponsoring 13 research projects, covering several types of units including a gas-run heat pump.

Of several widely used types of gas refrigeration units—steam turbine, gas engine driven compression, absorption—only the dependable Servel absorption type has gained any section of the big residential market (see New Products, p. 155). In recent years the Coleman Co. has led research on four methods of cooling with gas, and is now concentrating on distribution and service set-ups for a new gas-driven compressor unit. With spark plugs and oil good for 3,500 hours in a Tulsa test series, Coleman is confident of keeping cost per ton hour not much higher than the test figure, $.0165.

SPREADING A GOSPEL BY EXAMPLE

Sheldon Coleman (right) talks gas air conditioning with the people it will benefit most: gas utility leaders, at meeting of advisory conference in Wichita. Two past presidents of AGA, E. H. Eacker (left), Boston Consolidated Gas Co., and F. Marion Banks, Southern California Gas Co., discuss an experimental gas a/c unit.

4. Fans give house cooling a good head start

AT CENTER of attic area, Lau 24-in. panel fan (A) can easily get routine oiling and service. Exhaust box runs to automatic louvers (B). Soffit vents help air movement. Circle No. 8006 on reply card, p. 148.

DORMER at rear of Louisville house was in original plan. Installer Carr (pointing) now bases a/c size on ambient attic temperature of 110^\circ, not 140^\circ. Reverse-acting thermostat cuts fan in when attic hits 92^\circ (B).

TWO-TON year-round Mueller Climatrol unit (C) is for large hip-roofed house with much glass in living and family rooms. In two-story houses, fan reduces differential between floors. Circle No. 8007.
Some suppliers work with you

Last year only half of the 135,000 central a/c systems sold went into new homes. This year manufacturers are offering lower priced, simpler equipment. One reports new home jobs up to 75%.

Several suppliers are aggressively pushing the "under $700" unit: an all-in-one air-cooled job to fit in the attic gable, with fiberglass prefabricated products, similar to the package pioneered last year by Vornado. One of these, Lennox, provides lavish home development sales brochures, with builders' imprints. Chrysler, to help build the a/c market, is sponsoring the nation-wide “composite house” incorporating the most advanced climate control techniques. And service is improving.

They go out for large project a/c business

This handsome but unspectacular house represents two new trends: the return to the two-story, and "a/c included." One of four models in Jack Parker's 678 unit Bayside Country Club homes in Queens, N.Y.C., it sells for $26,950, with 3-ton General Electric year-round equipment.

Carrier reports a/c will be standard in the largest of four models in Bayberry, 1200 unit development near Syracuse. Bruce Construction Co., Miami, has a 500-unit plan at $19,900, with 3-ton Chrysler cooling. Hallmark Construction will put several Lewyt in-the-wall units in many of their 265 houses in New Brunswick, N.J. Dick Hughes is making a/c hard to refuse in his $12,000-up additions in Wichita Falls, Texas, and Bartlesville, Okla. Ralph Rocks plans 400 American Houses prefabs near Washington, D.C., with Borg-Warner units, at $1416,000. (See Levitt, p. 94.)

They encourage you with helps like these


MASS SALES are aim of Chrysler 2-ton gable air-cooled 1118 model with 5-year guarantee. Circle No. 8009.

BLUEPRINT of Typhoon closet installation helps builders design for a/c; no waste motion. Circle No. 8101.
Enter your best model home in American Builder's National Home Week contest

Here's what six nationally famous judges will look for in awarding "best model home" plaques:

The judges will spotlight model homes that best express the purpose of National Home Week: more saleable houses. Entries will therefore be scored on five counts, each of equal weight: (1) exterior design; (2) floor plan; (3) construction techniques; (4) quality materials and equipment; (5) merchandising. The judges are Joseph B. Haverstick, president, National Association of Home Builders; Neil A. Connor, director, Architectural Standards Division, Federal Housing Administration; John Normile, building editor, Better Homes & Gardens; William H. Scheick, executive director, Building Research Institute; John Highland, Highland & Highland, architects; one judge to be named.

Entries will be judged in two price-categories:

houses under $16,000; houses $16-40,000

One builder in each price-category will be given a Grand First Award. Similarly, there will be duplicate second and third awards. The judges will also select 15 houses in each category for special awards of merit. Award-winning entries will be published in American Builder's December issue and will be displayed at the 1957 NAHB convention in Chicago. Winners will also be publicized in local newspapers by American Builder's press relations staff.

If you show a model home during National Home Week, follow these steps to enter the contest:

1. Contest entries must reach American Builder, 30 Church St., New York 7, N. Y. not later than October 15.
2. Entries must include blueprints of complete working drawings; interior and exterior photographs; a list of major materials and equipment; samples of advertising and promotional material.
3. Entries may include rough detail drawings of special features; brief descriptions of economical construction techniques; newspaper publicity.
4. Please send a letter giving name of builder or company; architect, if any; price; location; statement of sales results; date of local NHW promotion.

PREVIEW: NATIONAL HOME WEEK MODEL HOUSES
Pottstown, Pa.: Buy it now, expand it later

This two bedroom house provides minimum accommodations now; all-purpose room can be finished in several different ways. Builder is Allen K. Davidheiser, Inc.

Sacramento, Calif.: The hip roof holds that horizontal line

Low hip roof, often manhandled in today’s designs, is used to best advantage here. Partial gable draws the eye away from the garage. Gallano Construction Co.

Floor plan features easy accessibility of all rooms from entrance, natural separation between family room and bedrooms. Note planter-wall leading to entry.

Cleveland, Ohio: A front to back split with colonial ancestors

Colonial styling is emphasized by the front porch with graceful arches. Third level under bedroom area has utility and recreation rooms. Par Construction Co.

Illusion of space is provided by planning the living room, dining room and entry in one unbroken sweep. Balcony beside the stairs opens to bedroom corridor.
Knoxville, Tenn.: A house that includes all outdoors

THIS ALREADY BIG HOUSE is made to seem enormous by the roof and wall connecting the carport with the main house. The house is being built by William Dawn.

Kenmore, N. Y.: How to squeeze room out of a minimum model

EXPANSION POSSIBILITIES for this little house lie in the carport, which could become a screened porch or a large family room. Built by Mooney Construction, Inc.

BIGGEST TRICK IN A LITTLE HOUSE is providing enough storage space to prevent the house from being cluttered. Here, full cellar does the job ideally.

Tyler, Texas: A ranch house that really looks the part

BIG FRONT PORCH and stable doors on carport give this ranch an authentic flavor. Note the family room, center of the house. Builder is O. B. Norton.
Jacksonville, Fla.: Positioned for privacy in outdoor living

PLACING LIVING AREAS IN THE REAR of this house takes maximum advantage of outdoor areas. Carport can also be a bad weather porch. Palmore, Inc.

San Diego, Calif.: Keep it all under the same roof

SINGLE, UNBROKEN ROOF LINE covers both house and garage, and also forms a protected front entryway. Outdoor living areas in back. Brock Construction Co.

Milwaukee, Wis.: Get the best out of both brick and wood

MIXING OF EXTERIOR MATERIALS, always tricky, is handled cleanly here. Horizontal brick and vertical wood make nice contrast. R and S Construction Co.
Indianapolis, Ind.: Here's "country kitchen" style living

COMBINATION OF kitchen and activities room is reminiscent of the old country kitchens; fireplace is a confirming feature. Builders are W. L. Bridges and Son.

BY USING AN INSIDE BATH, designer has squeezed two baths into space that would usually permit just one. Note how activities room becomes center of the house.

St. Louis, Mo.: High styling from a prefab plan:

PROOF THAT THE PREFABBERS are keeping up with the times is shown in this handsome house, to be part of the Mid-American Jubilee. W. G. Best Homes Co.

FEATURES OF THE FLOOR PLAN include a compartmented bath, and a family room almost as big as the living room, set where parties will not disturb bedrooms.

Seattle, Wash.: The split level gets a streamlined look

CONTEMPORARY STYLING, popular in the Northwest, has turned the generally unlovely split level into this handsome modern house. Kinney Leonard is the builder.
QUESTION:
What does HOUSEPOWER mean?

ANSWER:
It means faster selling houses

The term "housepower" is rapidly becoming a household word for "adequate wiring." It's making the latter, in fact, almost obsolete.

But before this happens American Builder wanted to find out how builders were thinking on this all-important subject. So we spot-checked them in various areas of the country and asked them to define "adequate wiring."

One thing we hoped to find was evidence of preplanning in regard to wiring. We found some but not enough. But at least, in this first of three articles, we know where they stand...

**IT MEANS QUALITY WIRING . . .**
Builder Edward F. Fischer, St. Louis, Mo.: "We have in our $15,000 homes 100-amp service with an 18-circuit panel. We feel this is important. In our $22,000 homes we use 200-amp service. We use the Adequate Wiring sign in our subdivision—our salesmen call it quality wiring. But customers are still not well informed on their future needs."

**IT MEANS LIGHT-ENGINEERING . . .**
Builder Carl Freeman, Bethesda, Md.: "We consistently provide a minimum of 100-amp to 200-amp service to carry all reasonably foreseeable loads. We also provide special circuits and service outlets for appliances and air conditioning. We light-engineer our homes inside and out. This type of planning helps to merchandise our homes."

**OR IT MEANS 100 AMPS . . .**
Builder Peter J. Beehner, Madison, Wis.: "After an embarrassing experience with 60-amp service I decided never again and switched to 100 amps. I think the day is coming when the buyer will automatically demand certification. My new 80-unit development will be wired to standards. Adequate wiring costs only $30 more per house."

**IT ALSO MEANS SAFETY . . .**
Builder Leonard Kohl, New City, N. Y.: "Some builders are putting in wiring that was adequate 20 years ago but . . . dangerous in 1956. In the last generation the use of TV sets, freezers and refrigerators has almost quadrupled. It takes only one appliance to overload a circuit . . . We . . . operate under constant inspection."

American Builder would like to see all $12,000 houses with 100-amp service. Fischer's 18-circuit panel is well above average. Use of the Adequate Wiring sign is one way to educate customers; newspaper and TV advertising is another.

American Builder likes the phrase "reasonably foreseeable loads" and the emphasis on outdoor as well as indoor lighting. Freeman is right in step with the trend toward more outdoor living. But the codes make little or no mention of it.

American Builder agrees. The day is coming when buyers will demand certification; Beehner will be ready for it. But the national picture on certification is still clouded. Most builders aren't able to enjoy such low rates as Beehner.

American Builder feels that the appliance stream is one you can't stem. Why? Because families are lapping them up almost as fast as they come off production lines. The industry sold more than 353 million in the last five years.
IT MEANS MORE SPARE CIRCUITS . . .  
Builder Sheldon Rose, Detroit, Mich.: "As production builders we regard adequate wiring as . . . amperage and outlets which will enable homeowners to plug in any existing appliance immediately on moving in . . . We supply 100-amp service, stove and dryer outlets and use circuit breakers exclusively. Also spare circuits for power tools, etc."

LESS TROUBLE WITH TRADE-INS  
Builder Ole Grandquist, Des Moines: "It costs us an extra $100 per house to bring in 100 amps over the initial 40 amps, or about $75 for 70 amps. The local electric company requires 50 amps; the city O. K.'s 40. I'd say 100 amps is minimum for 936 square feet. In the last 10 years we've taken 250 houses in trade—80% had to be rewired."

AND MORE ELECTRICAL LIVING  
Builder Jim Nucholls, Tulsa, Okla.: "Today's prospect is shopping for a home, not just a house. He's especially conscious of electrical living and is impressed with the benefit of adequate wiring. As a builder of custom homes we definitely rely on adequate wiring certification to sell our clients on the superior quality of our product."

WORK FOR LOCAL BUREAUS  
Builder Phillip Osborne, Chattanooga, Tenn.: "I was sold on the national adequate wiring program from the very beginning. I've been wiring my houses . . . to their standards ever since a representative of the Electrical League first called on me. I promote the program to my fellow builders and believe I am a better builder for having used it."

BUT WHAT ABOUT EVALUATION?  
Builder Al Miville, Wichita, Kan.: "If a builder in our area puts in adequate wiring, it has to come out of his own pocket—he doesn't get increased evaluation from FHA or VA. Buyers of new houses are insisting on the . . . plaque, but about all the builder gets is a special rate for range and water heater. I wonder if the plaque is worth it?"

American Builder cites Rose as a builder progressive enough to merchandise adequate wiring. But then Rose operates in a hotbed of wiring merchandisers—Detroit. A lot of credit goes to the job Detroit Edison is doing with builders.

American Builder would like to point out that the trade-in market is big, even though it does have headaches. Over a million families will add rooms this year. Will their houses be wired for it? Or will they have to add 220 . . . ?

American Builder feels that with the custom builder there's no problem. He puts quality wiring in because he can't afford not to. But the project builder is the guy that has to wrestle squarely with the problem, whether he likes it or not.

American Builder reports that even in areas where certification is available, only 8% to 33% of new homes have certified adequate wiring. You'd be surprised at the number of builders—even big ones—who miss by an outlet or two.

American Builder sees three sides to this evaluation question—the builder's, the buyer's and FHA's. But it also points out that wiring is hardly the place to skimp because so much of the house's future is at stake—saleswise especially.

Is wiring 'holding up the walls'?  
In spite of all promotional effort to get builders to include more amperage, more outlets and more circuits for greater "housepower," many are still not doing it. They still think that wiring is something nobody sees, so why worry about it? Or they think it's already holding up the walls, so why add more? Or they wait till after they get their financing to think about it, when it's too late. Wiring isn't holding up the walls; builders are just catching up . . .

CONTINUED ON PAGE 223 >
"LANAI RANCH" is placed on a 67x138 lot. The L-shaped house and the placement of the garage in reference to it, creates a courtyard.

Don't let its quiet look fool you...

...this house is full of surprises

LOUVERED DOORS of Ponderosa Pine open upon an impressive approach to the lanai court—an outdoor terrace built into the plan.

You hear a lot about adapting ideas and mixing them into a hot sales package—the planners of this house knew what to add and what to eliminate. The result is a long, low ranch that compatibly blends the calming attraction of "traditional" with the vigor of contemporary planning. Called the "Lanai Ranch" by its builders, Morton Brothers of Jamaica, Long Island, New York, it gets its name from the enclosed courtyard which is designed to complement the house as an integral part of plan. The almost-enclosed terrace is defined by the L-shaped house on two sides, and the garage on the third. The garage is a separate entity some 10 feet from the house itself, connected to it at the front elevation by an eave-height partition. Louvered double doors lead to the courtyard and through it to the front entrance. The wide eave protects the route.

(Continued on p. 89.)
FLOOR PLAN
SCALE ½"=1'-0"
As you can see by studying the blueprint at the left, the Lanai Ranch which architect Rudolph A. Matern designed is a compact house offering a lot of well-ordered living space for $21,990, including lot. The 67’ x 138’ lot is evaluated by Morton Brothers at $4,000. So for under $18,000 buyers are getting plenty. They get a one-car garage with full-sized windows along the court wall so it can double as a playroom. (Two-car garage is also available. The house then sells for $23,900, including larger lot for extra garage space.)

Buyers also get an impressive foyer and center hall, a 32 ft. living room and full-sized dining room; brick wall fireplace with raised hearth; arched ceiling with exposed cross-beams and indirect-lighting shadow box; clerestory window; 15-light bow window. They get 3 bedrooms, 2 ceramic tile baths with glass-enclosed stall shower, tub, double-sink vanity. There is a complete built-in kitchen and a snack bar as well as a family-sized breakfast room. The house has a full basement with a stairway opposite the service entrance.

**Products used:** Briggs plumbing fixtures; Bilt-Rite Products vanity; Certified Furnace Corp. heating system; Eljer bathroom fixtures; Fenestra windows; Formica bathroom counter top; General Electric complete kitchen; Globe Products lighting fixtures; Johns-Manville asphalt roof shingles; John Warden Co. water heater; Kentile kitchen floor tile; Lightolier light fixtures; Murray Manufacturing Corp. switch box; National hardware; Perfectaire ventilating fan; Ponderosa Pine shuttered doors and shutters; Raynor garage door; Red Cedar siding; Romany ceramic tile; Schlage hardware; Sisalkraft vapor barriers; Textolite counter tops in kitchen; U.S. Gypsum drywall; U.S. Mineral insulation; Woodall gliding doors.

**ONE OF THE CUSTOM TOUCHES** offered in one of the Lanai Ranch bathrooms is this pink Model 4EF1 Formica-covered Bilt-Rite vanity. Ceramic tile by Romay. (Photo: J. Alex Langley)

**LUXURY-LINED KITCHEN** has complete General Electric kitchen, snack bar, breakfast area. Steel cabinets are baked enamel in GE’s mix-or-match hues. Floor is Johns-Manville asphalt tile. (Photo: Richard Averill Smith)

**MORE SALEABLE IDEAS IN THE LANAI RANCH**
How to give an Eastern house

Morton Bros. of Long Island just didn't tack on the outdoor living area in this $19,000 house. That's what's so good about it. They made the outdoor living area as much a part of the plan as the second bath. And in the doing, they proved that you can successfully bring to Eastern subdivisions some of the sales-building ideas that got their start in the West.

Just look at these statistics: Morton Bros. have completed nearly 1300 houses in their Morton Village, Long Island; and the Lanai Ranch shown here (see how they capitalized on the appeal of Pacific coast touches!) is by far one of their most popular numbers.

You can see for yourself that the house doesn't make a gimmick out of outdoor living, nor make it the only sales feature of the house. See how the whole plan is pegged on spaciousness, integration of outdoors with indoors, maximum use of a small-to-medium sized lot.

LIVING ROOM and dining room are combined to form 32 feet of indoor space for entertainment. Cathedral ceiling gives illusion of more space. Clerestory windows bring in natural light, still allow generous wall area below.
LANAI COURT offers privacy for outdoor living, creates dramatic approach to front door. Trellised roof allows light to penetrate through to full windows in garage so it can double as another activity room.

INDIRECT LIGHTING in ceiling shadow box and 15-light bow window together with clerestory windows make living-dining room bright with light. Brick fireplace wall and raised hearth adds another luxury touch indoors.

LANAI IS an interior garden court with sheltering roof and trellis opening, includes barbecue grille, flagstone terrace and planting beds—virtually another living room outdoors, proving that outdoor space can be built in.

that certain California touch

NEAR-PERFECT integration of outdoor living space to entry and rest of the house is shown in plan.

BLUEPRINT HOUSE—ESTIMATING GUIDE

<table>
<thead>
<tr>
<th>Location</th>
<th>Actual</th>
<th>Actual + 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation footing</td>
<td></td>
<td></td>
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<tr>
<td>Foundation Wall 7'0&quot;</td>
<td>1720 cu. ft.</td>
<td></td>
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<tr>
<td>Pier Footings</td>
<td>24 cu. ft.</td>
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<tr>
<td>Porch Cheeks</td>
<td>24 cu. ft.</td>
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<tr>
<td>Porch Slab &amp; Step</td>
<td>27 cu. ft.</td>
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<tr>
<td>Chimney Footing</td>
<td>18 cu. ft.</td>
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<tr>
<td>Chimney Stack</td>
<td>90 cu. ft.</td>
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<tr>
<td>House Slab 4&quot;</td>
<td>425 cu. ft.</td>
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<td>1275 sq. ft.</td>
<td>48 cu. ft.</td>
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<tr>
<td>Garage Walls</td>
<td>142 cu. ft.</td>
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<tr>
<td>Garage Slab 4&quot;</td>
<td>70 cu. ft.</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>2084 cu. ft.</td>
<td>2188 cu. ft.</td>
</tr>
<tr>
<td>or 81 cu. yds.</td>
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CONTINUED ON P. 228
Second in a Series

Footings: figure them by the running foot

When a concrete footing is used under the foundation of a house, it is poured in one of two ways: into forms on grade, usually 2 x 8's on edge, or into a trench of the correct size. For figuring purposes here, in both cases an 18" x 8" footing will be used. Labor costs are based on U. S. Department of Labor averages and may have to be varied slightly to meet local conditions. Concrete is figured at $13 a yard delivered on the job.

A footing 18" x 8" will require one yard of concrete for each 27 feet of perimeter of the house. Cost of the concrete thus will be about 48 cents per lineal foot. Forms made of 2 x 8's on edge will cost approximately 20 cents per lineal foot. Placing the concrete, some of which may be shot directly and some carried by wheelbarrow, will average somewhere near $1.90 a yard, or about 7 cents per lineal foot. Total cost, 75 cents per running foot.

Example: what will be the footing cost for a house 40' x 24'? The total perimeter of the house is 128'. This, multiplied by the above cost of 75 cents per lineal foot, gives an estimated cost of $96.

The cost of the trench footing will be the same as above without the form cost, 55 cents a running foot.

Slabs: figure them by the square foot

In foundation work the slab is used in four places: as the finished or sub floor in a slab house, as the cellar floor in a basement house, as a garage floor, and as a dust apron on the bottom of a crawl space. While the exact thickness and finish may vary slightly among the first three of these, as a general rule they will all be of about the same thickness, usually four inches. Anything less is considered insufficient by most building codes, and anything heavier is unnecessary, except for special commercial needs. The dust apron can vary from one to four inches, and can have anything from no finish to a trowel finish. Due to these wide possible variations, it will not be discussed here.

For the standard four-inch slab it is generally safe to use a cost figure of 40 cents a square foot. This will cover the cost of the concrete, placing it, screeding, and a steel trowel finish, which is the one usually used on house slabs. In the case of garage floors, and sometimes cellar floors, a rough float finish may be used, and three or four cents a square foot may be deducted from the basic price.

Example: what will be the slab cost of the 24' x 40' house if a trowel finish is used? Total area is 960 square feet. At 40 cents a foot, cost will be about $384.
Block walls: cheapest for the single unit

In cases where a builder is building only one house at a time, he will usually find it cheaper to use block rather than concrete for his foundation. Blocks vary in width from 8 to 12 inches; the former will be used here for figuring. Blocks are made from both concrete and cinder; while cinder is slightly higher in cost, concrete is heavier and thus a little harder to handle, so the total cost will be about the same for both. Block cost will vary from area to area, and this must be considered in making the estimate.

The cost of 100 sq. ft. of wall is as follows: 8 x 8 x 16 block, about $24; mortar, $1.30; mason, 5 hours at $3.55, or $17.75; helper, 5 hours at $2.25, or $11.25. Total: $54.30 per square, or about 55 cents a square foot.

Example: suppose the 24’ x 40’ slab house used in the last two examples were to be built instead with a full basement of block, with a wall height of 11 courses of block, equal to 88 inches. What will be the cost of the walls? The perimeter of the house is 128 feet, or 1536 inches. This length, multiplied by the height of the wall, 88 inches, gives a total area of 135,344 square inches; divided by 144, this is 940 sq. ft., or about 9.4 squares. At a price of $54.30 a square, the cost of the wall is $515.85.

Poured concrete walls: strongest, cheapest in quantity

For estimating purposes, it will be assumed that the builder using concrete foundation walls will build his own forms and use them only once. Additional uses will drop the total cost an amount depending on their number.

The thickness of concrete usually specified for foundations is 8 inches. This allows one yard of concrete to make approximately 40 sq. ft. of wall at a materials cost of 32½ cents a square foot, or $32.50 a square. Cost of placing the concrete is about $1.90 a yard, or $4.75 a square. Cost of making and setting up wooden forms will be about $25.00 per yard of concrete poured, or about $62.50 a square. Total: $99.75, or, rounded off, $100 per square of wall.

Example: suppose the house in the previous example were to have a foundation of poured concrete instead of block. What would be the foundation cost? Total wall area is 940 square feet; at $100 a square, total cost is $940.

If soil conditions and local codes permit, concrete for the foundations of slab houses may be poured directly into an 8 inch-wide trench. The cost will be the same as above without the form cost, or $37.25 a square. Digging costs should be figured with the excavation. If block is used for the wall above grade, no forms will be needed anywhere.
WHAT AMERICA'S BIGGEST BUILDERS ARE SELLING TODAY

Here's why Levittown (Pa.) is

William Levitt and Sons are just completing
their second "world's biggest development."
Whether you're a big or a little builder, there
are ideas here you can use.

Millions of people who can't
tell a saw from a hammer
are perfectly familiar with the
name Levitt. To them it means
"lots of house for the money"—
and lots of houses.
William Levitt and Sons has come by this reputation honestly.
Since the end of the war this company has built two communities,
Levittown, N.Y., and Levittown, Pa.; and when the sawdust has
cleared away from this last, sometime around the end of the year,
Levitt and Sons will have become the proud parents of some thirty-
five thousand houses over the last ten years. No other building firm
has even remotely approached this fantastic figure. And if this
weren't enough, work has already begun on Levittown, N.J., a new
community to be located northeast of Camden. While no figures
have yet been released on this project, there is no reason to be-
lieve that it will be any smaller or less ambitious than the others.

The sales are a cinch

How can any one company be sure of selling such a huge num-
er of houses? By observing two basic rules: build where there are
a lot of people who want new houses; give them more house for
the money than any other builder in the area. All of Levitt's proj-
ects are near large population centers, and his houses would be
good buys anywhere in the country. Take, for instance, the "Jubi-
lee," biggest selling of the two models in the Pennsylvania com-
nunity. It has better than 1200 square feet of living space on
two floors, with a completely equipped kitchen, living room,
dining room, two baths, three bedrooms, another room that can
be a fourth bedroom or a den, and a one car garage. The house
sells for $11,600.

For the better heeled there is the "Country Club" model with
nearly 1600 square feet of space,
central air conditioning, an expansion attic with room for three more bedrooms and a bath, and a two car garage. This house, with a deluxe kitchen and every appliance in the book, sells for $18,990. From any angle, it’s a bargain.

**Just one big assembly line**

According to Bill Levitt, the company’s president and one of the building industry’s more articulate spokesmen, price tags like these are the result of putting every part of the operation, on an assembly line basis. Every job on the project is handled by specialists. Every item of construction on every house is planned—down to the last nail—with an eye to speeding up the work of the man in the field. And finally, all crews are hired on a subcontract basis and paid according to the number of units they complete. The result is a building operation going at a pace that would make the average builder drop his teeth.

It should interest most builders to know that by present day standards, Levitt is closer to being a prefabbrer than a conventional builder. Outside of the window frames, there are no parts of the house assembled before they reach the building site. However—and this is the significant fact—all framing lumber arrives at the site cut to length, marked and bundled; the framing crews simply lay out the pieces, assemble them on the slab, and lift them into place. In other words, instead of the house being prefabbred in a factory, it is “prefabbred” right on the site, thus gaining most advantages of factory construction without the extra cost of transporting large sections of house. Precutting keeps the saws and rulers off the job and lets the house be framed with hammers—and an occasional assist from the hatchet.

All other operations are handled with the same relentless efficiency. Radiant heating coils are preformed and cut to length in the shop, so that cutting on the job is unnecessary; the tubing is unfolded like an accordion, tied down to rods, and soldered to the manifolds. Painting the house interiors is accomplished at an incredible rate with sprayguns.

The painting crew first comes in and masks off all surfaces to be left unpainted. (An exception: windows are not masked, experience having shown that it’s faster to clean them afterwards with a razor blade.) Then a prime and two finish coats are sprayed on in something under an hour apiece. A neutral color is used so that having the whole house one color is not unattractive.

**Power put to work**

Power tools are in evidence from one end of the job to the other. Lumber, of course, is cut on power machinery in the mill. Wherever a saw is used on the job, it’s usually power operated off a generator on the back of the subcontractor’s truck. Carpenters on the door hanging crews use electric routers and screw drivers, and can rout out a door buck for hinges in something under ten seconds, including setting up the pattern board. Stone finishing crews use air hammers to set the clips that hold the stone veneer, and apply the grout with an electric mortar gun.

There are other items, too, that any builder can apply to his own development. The work of installing utilities and the grading of individual house plots are coordinated so that when the actual building gets under way, there will be no need to do further digging and hence disrupt other operations. Before any construction starts, road beds are put in. Any builder who has had to move heavy equipment through axle-deep mud after a rain will appreciate how much money can be saved by this piece of planning, particularly during the Winter and early Spring.

**Products used:** Woodlife preservative; Sayre and Fisher Brick Co., brick; Bennett-Ireland, Inc., fireplace dampers and screens; U. S. Gypsum sheathing; Johns-Manville asbestos shingles; Perma Products wood shingles; CertainTeed Products asphalt shingles; Silvara Stone Quarries stone; United Lacquer Co. interior paint; General Bronze Corp. windows; Tracy kitchen cabinets and medicine cabinets; Mastic Tile Corp. floor tile; Robertson ceramic tile; York and Shipley boilers; Bell and Gossett circulators; Alliance plumbing fixtures; General Electric Textolite counter tops; Case water closets; carrier air conditioners; Baldwin-Hill insulation; Sargent hardware; General Electric appliances; General Door Co. garage doors; Acme Venetian Blind Co. folding interior doors; Stronghold nails; Timber Engineering Co. timber fasteners; Masonite siding; Libbey-Owens-Ford glass; Simmons shower mixing valves; U. S. Plywood Corp.

**Ideas for...**

**building foundations**

**speeding up framing**

**air conditioning**

**“custom look” finishing**
HERE THE FOUNDATION is almost ready for heating coils to be laid down. Pipes sticking up on the center are water and waste lines, already connected up to the community's water mains and sewage lines. Workman in picture is spreading out roofing felt for the vapor barrier.

CROSS SECTION shows Levitt's way of constructing foundations. Concrete wall has been poured into a trench, machine-dug with great accuracy. Soil in the area has ideal consistency for this operation. The use of block above grade eliminates all form work. Stepped block is especially designed by Levitt.

WHAT LEVITT BUILDS AND HOW HE BUILDS IT

Foundations: how to get a good

Foundations provide a good example of how Levitt brings "assembly line" methods to housebuilding. By the time his trenching machines are ready to move in, house plots have been laid out and graded, sewer lines and water mains are in, and road beds have been completed, allowing heavy equipment to move in and out in any sort of weather. Then the different crews come in and move down the lines of building lots: first the trenching machines; then the concrete trucks to pour the foundation walls; then the stepped blocks are laid on top of the concrete; then the insulation is put in place. Tractors with power scoops lift in bank run gravel and smooth it out. The shoe is bolted down, the vapor membrane is laid out, and finally, heating and plumbing lines are installed, and the slab is ready to be poured. No crew has to wait for another to finish. The result: as many as forty houses finished a day.

ECONOMICAL PLAN keeps perimeter at minimum, cuts down the amount of foundation and roof. Larger room on the second floor can serve as second living room or another bedroom. Note tightly planned plumbing wet wall.

COMPLETED "JUBILEE," smallest and most popular of the Levittown models. This is one of four different elevations used to vary the appearance of these houses. With kitchen appliances, house sells for a low $11,600.

AMERICAN BUILDER
COPPER HEATING COILS come from fabricating shop in accurately cut lengths made up into bundles, shown above. Transverse rods shown are held down by earth spikes, and the coils are wired to them. They are not reinforcing rods; experience has shown that this slab design needs no reinforcing.

PLUMBING CREW quickly stretches out bundles of copper tubing, wires them in place. When finished, most of the crew will move on, leaving one man to solder the tubing to the manifolds and to test the system. Note the shoe already bolted to the foundation blocks, to serve as screed for the slab.

house off to a good start
WHAT AMERICA'S BIGGEST BUILDERS ARE SELLING TODAY continued

Framing: how Levitt pre-cuts for on-site efficiency

The ingredients: pre-cut lumber and a highly trained framing crew.
The results: a house framed from slab to ridge in a day.

"Precutting" is a word every builder ought to paste to the footboard of his bed. No other one factor can serve him so well as a cost and time saver. It is a major tool in attaining prefab efficiency with field construction. And most important, it helps the builder to build accurately. This applies whether he is a Jones building four houses a year, or a Levitt building four thousand.

Studs, cripples, headers, joists, and other timbers that need only a straight cutoff can be obtained precut from several sources. Often a lumber yard will order the material cut to size, or saw it in their own mill. If the builder has a radial saw, he can set up his own precutting operation, either in an old garage or on site. Rafters, gable end studs, and other parts with angled and compound cuts require more careful setting up; but time and money saved will be many times that spent. The important thing is that when assembly actually starts, the only tool needed is a hammer.

Special crews are usually the province of the larger builder, but the man who is building three or four houses at a time can benefit from specializing to this extent: if he does all foundations one after the other, then does his framing and all other operations the same way, by the time his crew gets to, say, the third unit of each operation, it will be受益ing from its experience on the first two, and efficiency will be greatly increased.

HERE ARE FOUR LEVITT TRICKS THAT ANY BUILDER CAN USE

1. GYPSUM BOARD sheathing. This material is light, inexpensive, and can be cut quickly and easily. It can be used wherever the sheathing does not have to serve as a nailing surface. Note diagonal braces, usually required with this material.

2. FLOOR SPAN in the rear of the house is greater than in front, so spacing of joists is changed. Changing the timber size instead would have made it impossible for both ceiling and floor to be flush across the entire width of the house.

3. STAGGERED RAFTERS. Where rafters meet the ridge, they are offset from each other by the width of one rafter. This makes them easier to nail through from the ridge, speeds up erection of rafters. Strength of the joint is not affected.

4. UPPER SHOE projects slightly over lower shoe. This permits slight variations from square in foundations from throwing out the whole house by leaving room for the framing crew to juggle the upper shoe into square.
GABLE END SECTION, with window frame installed, goes up. Note that in fully-framed house (background), primed trim is already in place. Thus crew can go in and out once, need never to return to put up trim.

RAFTERS, precut and notched, are laid against side of house ready to be sent up. To this point, all houses are the same; from here on, roof lines on the house and garage are varied slightly to avoid “cookie cutter” look.

PLYWOOD IS USED for all sub flooring and roof sheathing, a good example of “ precut” or modular material supplied by manufacturer. Note beveled ends of joists, cut with an axe. A good man can make the cut in one swing.

AUGUST 1956
Cooling: how to build it in

Will air conditioning sell houses?
Bill Levitt thinks so; he's made it standard in his deluxe models

One of the biggest news makers this Winter was Bill Levitt's announcement that he would include central air conditioning in his big Country Club models without passing on a price increase to buyers. There are two points of interest here to all builders: first, Levitt considers air conditioning a big enough merchandising feature to make it a standard appliance; second, he is able to absorb the added cost, indicating that an air conditioning system can be installed for a lot less money than a lot of builders are spending. It takes planning, ingenuity, and particularly a close study of some of the new products now on the market. Shown below are a few of these products and ideas.

1 GLASS FIBER DUCT covered with aluminum foil is shipped flat, assembled quickly with tape, adhesive. Duct is installed far to one side where it won't interfere with later expansion of the attic.

2 CARRIER COMPRESSOR unit is installed in the back of the garage, cooling air comes through holes in the wall. Ductwork is kept to a minimum. Garage is 25 ft. long, leaving plenty of room for cars.

3 BLOWER UNIT for the system is mounted above the joists in the garage, taking advantage of otherwise useless space. The blower is not actually set on the joists, but is hung from rafters on steel rods.

4 HALLWAY CEILING is dropped and covered to make cooling duct for the bedroom wing. This method is used where duct runs at right angles to joists. Where they are parallel, duct is set up between joists.
Finishing: how to nail it on

Here's luxury at low cost:
Levitt's Country Clubber—
1560 square feet of roominess,
good looks and comfort for
less than $19,000.

DECORATIVE STONE VENEER is a favorite with buyers. Stones have grooves along edges for metal clips. Here workers are fastening in clips with air hammers. Later, grout is laid in with power mortar gun, pointed up by hand.

FLOOR PLAN features big rooms, almost ideal circulation. Kitchen includes G. E. appliance wall unit in addition to plenty of cabinets. Furnace is in kitchen corner nearest the fireplace, takes up almost no room.

HOUSE HAS big, rambling look. Four different elevations include moving the expansion attic, here shown over the center of the house, out over bedroom wing. With shed dormer, three bedrooms and bath can be added.
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SARGENT LOCKS
"Sign of a well built house"
The Payoff
Departments

New Products and Catalogs............. page 149  
Builders’ Supermarket for new products and equipment, and for manufacturers’ literature, on air conditioning, building specialties, tools and equipment, windows, doors, etc. Just detach the handy reply card at the beginning of the Supermarket and go right on through, circling the items that mean money in your pocket.

How To Do It Better................... 205  
Everything from supporting ceiling-board while it is nailed off to eliminating black marks caused by the base of a power tool; all these ideas have been tested and found helpful by other builders and are now presented for your own use.

Ask The Experts...................... 209  
Got a problem you can’t solve? Our staff of experts analyzes reader queries, and may have some valuable tips for your operation. This month, the experts discuss the insulation of a broiler house, repairing a drywall job, insulating crawl-space, etc.

Keeping Up With The Law............. 214  
American Builder’s legal consultant, John F. McCarthy, offers valuable advice to builders on questions involving the law. This month, Mr. McCarthy discusses good faith in labor relations.

Technical Guide...................... 216  
Detailed drawings and complete instructions give you valuable information on the basic principles of air conditioning.

Better Detail Plate.................... 220  
Here, in text and art, is the basic planning that went into a new showroom for a Tucson lumber yard. Save these pages; you’ll be glad you did.

Convention Calendar............... 224  
And here is a new American Builder department: a listing of all association meetings scheduled to take place in the near future. Check these listings for the meetings you can attend . . . it’s the place to learn what your fellow-builders are doing.

The Month Ahead..................... 232  
Things for alert builders to think about in the month of September.
for the final touch

in the finer homes you build

SPECIFY the...

**Thermo-Rite**

FIREPLACE ENCLOSURE with HEAT TEMPERED GLASS DOORS

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- Radiates your fireplace heat like a common light bulb, but on a much larger scale. (Burns wood, coal or gas.)
- No sparks. No smoke
- No floor drafts
- Complete control of fire
- Cleanliness
- Perfect safety
- Lowers fuel bills

THERMO-RITE MFG. CO., Dept. 8-8, Akron 9, Ohio

CANADIAN PLANT—134 HARTZEL ST., ST. CATHARINES, ONT.

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4. On-Site Selling Aids. You get on-the-spot demonstrations of your General Electric kitchens by experts—everything you need for action at the point of sale!
new General Electric Kitchen-Laundry!

Be the first to capitalize on it in your area
Let G-E products and service help you sell your homes fast—whether they are priced at $9,600 or $96,000.
Dramatic New General Electric Kitchen-Laundries are available NOW—right now.

No question about it! A house is easier to sell when it's equipped with a General Electric Kitchen-Laundry.
When a prospect is enthusiastic about your kitchen, she's usually enthusiastic about your house. And we don't have to tell you how excited women can get about General Electric Appliances.

Dozens of Styles Available in Five Mix-or-Match Colors Plus White
General Electric modular kitchens, free-standing and built-in appliances—the whole exciting General Electric line in all colors—is available through your General Electric distributor.
These new, magnificent appliances are ready to be shipped to your building site now—right now!

No one else helps you as much as this
Your General Electric distributor will work hand in hand with you, even before your house plans are drawn up. And he will continue to work with you clear through kitchen layout, appliance installation and final decoration—right down to helping you select your paints.
Get all this assistance from General Electric for your houses. Be the first builder in your area with the new, dramatic General Electric Kitchen-Laundries. Contact your General Electric distributor now. He will help design and plan your kitchen and provide merchandising assistance. Or write direct to General Electric Company, Home Bureau, Appliance Park, Louisville 1, Kentucky.

As little as $4.00 or $5.00 a Month Extra*
Your customers can afford General Electric Kitchen Equipment. When included in a long-term mortgage, the cost is usually within the range of an average monthly phone bill.

New, big advertising campaign!
Prospects for houses will see the new, exciting General Electric Kitchen-Laundry in colorful spreads in forthcoming issues of Life, Better Homes and Gardens and other magazines. To sell your houses faster, tie in with this powerful promotion in your home town!

Progress Is Our Most Important Product

SEND FOR THIS NOW!

*Installation and accessories additional. Price subject to local variation.
Sell 'em faster—

Moduflow, with indoor and outdoor thermostats,
glamorizes your heating-cooling systems, gives
you a wonderful new selling story.

Moduflow brings the selling promise and
glamour of electronics to your homes in a
way your customers clearly see and understand.

First they notice the Weathercaster outside. Then,
inside the house, they see the handsome Honeywell
Electronic Golden Circle Thermostat. Both these
features plus the unusual clock control, help you
dramatically convince your prospects that Moduflow
gives the ultimate in advanced home comfort.

You high light your heating-cooling system
and give your salesmen new comfort to sell.

Let Moduflow start helping you sell more homes.
See your Honeywell salesman or dealer, or write
Honeywell, Dept. AB-8-56, Minneapolis 8, Minn.
Honeywell Electronic Moduflow varies the temperature inside as the weather changes.

1. Electronics
New outdoor Weathercaster is eight times more sensitive than ordinary thermostats; continually adjusts indoor thermostat to compensate for changes in outdoor temperature.

2. Temperature
With this beautiful Golden Circle Thermostat, day and night indoor temperatures are set once. Thereafter, the outside thermostat raises or lowers settings automatically.

3. Time
This handsome electronic wall-clock automatically lowers night temperature for comfortable sleeping, fuel savings. Available in chrome, copper or ebony black.

with Electronic Moduflow

Add these other Honeywell features to your homes

Tap-Lite Wall Switch
Completely new. Tap—it’s on! Tap—it’s off! Transparent wall plate makes it easy to decorate with wallpaper, drapery material, or the colored inserts supplied with each switch. Adds a low cost feature to every room.

Fire-Belle Alarm
Attractive fire alarm panel is wired to fire-detector elements in attic, basement, closers, etc. Should fire start, bell rings and a light goes on, locating the fire instantly. An impressive home safety feature.

Electronic Moduflow by Honeywell
EXCLUSIVE WITH

Westinghouse
DISHWASHERS

IN CONFECTION COLORS
Sugar White • Frosting Pink
Nougat Gray • Lemon Yellow
Mint Aqua

IN CUSTOM FINISHES
Antique Copper • Brushed Chrome
Natural Wood (made locally from template provided) • Prime-coated Steel (paint locally in any color)

Color's no gamble—if it’s one of these new Westinghouse Confection Colors or Custom Finishes. They’re risk-proof to build in because they’ve been tested and selected for broadest consumer appeal. And these “Custom Panel” fronts can be switched in minutes! You’re ahead with Westinghouse dishwashers on all counts. They’re easier to install. Exclusive Temperature Monitor guarantees 140° water for spotless washing and sanitizing. Service-for-eight capacity plus front-opening, top-loading design mean better performance. Plan a Westinghouse dishwasher in your kitchens. 48” dishwasher-sink combination and 24” free-standing model are also available.

Phone your Westinghouse Distributor or write our Contract Sales Department for complete information.

NEW FOOD WASTE DISPOSERS amazingly trouble-free!
Less than 1 repair call in 100 installations. That’s the proud service record of Westinghouse disposers. This new model FD-2, specially designed for builders, is ruggedly built, efficient and quiet operating.

Ask about the complete line of Westinghouse Water Heaters in Round, Table-top and Quick-Recovery Models.

WATCH WESTINGHOUSE WHERE BIG THINGS ARE HAPPENING FOR YOU!

Westinghouse Electric Corporation—Major Appliance Division—Mansfield, Ohio
MATCH ANY KITCHEN!
Now...normal delivery of THERMOPANE®

- Many standard sizes in local stocks right now!
- Only 60 days for factory shipment of special sizes!

Production is up—thanks to Libbey-Owens-Ford's tremendously expanded plant facilities. Now you can add the popular appeal of Thermopane insulating glass to your houses without delay. L·O·F Distributors have many standard sizes on hand for immediate delivery.

Call your L·O·F Glass Distributor or Dealer (listed under "Glass" in phone book yellow pages) for full information on sizes, installation data and types of sash for Thermopane. Or write to Libbey-Owens-Ford Glass Co., 608 Madison Avenue, Toledo 3, Ohio.
This new idea in light control costs little...adds so much

...Use it to help sell your homes

You know how hard it is...sometimes...to offer prospects functional and decorative advantages that are really new and special.

Well, here you have something! Very special. LUXTROL Light Control. A revolutionary new lighting concept.

Just by the turn of a dial, LUXTROL Light Control creates any level of light...from dark to full bright. From full bright to dark. Always the perfect level of light for any occasion, any activity, any mood.

You can install LUXTROL with complete confidence. It is made by a leading producer of commercial light-control systems.

It is a precision-made, soundly engineered autotransformer-type unit. Not a rheostat. Approved by Underwriters' Laboratories. And it is low-cost.

LUXTROL is efficient...silent...safe. And it's as easy to incorporate into your plans as the outmoded "on-off" wall switch it replaces.

LUXTROL controls incandescent, fluorescent or cold-cathode lighting. So you can recommend it for any type of building.

Ask your distributor to give you a demonstration of LUXTROL Light Control, without delay. We'll send you his name, and complete information by return mail. Just use the coupon below.

The Superior Electric Company
3086 Demers Ave., Dept. H PB
Bristol, Connecticut

Please send me full design data on new LUXTROL Light Control...and the name of my LUXTROL distributor.

Name__________________________

Street_________________________

City __________________________

Zone _________________________

State _________________________

new LUXTROL Light Control

A product of
The Superior Electric Company
"ROW HOUSES?"

NO SUCH THING WITH A COMBINATION OF CECO WINDOWS

Home after home with duplicated architectural design—but each has individual "personality." That's a promise when each is equipped with a combination of different types of Ceco Windows. Ceco offers you more variety in steel and aluminum windows than any other manufacturer. We keep a mighty close check on what "window-wise" home-buyers want. Ceco is ready to help you choose the right windows for different homes, whether they're in a low-cost housing development—or whether they're custom-built jobs. For better steel and aluminum windows, for better home building, better call your Ceco man today! You'll be money ahead if you do.
Streamlined modern construction methods call for the most efficient and most easily installed products. That's why building material wholesalers and dealers recommend—why more architects are specifying—Bermico Sewer Pipe.

And it's why more and more builders and contractors are using this lightweight bituminized fibre pipe—root-proof and corrosion-proof—for house-to-sewer or septic-tank connections.

Bermico Sewer Pipe and Bermiseptic® Perforated Pipe for septic-tank disposal beds are produced in 8-foot lengths, from 2" to 6" in diameter. And only Bermico has a complete line of fittings made of the same material as the pipe! Send today for information about this modern pipe.

Brown Company, Dept. HB-8, 150 Causeway St., Boston 14, Mass.
You Build Better, Sell Easier... When Your Homes

CELOTEX

A Complete Line under One Famous Name,

You know the brand name Celotex and the fine building materials it stands for! And you know the demand for the Celotex kind of product quality among builders as well as the home buying-and-remodeling public!

Independent surveys prove it... prove that builders recognize Celotex as one of the best-known names in building

CELOTEX INSULATING INTERIOR FINISHES

Build, insulate, decorate... all at one time. Rich, interesting textures... smart, exclusive colors, blends, and whites. Full range of sizes in Tile Board, Finish Plank, Building Board. Tile Board and Finish Plank have famous Celotex "E-Z" Joint for concealed stapling or nailing and quick, easy application.

CELOTEX HARDBOARD

Tough, dense, grainless, moisture-resistant wood fiberboard. Rigid, strong, scuff-resistant. Types: Regular, Panel Board, Tempered, Black Tempered, Tile (scored 4-inch squares), Leather-Grain, Perforated, Underlayment, Multi-Ply, Primed and Sidings.

CELOTEX INSULATING SHEATHING

Guaranteed for the Life of the Building! Made from tough, interlocking, long Louisiana cane fibers, protected against dry rot and termite attack by the exclusive Ferox® Process. Has approximately 30% greater strength than ordinary sheathing with let-in bracing. Laminated for extra strength and rigidity. Double-waterproof... outside, by protective asphalt coating... inside, by special processing of the fibers. Vapor permeability greatly exceeds minimum advocated by government agencies. Variety of types and sizes.
Nationally Advertised for Over 35 Years!

materials. Consistent national advertising for over a third of a century has made it so. To get your share of these new home sales and remodeling jobs, make it your regular practice to use the famous genuine Celotex line! Make it known that your homes include only the finest... Celotex Building Products!

CELOTEX

GYPSUM PRODUCTS


CELOTEX ROCK WOOL PRODUCTS


CELOTEX ASPHALT ROOFING PRODUCTS


CELOTEX INSULATING SIDINGS


FOR COMPLETE INFORMATION, CONTACT YOUR CELOTEX WHOLESALE DISTRIBUTOR

Build Better... Build with Genuine

CELOTEX BUILDING PRODUCTS

THE CELOTEX CORPORATION, 120 SOUTH LASALLE STREET, CHICAGO 3, ILLINOIS

AUGUST 1956
When Good Sellers Get Together!

RICHMOND
BUDGETEERS

WINTER AIR CONDITIONERS GAS- AND OIL-FIRED MODELS

Here’s a line-up of Richmond’s Budgeteer Series—engineered to meet all customer demands for performance and economy. Gas or oil fired, with or without extended jackets, styles and sizes for all installation requirements from 70,000 to 140,000 BTU/Hr. capacities. You’ll find just the unit that means customer satisfaction, generates word-of-mouth praise that leads to added sales.

WRITE FOR FREE TECHNICAL BULLETINS!

HIGH BOY For a variety of installations including small spaces such as closets or utility rooms. With or without extended jacket.
GAS: Type VG-36: 70,000, 90,000, 110,000 and 130,000 BTU/Hr. input. A.G.A. approved
OIL: Type VO-71: 84,000 and 112,000 BTU/Hr. output at bonnet.

COUNTERFLOW For basement-less, slab type homes or any perimeter system. May be installed in closet or utility room. With or without extended jacket.
GAS: Type CG-46: 70,000, 90,000 and 110,000 BTU/Hr. input. A.G.A. approved
OIL: Type CO-81: 84,000 and 112,000 BTU/Hr. output at bonnet.

LOW BOY For a wide range of installations including full or half basement. With or without extended jacket.
GAS: Type LG-16: 70,000, 90,000 and 110,000 BTU/Hr. input. A.G.A. approved
OIL: Type LO-61: 84,000 and 112,000 BTU/Hr. output at bonnet.

SUSPENDED-HORIZONTAL For attics, crawl spaces or suspension in utility rooms and basements.
GAS: Type AG-56: 60,000, 80,000, 100,000, 120,000 and 140,000 BTU/Hr. input. A.G.A. approved
OIL: Type AO-91: 84,000 and 112,000 BTU/Hr. output at bonnet.

RICHMOND WEATHER-AIRE CENTRAL COOLING

Air- and Water-Cooled, enclosed High Boy or evaporator type units available for use with all Richmond Budgeteers.
SHOWN: Evaporative cooler installed in warm air supply duct.

Look to RICHMOND for a complete line—automatic heating—central summer cooling units.

Other Rheem Products: WATER HEATERS * WATER SOFTENERS * WEDGEWOOD GAS RANGES AND CLOTHES DRYERS * STEEL AND FIBRE CONTAINERS

RICHMOND
PLUMBING FIXTURES DIVISION
Rheem Manufacturing Company
16 Pearl Street, Metuchen, N. J.
Save Time and Trouble with
"HIP POCKET"
Plaster and Mortar Mixing

Upstairs, around corners, through doorways, haul it in your car's luggage compartment. It's portable.

One-minute assembly. No screws, bolts, fasteners of any kind, Slip three parts together, plug in cord.

Mix different coat or color in extra tub, using same motor and base. Mixing keeps up with workmen easily.

Here's a new electric power tool... for masons, plasterers, terrazo and tile men. It mixes mortar right by your hip pocket—no matter where you work. Man! Does that save time and trouble!

It saves the time, mess and effort of hauling wet mortar or plaster; cuts down waiting time; turns out a smooth, even mix without screening or waiting overnight. One man and the Handy Mixer deliver more mix, faster, than a whole mixing crew with a regular mixer.

It's completely portable... no part is heavier than a bag of pre-mixed plaster. It has a capacity of 5 bags of pre-mixed aggregate, but costs no more than an ordinary mixer of half its capacity.

It makes work easier, all the way around.

If you mix mortar, plaster or terrazo, be sure you have all the information, including the low cost "f.o.b. hip pocket" of this speedy new portable multi-bag mixer.

Just mail the coupon below. There's no obligation.

MASTER

Master Vibrator Co., 536 Stanley Ave., Dayton 1, Ohio
Please send me all the information on the Master Handy Mixer.

Name __________________________ Phone __________________________
Firm __________________________
Street __________________________
City __________________________
TWO MORE NEW Grant PRODUCTS
THAT CREATE PROJECT-SELLING FEATURES

the new *Rocket 6000*
Sliding Door Hardware

Substantial — reliable — low installation cost — headroom as low as 1 1/8" — reversible for 3/4" or 1 3/8" doors.

Grant Rocket 6000 is designed to make available many of the most important features of the finest sliding door hardware at a moderate price range. Specialized engineering staffs and manufacturing facilities have given this popular new line the durable, dependable operating qualities that distinguish all Grant products. The installed cost of Rocket 6000 hardware is the last cost. Rocket 6000 features — both single and double wheel types of carriers — self-lubricating nylon wheels — 1/4" vertical adjustment without removing attachment screws — carries all standard thickness doors (3/4" to 1 3/4") — track design prevents jumping. Write for detailed specification sheet.

the new *Grant 300*
Drawer Slide

The low installed cost of the 300 slide is within practical range of competitive builders and designers of moderate-cost apartment, commercial and institutional construction. Nylon rollers — smooth, quiet, durable. Only 1/2" space required at sides of drawer. Simple stop.

Full data, suggested applications in specification book — ask for a copy.
More beautifully styled than any line you've ever seen, more power-packed with functional features than any refrigerator-freezer you've ever known, more advantages on the price tag and in installed cost than you've ever had — far more, that's PREWAY'S Bilt-In Refrigerator-Freezer.

That's hot news for builders, good news for architects who are planning with clients. The proof is here — illustrated and factual in PREWAY's detailed specification bulletin. Mail the coupon today for full information.

Eight-Plus Cubic Foot Eye-Level Refrigerator shelf capacity that allows food storage space equal to most ordinary 11 cubic foot refrigerators. Glacier blue door liners and trim in both freezer and refrigerator.

Eight-Plus Cubic Foot Eye-Level Refrigerator shelf capacity that allows food storage space equal to most ordinary 11 cubic foot refrigerators. Glacier blue door liners and trim in both freezer and refrigerator.

Spacious "Door Store" in both freezer and refrigerator compartments.

Easiest to install — just slide-it-in—that's all.

There are no surprise hidden installation costs to consider with a PREWAY Refrigerator-Freezer. This all-in-one unit just slides in place. It is self-supporting from the floor up, requires no building of cross members to support the freezer-refrigerator cabinets.

A formed steel frame is supplied to fit between the cabinets and the floor. The compressor is self-contained in the same cabinet with the refrigerator and freezer — no need to build a separate compartment for the compressor! This method makes installation simple, eliminates the danger of tubing fractures, kinking, etc. greatly minimizes installation costs.

PREWAY Inc. 4856 Second Street, N. Wisconsin Rapids, Wis. Please send me full information on PREWAY'S Bilt-In Refrigerator-Freezer.

Name
Position
Address
City State
HERE'S THE COMBINATION that's making SIDEWALL NEWS...and SALES!

The BIG Johns-Manville COLORBESTOS SHINGLE with pleasing color—texture—modern broad exposure applied over Johns-Manville SHINGLE BACKER adds deep, rich-looking horizontal shadows, extra insulation, greater strength...

result—EXCITING SIDEWALL BEAUTY for NEW HOMES and OLD...

Colorbestos® Shingles are fireproof, rot-proof, permanent as stone...never need paint to preserve them. New large size means fewer pieces to handle—saves time and money on the job by making installation easier, faster than ever before.

For full information on J-M Colorbestos Shingles and the J-M Shingle Backer write Johns-Manville, Box 158, Department AB, New York, N. Y.
This is one of those ideas that saves you money on installation, saves you space inside the house—and gives you a genuine selling feature. It's the automatic, storage type Electric Water Heater, which you can install near where the hot water is needed, anywhere in the house, because there's no flue or vent to provide for. This helps to shorten pipe runs, saves on piping, time and labor.

You have some talking points to use on customers, too. Operation is automatic, and trouble-free for years. It's economical, too, because heat loss through piping is reduced to a minimum, and hot water is produced efficiently. Install Electric Water Heaters. They'll help you to turn prospects into home buyers!
James D'Agostino, builder of Harrington Park Manor, Bergen County, N. J. says, "We chose Lennox.

James D'Agostino, right, above, looks over plans with dealer Howard Guenther, as installers unload a Lennox CHA-1 Stowaway central air conditioning unit. Mr. D'Agostino has built more than 300 air-conditioned luxury homes in the New York City area since 1950. At left is a typical medium-priced home that now has greater-than-ever sales appeal, thanks to Lennox all-season air conditioning."
for 3 sound reasons:

"1. Lennox actually offers us more and better cooling for less money.

"The new Lennox CHA-1 Stowaway central air conditioning unit is ideally designed and engineered for our medium-priced homes, gives us one-half ton more cooling for less money. This unit is so compact, we can install it anywhere in a home, at less cost. It gives our salesmen plenty of talking points, like practically no maintenance with 100% hermetic design; lowest operating cost—up to 40% less than other air cooled units of similar capacity.''

At right, Lennox dealer-expert Howard Guenther talks installation with builder D'Agostino.

"2. Our Lennox dealer, a Lennox-trained expert, gives top service.

"Our Lennox contractor, Superior Sheet Metal Co., has a reputation for top-quality work. Their men are trained by Lennox, and backed by skilled engineering help from a nearby Lennox factory. "The world's most complete line of heating and air conditioning equipment is manufactured in Lennox plants across the nation, located to assure prompt delivery. Photo at right shows Stowaway unit and duct work, which connects directly into warm air plenum. Automatic damper permits quick change to cooling or heating.

"3. Lennox provides sound selling ideas, and helps make them work.

"I have never seen a finer sales promotion program put together to help a builder sell homes. Not just one idea, but a real choice—each one a natural." At right, Lennox selling plans are discussed by Lennox expert Guenther, James D'Agostino, and his advertising Vice President, Malcolm Langton, who says, "It's a cinch to adapt these Lennox promotion aids to our needs. Every piece we've seen is packed with sell."

FOR COMPLETE INFORMATION and sample of builder personalized tract brochure, get in touch with your Lennox dealer, or wire collect to your nearby Lennox plant. Lennox Industries Inc., Air Conditioning and Heating, founded 1895: Marshalltown and Des Moines, Iowa; Syracuse, New York; Columbus, Ohio; Forth Worth, Texas; Los Angeles, California; Salt Lake City, Utah; Decatur, Georgia. In Canada, Toronto, Montreal, Calgary.
This brand name also brings you...

West Coast Hemlock

Those who use it call it the “Ability Wood” because of its versatility

- Consider this... of the commercial woods used in the United States, West Coast Hemlock ranks as one of the first five in volume produced.

... as Dimension... Weyerhaeuser 4-Square West Coast Hemlock is produced in stress grades that include 1600 f Select Structural, 1500 f Construction and 1200 f Standard. Where stress properties are not required, other grades of dimension are available.

... as Boards... Weyerhaeuser 4-Square West Coast Hemlock is used for sheathing... and for many other uses where good boards are required.

... as Flooring... Weyerhaeuser 4-Square Hemlock flooring offers a fine uniform, even toned texture, a light color and freedom from pitch. Its long tough fibers have a tendency to mat together, to provide a floor that hardens with age. Hemlock is known as the “hard softwood” flooring.

... as Bevel Siding, drop siding, ceiling, finish, paneling or molding, Weyerhaeuser 4-Square West Coast Hemlock is an ideal wood for interior or exterior application.

It pays you to utilize West Coast Hemlock as processed by Weyerhaeuser. You can depend on it as a fine building species in ready supply. Weyerhaeuser has vast stands of this abundant utility wood... and research facilities, dry-kiln capacity, and skills to make Weyerhaeuser 4-Square Hemlock one of our most beautiful and useful softwoods. Learn to know the “Ability Wood”.

Weyerhaeuser Sales Company

ST. PAUL 1, MINNESOTA

AMERICAN BUILDER
NO CEILING ON COMFORT HERE!

But, plenty of ceiling on cost! That's because lightweight, easy-handling Chase copper tube for radiant heating installs faster! Perfectly tempered, it easily unrolls into position on ceiling or floor. Comes in long 60 and 100-foot lengths that result in fewer joints. Connections are quickly made with simple soldering techniques. Even the rugged carton for Chase copper water tube is designed to speed handling... save time! It's color-coded for easy identification of type and size. Has a center hole big enough for a firm grip. Can be stacked, rolled or carried with ease!

Proof that Chase copper water tube cuts installation time is the fact that it is being used in many of the largest housing developments where over-all costs must be low!

If it's radiant heating, be sure the system is made with Chase copper tube and solder-joint fittings.
"TWINDOW"... the world's brings many advantages

EVEN IN LARGE AREAS, the amazing insulating properties of Twindow—Pittsburgh's windowpane with insulation built in—keep a room like this one more comfortable winter and summer. Twindow reduces window fogging and icing. It cuts heating and air-conditioning costs. And it provides the most convenient form of storm window insulation. Prospective home buyers and people interested in remodeling know that they are saved the labor of putting up storm windows in the fall and taking them down in the spring. Architect: Giorgio Cavaglieri, New York City.

THIS PATIO VIEW shows the clear vision possible with "the world's finest insulating glass"—Twindow. More and more people are demanding the advantages possible with Twindow. And they are impressed with the fact that Twindow costs no more than single-pane windows plus storm sash.
finest insulating glass... to this beautiful home

TWINDOW, as demonstrated here, adds to the beauty of the home's design. It opens the rooms to the fullest enjoyment of the outside view—whether it's an exceptionally delightful one, as here, or a modest garden scene. Moreover, Twindow minimizes cold air downdrafts. It muffles outside noises.

TWO TYPES OF TWINDOW®

METAL EDGE. Ideal for large windows and where maximum insulation is needed most. Constructed of two panes of ⅛" clear-vision Plate Glass, with a ½" sealed air-space between. Exclusive stainless steel frame means no bare edges to chip or mar. It means easier, quicker, and safer handling for the builder, too.

ALL-GLASS SEALED EDGE. Precision fabricated unit, all-glass welded edge, high insulating value make this the favorite for smaller window openings in every room. Constructed of two panes of ⅝" Pennvernon—"the quality window glass"—with a ¾" air-space between.

See Sweet's Builders Catalog for detailed information on Pittsburgh Plate Glass products.

Build it better with Pittsburgh Glass

PAINTS · GLASS · CHEMICALS · BRUSHES · PLASTICS · FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

AUGUST 1956
Insulite Sheathing cuts

Saves $85 per M, too,
New Orleans builder
Frank R. Gatti discovers

Frank R. Gatti, Jr. (right), owner of
Gatti Construction Co. in New Orleans,
discusses new home with Andre Theriot
of Martin Lumber Co., Insulite dealer.
Gatti builds eight to ten homes a year,
priced from $38,000 to $49,000.

INSULITE, Made of hardy Northern wood

Insulite Division of Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota
In hot, humid New Orleans, where every home he builds is air conditioned, Frank R. Gatti, Jr. knows that each dollar per month saved in cooling costs is mighty important to the owner. “We use Insulite Sheathing exclusively,” he says. “Insulite adds extra insulation so buyers of Gatti homes enjoy cool comfort at less expense. And we insulate each home with Insulite Insulating Wool, for extra protection from the heat. Because there’s no waste with Insulite Sheathing, we’re able to save $85 per thousand square feet compared to wood.”

Gatti, a member of the Home Builders of New Orleans, finds Insulite Sheathing is easy to cut, prevents “gumming” of saws and blade damage. It stores well on the job in any weather. And because Insulite Sheathing has pre-marked nail spacing, he never has to stand over the job.

Whether you build $10,000 or $100,000 homes, you can build better and save with Insulite. For detailed data on Insulite Sheathing, Insulating Wool and other money-saving products, write Insulite, Minneapolis 2, Minn.
add 50% greater FIRE SAFETY to lath and plaster ceilings

The simple addition of Keymesh galvanized reinforcing lath over gypsum lath increases the fire rating reference of a ceiling from one hour to one and one half hours, when finished with 1/2 inch of lightweight aggregate plaster.

This increased fire safety is further evidence of the exceptional value Keymesh reinforced lath and plaster adds to every building, from the low cost home to large commercial and industrial buildings. It's another reminder that Keymesh costs so little, but adds so much.

PLUS positive protection from cracking

When Keymesh lath is used, your entire ceiling and wall surface is reinforced with a vast network of multi-directional reinforcing wires, adding far more protection from cracking. This protection that stops cracks before they start, costs so little, but adds so much.

PLUS greater over-all strength

Keymesh lath helps the plasterer get a full, uniform thickness of plaster. With its open mesh, each wire is fully embedded, while serving as a gauge to assure the full 1/2" thickness of plaster specified. Full, uniform thickness assures greater over-all strength. Yes. Keymesh costs so little. Keymesh adds so much.

Recommended and used by America's leading lathing and plastering contractors.

KEYSTONE STEEL & WIRE COMPANY
PEORIA 7, ILLINOIS

KEYMESH * KEYBEAD * KEYCORNER * KEYSTONE WELDED WIRE FABRIC * KEYSTONE NAILS * TIE WIRE * KEYSTONE NON-CLIMBABLE AND ORNAMENTAL FENCE
KEYMESH
GALVANIZED REINFORCING LATH

Here's all you do! After gypsum lath is applied, cover it with Keymesh. The exclusive reverse-twist weave makes it unroll flat; go up flat. It's so easy to apply. Then it's plastered, following customary practice. Proved through the years as a superior reinforcement for stucco, it now brings new value to lath and plaster construction.

It adds so much, it costs so little.

For highest quality at lowest cost, use the 3 KEYS TO STRONGER PLASTER

KEYMESH lath for over-all reinforcement. Made of galvanized woven wire. Especially recommended for ceiling construction.

KEYCORNER strip lath, preformed to fit snugly in corners. Lies flat when applied to joints. Galvanized to prevent rust streaks.

KEYBEAD corner lath with precision formed bead for outside corners. Open mesh assures strong, solid plaster corners.
104 Houses Sold in 30 Days

The Camellia Homes project, in suburban Norfolk, offers an outstanding housing value that has had Virginians reaching for their checkbooks. In the first month alone, over 100 of the houses were sold. The project will number 600 dwellings when completed.

Located close to a giant shopping center, a new elementary school and fine bathing beaches, the homes boast features rarely found at the $12,000 level. They are built to six basic designs, each offering all-brick construction, movable inside walls, hot water base-board heating, fenced-in patio areas — and big picture windows.

As in so many modern homes, these windows are made of steel, because only steel has enough strength to permit slender frames and muntins that allow maximum light, visibility and ventilation. And only rugged steel windows can withstand the inevitable rough treatment during shipment, at the job site, and following installation in the finished home.

In addition, you save money two ways with steel windows: (1) they cost less than most other types, and (2) they cost less to install, because they come factory-assembled (with steel casing, if desired) for quick, easy installation. A wide selection of steel windows in all standard types and sizes is available locally. Contact your building supply dealer, or any manufacturer of steel windows.

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

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

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

BUILD FASTER...SELL FASTER WITH

STEEL WINDOWS
Install the new General Electric Thinline Room Air Conditioner through the wall

It's the easy, low-cost way to give your homes the sales appeal of built-in, area-by-area air conditioning.

Advantages to you: The new General Electric Thinline is compact, so you don't have to design rooms around it. It's easy to install—there's no plumbing or duct-work needed. Its thinline design won't mar the appearance of the homes you build.

It's pre-sold to your customers, backed by General Electric's name, guarantee and servicing. And the General Electric Thinline qualifies for FHA financing—just follow FHA procedures when you apply. Entire unit is covered by a one year written guarantee, and the sealed refrigerating system is covered for an additional four years. General Electric Co., Appliance Park, Louisville 1, Kentucky.

Look how easy it is to install the G-E Thinline through the wall

Build sleeve and frame into wall during construction. Opening is about 27" wide, 23" high. More through-the-wall units can be added later.

Slide the G-E Thinline into sleeve. Six bolts hold it, give a quick, weather-tight installation. Controls are behind a fabric-like aluminum panel.

Simple but decorative trim frame adds a final touch. Notice that this 16½" unit does not project into the room. It's practically flush with the wall.

Aluminum grill won't rust or corrode, will keep its smart good looks for a long time with little maintenance costs—if any.

Progress Is Our Most Important Product

GENERAL ELECTRIC

AUGUST 1956
Block is Fast Becoming a Popular Building Material in California

Nowhere are the many advantages of block valued more highly than in California and other western states. In that area, a home or building must be cool during the hot days of summer . . . warm during frosty weather . . . dry when the “dew” falls . . . strong and safe if the earth should shake . . . secure against insects, rodents, fire, flood and storm . . . comfortable and dependable under all conditions.

This is a large order . . . but block fills it admirably. In fact, no other building material so completely meets all of the specifications for an adequate western type home or building.

Vibrapac Block, in particular, has much to offer the architect and builder. Produced automatically with Besser Vibrapac Machines, this popular building material is highly resistant to stress, strain, weather and moisture.

The many patterns, textures and sizes of concrete masonry are of keen interest to creative designers. Its adaptability is a major advantage. Churches, schools, hospitals, commercial and industrial buildings as well as homes can be built of Vibrapac block. So can any part of a building, or the entire building, from roof to basement.

For the western scene, perhaps no characteristic of concrete masonry is as appropriate as its appearance. It blends perfectly with the ruggedly beautiful scenery for which the west is noted . . . fitting in harmoniously with mountain or valley backgrounds or semi-tropical surroundings.

Noted for its beauty, uniformity and long-lasting qualities, Vibrapac Block makes new friends everywhere, not only in the west but throughout the world. Complete literature on request. Write Besser Company, Box 183, Alpena, Michigan, U.S.A.
This attractive, new, low-cost International heating unit panels simply and snugly into a wall. Easily and quickly installed at a low, low cost, the Model R-70 oil furnace is the ideal heating unit for every size home.

SAVE UP TO 65% ON YOUR HEATING BUDGET...

Installation costs no more than a space heater. Due to its special design, the R-70 can be converted to distribute heat overfloor, underfloor or a combination of both. Overfloor heating produces a blanket of warm air that flows constantly into the room sweeping across the floor from the bottom of the unit. Simply add ducts for conversion to underfloor system (see illustrations).

(A) Simple Overfloor System: This type requires a central furnace location with free openings to all rooms.

(B) Combination Overfloor and Underfloor System: Better heating can be had by ducting heat directly to those rooms not located adjacent to furnace.

(C) Underfloor Radial System: This is the simplest form of perimeter heating.

ZONE HEATING IN LARGE HOMES with two R-70 units—During the day the heat in bedrooms and other areas not in use can be lowered. Then, at night when only the bedrooms are occupied, the heat in kitchen, living and dining areas can be turned down. This "zone control" results in big savings on fuel bills.

LOOK AT THESE FEATURES
- Automatic Wall Thermostat
- Fits Snugly into the Wall—Only the Handsome Louvered Door is Exposed
- Full 600 CFM Blower
- Cabinet has baked Enamel—Willow Finish

Get prices, information and detailed heating layouts of typical floor plans! Write, wire or phone today!
K&M "DUALAY" ASBESTOS ROOFING SHINGLES

Check SWEET'S LIGHT CONSTRUCTION FILE.
Contact your K&M distributor or write to us. Information also available on K&M Siding Shingles.
Are your closets merchandising your houses?

Modernfold openings are the last word in convenience...cost no more than awkward conventional doors and require no servicing.

You know it's a woman who decides on the house. These completely accessible, roomy Modernfold closets offer luxury she wants and can brag about! That's merchandising you can't afford to miss. And it's a fact you spend no more—could be less. Figure it for yourself. Count costs of hardware, time and installation labor on conventional sliding doors. You get Modernfold closures complete, in decorator colors or even wood-grain finishes—ready for easy, quick installation. Lifetime quality. They can't warp, crack or jam...so you save the cost of servicing. You owe it to yourself to get all the facts. Call a Modernfold Distributor, or send the coupon—today.

Privacy of an extra room—another big sales-point

This complete access to closets with floor-to-ceiling Modernfold Doors instantly catches a woman's eye...their sound, trouble-free construction pleases the men.

Nationally advertised Modernfold closet openings help close sales!

NEW CASTLE PRODUCTS, INC.
Dept. H21, New Castle, Indiana
Please send complete information on Modernfold Doors.

© 1956, NEW CASTLE PRODUCTS, INC.
AUGUST 1956
What has a Youngster got to do with Insulation?

The non-irritating qualities of Balsam-Wool are illustrated by this workman, who is handling Balsam-Wool fiber freely in using it for calking around a window frame. After calking, a vapor seal is applied over the fiber. Photo also shows how Balsam-Wool helps provide protection from wind infiltration by filling cracks and crevices.

Just this: Anyone can handle Balsam-Wool insulation without getting "splinters" in his fingers...the clean, non-irritating, cellulose insulating mat is so gentle, so easy to handle on the job. No wonder carpenters and contractors like to work with Balsam-Wool!

But with all its gentleness, Balsam-Wool is a tough insulation. Sealed in rugged liners, it withstands handling on the job—doesn't tear easily, pull apart or settle. Rugged spacer flanges (a reinforced flange for application to framing) simplify application.

Add to that high insulating efficiency...resistance to moisture and to wind...and you have the reasons why millions of builders and home owners have found Balsam-Wool a sure way to insulate.

Balsam-Wool insulation is sold by lumber dealers only. It's a quality insulation through and through, designed for the home which requires year-round comfort plus low heating or air conditioning costs. Wood Conversion Company, Dept. 118-86, First National Bank Building, St. Paul 1, Minnesota.
After they've seen a heap o' living

**will your homes be selling you?**

Be sure...with straight, true-edge plaster corners protected by Milcor Super-Ex Corner Bead

The exclusive patented features of Milcor Super-Ex provide super-protection — extra assurance that your houses will continue to have a clean, fresh look that is a credit to your reputation.

Here’s why:

1. Only Super-Ex combines the rigidity of a solid wing with the added plaster reinforcement of expanded metal.

2. It is easily plumbed, with little or no aligning even on irregular surfaces. Faster erection cuts costs, so the finished job costs less.

3. It provides greater depth of plaster adjacent to the bead. Corners get extra protection against shocks.

These important advantages apply to all your jobs — apartments, commercial buildings, etc.

Super-Ex is one of many Milcor products that give your jobs a touch of quality — a difference that shows for years to come. Write for Catalog 202.

**Milcor®**

Super-Ex Corner Bead

Use Milcor Super-Ex to protect all outside corners.

INLAND STEEL PRODUCTS COMPANY

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Baltimore • Buffalo • Chicago • Cincinnati • Cleveland • Dallas • Detroit

Kansas City • Los Angeles • Milwaukee • Minneapolis • New York • St. Louis
FRESH approach to faster sales!

For every house... throughout the house!
KITCHEN... of course!
BATH, LAUNDRY, BASEMENT... fight dampness, remove odors!
GAME ROOM, LIVING ROOM... "party-fresh" air—even with smokers!
ATTIC... for inexpensive night-cooling! No costly installation!
Solve any ventilating problem with a Westinghouse ventilator or exhaust fan and you've built-in an extra sales-appeal that more than pays for itself! All Westinghouse fans and ventilators are guaranteed five years. "You can be SURE... if it's Westinghouse!"

Ventilators by
WESTINGHOUSE
the name that means "best" to more home buyers!

FREE—get the facts! Complete specifications and dimensions, photos and features, on the entire '56 line of Westinghouse fans. It's all in the new 1956 Westinghouse Fan and Ventilator Catalog. Fill in coupon and let us send you your free copy!

Mail Coupon Today
Westinghouse Electric Corporation
Electric Appliance Div., AB-858
Mansfield, Ohio

Gentlemen: Please rush my free copy of the new 1956 Westinghouse Fan and Ventilator Catalog.

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Company__________________________
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City__________________ Zone________ State__________________

WATCH WESTINGHOUSE
WHERE BIG THINGS ARE HAPPENING FOR YOU!

AUGUST 1956
UPSON ANNOUNCES

SUPER-BILT

a new tough board for interiors

DESIGNED FOR THE SPECIAL REQUIREMENTS OF PREFABRICATORS AND PROJECT BUILDERS

As a builder, you will see at once the great advantages now yours in Upson Super-Bilt. For here is a board built the way builders told us they wanted it built.

The surface is smooth, tough, and hard. It comes in giant panel sizes—big enough to cover a whole wall. Goes up easily by power nailing or any other conventional method. And you can fill nail holes fast—completely, perfectly.

Super-Bilt is 6 times stronger and supplies up to 31/2 times greater insulating value than most dry wall materials. Has built-in vapor barrier for exterior walls.

You will find that the surface of Super-Bilt sands extremely well. Even an inexperienced workman will do an expert job without marks or fiber lift. Paints and decorates economically due to superior sizing of new surface.

To find out how Super-Bilt can produce new economies in prefabrication or project building, write, wire or mail the coupon for complete information.
...and a fast new
PHANTOM TAPE SYSTEM
for corners

A specially designed tape. Applies easily and quickly. Follow simple directions and you get a well bonded square corner that looks like the board itself. *Edges are feathered* to blend in with the surface of Upson Super-Bilt Board and become completely invisible when painted. Be sure to get details on the Upson Phantom Tape for corners. Our representatives will gladly give you a demonstration. Write or mail coupon.

Applying Phantom Tape at inside corner. Starting at ceiling, press creased tape into place. Then slide Applicator downward over tape. Apply pressure with putty knife.

PROVEN QUALITY YOU CAN TRUST

The Upson Company, 817 Upson Point, Lockport, New York

Please rush me information
- [ ] Upson Super-Bilt
- [ ] Upson Phantom Tape System for Corners
- [ ] Have representative call on me for demonstration

Name

Position

Name of Company

Street    City    State

AUGUST 1956 145
The foundation for fine flooring

—with a special bonus for the housewife

The housewife takes more steps in a day than she would care to know about. But she does care about the comfort of walking on a floor using Homasote Underlayment — she can feel the difference. The difference has long been known by hotels; for many years hotel designers have specified Homasote as the ideal foundation for all quality floor coverings except cork — and especially for wall-to-wall carpeting. Homasote Underlayment is still the only major innovation in flooring today.

Actual use of Homasote Underlayment with top quality floor coverings has demonstrated its reliability again and again. The "soft" Homasote floor does not dent appreciably more than any combination of other underlayments and quality floor coverings.

Applied directly over sub-flooring, Homasote Underlayment is installed simply and economically — particularly when you have the know-how of the Homasote Handbook. All the needed materials are specified, from ring drive nails to waterproofing formulations for concrete. Accurate diagrams indicate each step of application. The approximate coverage of adhesives is estimated. Special nails to prevent squeaking are recommended. Careful consideration is given to the problem of expansion, and there is a simple explanation of why Homasote Adhesive helps to prevent cracking of the floor surface.

This wealth of detail is just one more example of the know-how of the Homasote Handbook — and Underlayment is only one subject so thoroughly handled. The new, revised Handbook has answers to 100 construction problems — all right answers, backed by more than 46 years' experience in the making of quality products. We are proud of this book, and have confidence in its basic value to every architect, builder, and dealer. May we send you a copy, without cost or obligation? Kindly address your inquiry to Department H-4.
You are entering the **American Builder**

**Supermarket**

Help yourself to everything you want in new information and literature about new products shown on the pages ahead. This is one-stop shopping for ideas. Instead of writing to a dozen different manufacturers, just circle the numbers on the other side of the card below... then drop it in the mail (no stamp needed). **AMERICAN BUILDER** will forward your request to each manufacturer, who will send you complete data free of charge. Get your pencil out and help yourself...

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**BUSINESS REPLY CARD**

First Class Permit No. 153, Sec. 34.9, P. L. & R., New York, N. Y.

4 cents Postage will be paid by

**Business Manager**

**AMERICAN BUILDER**

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New York 7, N.Y.
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MAIL THIS CARD TODAY — WE PAY THE POSTAGE

PLEASE PRINT NAME

TITLE

NAME ........................................... KIND OF BUSINESS

STREET ...........................................

CITY ......................................... ZONE ................................ STATE ............................ AUGUST, 1956

I wish to enter a subscription to American Builder for one year ($3.50) ☐ 3 years ($7) ☐

☐ New  ☐ Renewal ................................ Signature

SERVICE ON THIS CARD EXPIRES IN 90 DAYS — ACT NOW!
more about air conditioning: here
are seven more pages of ideas and
products to follow up the 10-page Buying
Guide which starts on page 67. All
are keyed to reply card, p. 148.

BUILT-IN AIR CONDITIONING for the future. Builders can now
offer, at small cost, facilities for future cooling with any type furnace
installation. Example here is Williamson’s Hi-Boy furnace unit which
can be installed with an empty cooling coil enclosure. Since furnace
plenum remains in position atop the enclosure ducts can be connected
from all directions. When homeowners desires cooling, the Waterless
Plenum “A” Cooling Coil is inserted. Williamson Co., C. T. Pfirrmann,
Dept. AB, 3500 Madison Rd., Cincinnati 9, Ohio (No. 8011, p. 148).

Component cooling is flexible

LESSON IN FLEXIBILITY from
Worthington. “Flexi-cool” line com-
bines advantages of packaged air con-
ditioning and custom-tailored central
systems. Factory-packaged matching
sections assemble in variety of sizes
and arrangements to meet any air
conditioning problem. Vertical instal-
lation above is in playroom of Hobart
Ramsey’s home in Short Hills, N. J.

SAME TWO UNITS, this time hori-
zontally installed, adapt themselves to
low sloping roofs or shallow attics.
Cooled air is carried from both in-
stallations through ducts and circu-
lated through rooms by ventilators.
Information on Flexi-Cool units, all
factory-packaged, from Worthington
Corp., Dept. AB, Harrison Ave., Har-
rison, N. J. (Circle No. 8012, p. 148).
HEART OF FLEXIBLE cooling system by Winkler is condensing unit to combine with Winkler evaporator cooling coil installations illustrated at right. Condenser is available in either air or water-cooled models, can be put outdoors. Stewart-Warner Corp., Attn. Norman Gill, Dept. AB, U.S. Machine Div., Lebanon, Ind. (No. 8013, p. 148)

LENNOX'S "STOWAWAY" is a unit which can be tied into ductwork of an existing forced-air heating system or added to hot-water heat or gravity furnace. List: $599 for 2-ton unit. Lennox Industries Inc., Attn. C. Floren, Dept. AB, Marshalltown, Iowa. (No. 8014, p. 148)

FOR NEW FURNACES the Winkler evaporator unit will combine flexibly with almost any type of heating unit. Shown above, left: the evaporator installed with a vertical type furnace for the conventional upflow air circulation. Right: the same Winkler evaporator installed in a counterflow furnace for perimeter heating and cooling. Another use of the same unit (not shown) is with a new basement model furnace in which the evaporator is installed on top of the furnace.

IN BASEMENT WALL: In this installation the air-cooled condenser half of the Stowaway is projected OUTSIDE the house, with the evaporator half of the unit INSIDE the house. System keeps duct runs short, makes a neat looking yard installation. Duct work can be tied to any forced warm air furnace: hi-boy, lo-boy, gas-fired or oil-fired and an automatic or manual changeover damper used to complete the system. Layout is made for minimum house space.
UNITS WILL COMBINE WITH ANY HEATING SYSTEM

SPACE PROBLEMS SOLVED: Another application of Winkler component unit. Shown above is evaporator combined with a new-type horizontal furnace. Evaporator and furnace can be suspended in basement or crawl space or placed overhead. For this installation, a Winkler evaporator coil designed for horizontal air flow is used. (Other vertical installations take an “A” type evaporator coil.) Both type evaporators combine with condensing unit at far left.

MEETING OLDER SITUATIONS: Older homes with existing furnaces or boilers can also be successfully air conditioned with a combination of Winkler cooling components. Above, a gravity circulation furnace furnished with a Winkler “A” type evaporator coil plus a blower unit which fit together and are connected into the existing ducts. Older forced warm air system in the home can also be combined with an evaporator installed in the duct work.

COMBINING WITH STEAM HEAT: For homes heated by steam or hot water, Winkler suggests a combination of blower plus horizontal evaporator coil. Units can be installed in attic or upstairs hall. Another installation (not shown) with steam or hot water heat would use the same combination suspended in basement or crawl space of home. Blower units are available in many sizes. Fan motor h.p. and diameters range from 1/4 to 1/2 h.p., and 9 to 15 inches.

CONDITIONER DISAPPEARS INTO ATTICS, BASEMENTS, ONTO ROOFS

IN AN ATTIC WITH LOUVERS: Recommended treatment for a gabled roof is to mount condenser end of the Lennox Stowaway unit flush with the outside wall. Exhaust louvers are removed from the Stowaway and set in the wall at opposite end of attic. Additional exhaust louver is installed above the condenser inlet. System operates by pulling outside air in through condenser and exhausting into attic. This helps ventilate the attic, cuts cooling load, lowers operating costs as much as 20 per cent. Where a low pitch roof cramps attic space, the Stowaway is placed with evaporator end extending into closet. Main duct work then runs in a furred-down central hallway and branch ducts feed cooled air through high registers.

INSTALLATION FOR A FLAT ROOF: Placement of Lennox Stowaway system on flat or slightly pitched roof is a simple installation job, according to the manufacturer. Air conditioner is mounted outside on roof top; connecting duct work extends down into Lennox automatic damper on plenum of an up-flo warm air furnace. Heating duct work carries cooled air into rooms, and one or more return air grilles in the ceiling permit the air to be ducted back to the rooftop air conditioner. Automatic damper permits quick change from cooling to heating. Cabinet of Stowaway unit is specially weatherproofed for outdoor installations. Hermetically sealed, the unit is made of heavy galvanized steel coated with tough baked-on enamel.

MORE ABOUT THIS FLEXIBLE SYSTEM >
Now all of these Dexter lock lines can be installed in one standard boring. Even the entrance handle sets fit the same holes. And what's more, Dexter locks are installed with our special installation tools to achieve a perfect boring in a fraction of the time normally required. Installation cost is cut to a minimum. That's one reason so many contractors specify Dexter Lifetime Locks. They know that Dexter materials and workmanship are unmatched, that every lock is guaranteed for the life of the building...and that no lock installs faster than a Dexter.
LENNOX UNIT “STOWSAWAY” AS DORMER in a hip roof house. Building a small dormer for the air conditioning unit is recommended by the manufacturer as an excellent method of installation in the attic of a hip-roof house. Exhaust air can be expelled through louvered placed in the sides of the dormer or, if desired for attic ventilation, air can be exhausted into attic and out through louveres set in another part of the roof or through ventilators in the roof overhang. Duct work feeds cool air down into rooms from an attic distribution system. With this set-up, Stowaway can also tie into a horizontal-flo furnace in attic. More installations on preceding page.

PLANNING A SMALL COMMERCIAL INSTALLATION: Many variations of the typical residential installations shown on these pages can be adjusted to meet requirements of a small commercial installation. Lennox recommends the above set-up as a low-cost cooling solution for shopping center, store, office and other small commercial buildings. Stowaway air conditioner is installed on roof of building. Cooled air is ducted to a large ceiling diffuser in central ceiling location. Return air is taken through ceiling grille back to the Stowaway. System operates quietly and efficiently. Its suspended, out-of-the-way location uses no “selling” floor space.

FREE-STANDING CONDENSER TIES WITH MANY INDOOR SET-UPS

 Indoors-Outdoors COMBINATION: Shana-Air's SAAC series of air-cooled units are engineered with an advance-designed modern outdoor cabinet to hold refrigerant condenser and compressor plus indoor evaporator assembly and blower. Series comes in two, three and five-ton capacities and is recommended as “weather-proofed,” with sufficient power reserve to assure sustained operation under the most adverse conditions. Outdoor assembly (left) is housed in heavy-gauge furniture steel treated to resist weather deterioration. Also includes motor and fan assembly, refrigerant condenser and compressor. Unit can be placed in any convenient outdoor location. Indoor assembly with blower (right) is here in suspended ceiling location. Evaporator coil for SAAC series comes in either horizontal or vertical airflow or in “Inverted V” coil designed for any airflow to fit in tight space requirements. Information from Shana Manufacturing Inc., Attn. H.G. Shaffer, Dept. AB, 188 West Randolph St., Chicago 1, Ill. (Circle No. 8015 on page 148)
The American Super 8 leads in performance with twice the speed of Standard machines. The varispeed drum transmission and drum speed dial selector are typical ahead-of-the-times features by American engineers so you can sand any floor quickly and at a profit.

NEW! American Super Speed Abrasive Paper
One test will show you beyond all doubt the amazing superiority of the all-new American Super Speed... a paper produced on the newest and most modern making machinery in the industry. Try some Super Speed today... made for floor sanding by floor sanding experts. It costs no more. Send for price list and free sample sheet... no charge, no obligation.

511 So. St. Clair St. Toledo 3, Ohio
PERFORMANCE PROVED PROFESSIONAL MACHINES FOR CONTRACTOR USE • WORLD-WIDE SALES AND SERVICE

NEW! Hope's Roto Type Ranch Windows offer these exclusive advantages:

✓ Underscreen roto operators open and close ventilators easily, quickly.
✓ Flat type screens, with bronze wire mesh, need never be touched.
✓ New, wider muntins are in pleasing proportion to panes — provide unequalled strength and rigidity.
✓ May be glazed with standard units of "Thermopane" and "Twistone", eliminating storm sash, or with single panes of sheet or plate glass.
✓ Ventilators project outward at bottom; awning effect permits ventilation even in rainy weather.

Write for Bulletin 145-AB for Full Information.
Gas-fired Homeaire both heats and cools

The new York-Gas-Heat Shipley Homeaire conditioner (Model GHC-1142 shown), offered for home comfort the whole year 'round. Enclosed in compact taupe and white cabinet, the heating-cooling unit is available in six sizes —three different heating capacities with two different cooling capacities for each size. Heating systems use natural or bottled gas while cooling is furnished by an air-cooled condensing unit outside home. Small ten inch wide conditioner section fronts furnace for cooling needs. Information from York-Shipley Inc., Attn. F. A. Mitchell, Dept. AB, York, Pa.

Circle No. 8016 on reply card, p. 148

Gas-operated unit is all-year air conditioner

Servel's gas-operated Sun Valley (Model FCA-96-G) is contained in one unit and provides all-year air conditioning. In winter, unit cleans and circulates air, maintains the conditioned space at temperature level. In summer it automatically cools, dehumidifies, cleans and circulates air, also maintaining controlled temperature. Components include absorption combination refrigeration and heating unit, filter section and a centrifugal blower for air distribution. Gas flame supplies heat for absorption unit. Better than 3 tons of cooling capacity. From Servel Inc., Attn. Jack Hewson, Dept. AB, Evansville, Ind.

Circle No. 8017 on reply card, p. 148

MORE GAS AIR CONDITIONING, P. 74

AUGUST 1956
TAKE A
GOOD LOOK
AT YOUR ADVERTISING!

Put yourself in your prospects' shoes. Suppose you wanted to locate someone to do some building or remodeling... how would you know where to look? If you did what most people do you'd look in the 'Yellow Pages' of the telephone directory.

Do you know there are several different 'Yellow Pages' classifications producing business for building contractors? Make sure you are cashing in on all the headings that can bring more business for you.

Take a good look at your 'Yellow Pages' advertising today and make it easy and convenient for prospects to locate your business in the 'Yellow Pages.'

Prospects Find You Fast in The 'Yellow Pages'

Would you like some good sales ideas? Suggestions from your 'Yellow Pages' representative on his next visit will help you to improve your Classified Directory advertising.

American Builder New products

AIR CONDITIONING

Attic exhaust fan is thermostat-controlled

Forced air attic ventilation to relieve excessive attic heat is suggested by Hunter Fan as an important accessory to an air conditioned house. Ventilation reduces operating expense of air conditioning by cooling hottest area which would normally keep conditioner working after other heat load factors are reduced by evening coolness. Fan can be installed in any kind of attic construction, has thermostatic control, is engineered for easy installation. Electric motor of 1/2 h.p. uses only 130 watts. List: $78. Hunter Fan Co., Attn. Jim Gantt, Dept. AB, P.O. Box 3775, Memphis 14, Tenn.

Circle No. 8018 on reply card, p. 148

"Comfort-Conditioning" from new Holly combinations

New Holly air conditioning units (shown mounted here on forced air furnace) consist of three main assemblies: remote air cooled condensing and compressor unit which can be installed in any remote location; refrigerating tubing assembly; and evaporator or cooling coil assembly enclosed in a heavy gauge galvanized cabinet. These units, combined with a Minneapolis-Honeywell cooling-heating thermostat and control panel are used with Holly Forced Air Furnaces to make quality, year round air conditioning system. From Holly Manufacturing Co., 875 S. Arroyo Parkway, Pasadena 2, Calif.

Circle No. 8019 on reply card, p. 148

MORE ON FANS, AIR CONDITIONING, PP. 68-75

AMERICAN BUILDER
Leonard W. Besinger, Carpenterville, Ill.

"7,000 homes with polyethylene moisture barriers"

"... plus 5 school buildings, 102 stores forming the world's largest shopping center under one roof"

"We wanted no part of old-fashioned materials. Polyethylene cuts laying time 50% ... we have no waste due to cracking and tearing ... and we do away with equipment necessary to seal joints. Polyethylene stays moisture-free, never gets saturated. And, we exceed the minimum requirements of both VA and FHA."

"The buyer is given advantages in health and upkeep", said Mr. Besinger, "no housewife wants to look at sweaty walls with streaks or blisters, mildew on furniture or rugs. Polyethylene ... assures no condensation even with contact tile floors."

Have you investigated using moisture barriers of film made of BAKELITE Brand Polyethylene? Or, its applications for dust barriers, covering equipment and stored materials, covering uncompleted windows in bad weather? Your supplier has full information, or write Dept. SH-5.

BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation 30 East 42nd Street, New York 17, N.Y.

The term BAKELITE and the Trefoil Symbol are registered trade-marks of UCC
MODEL X-42 (J)—Featuring All Purpose Family Room

Greater liveability at less cost to your buyers in International Homes spacious, Four Bedroom models. And—full profit to the builder-dealer, too! Smart styling and smart production methods are available to you from the fastest-growing manufacturer in the field of low-cost housing.

Package includes complete land-planning service, F.H.A. and V.A. low-down-payment mortgages and construction funds.

For new color catalog and complete information, responsible builders, write today on your letterhead!

Entire home cooled with Amana Central-System

Amana's Central-System air conditioners offer the homeowner an entirely self-contained system needing no water and easy to install. Installation kit for Model 200C (for small homes) and 350C (for medium sized homes) includes main and branch duct pieces, return grille, air filter, ceiling diffusers, duct sealing tape and cement, return air grille template, diffuser and branch duct template. System can be fitted into attic, basement, utility room. More information from Amana Refrigeration Inc., Dept. AB, Amana, Iowa.

Air conditioner can go in now or at later date

New “Weatheramic” combination heating and air conditioning unit by Utility Appliance comes complete with a resiliently-mounted refrigeration chassis which can be installed either at time of original installation of furnace section or at later date when air conditioning is desired. Weatheramic is available in two-ton and 75,000 Btu per hour, and three-ton and 105,000 Btu per hour sizes. Furnace controls feature 24-v diaphragm gas valve, safety, fan and limit controls. More information from John Elfstrom, Dept. AB, Utility Appliance Corp., 4561 East 50th St., Los Angeles 58, Calif.

International Homes

INTERNATIONAL HOMES
3896 MAHONING AVE. - YOUNGSTOWN, OHIO
Dur-O-wal preserves beauty, adds structural soundness and prevents cracking.

Trussed Design
Butt Weld • Deformed Rods

DUR-O-WAL

Phone, wire or write Dept. 2F today for complete dealer information . . . you have a market for Dur-O-wal in your town. Act now.


MULLER MACHINE COMPANY, Inc.
Metuchen 4, N.J. Cable Address MULMIX

Muller Machines combine high quality with low price

Customers often express surprise that Muller Mixers and Power Trowels of such excellent quality can be sold for such low prices. There are four reasons: (1) long experience (46 years), (2) specialization, (3) best materials, (4) best distributors.

PLASTER and MORTAR MIXERS

Five sizes, 2 to 10 cu. ft. Electric or gasoline. Muller Lifetime Pedestal Shaft Seal. Power feedwash on smaller models, disc clutch on larger. Rubber scraper blades optional.

CONCRETE MIXERS


Ask for prices and name of local dealer. You will be agreeably surprised with Muller's low prices.

MULLER MACHINERY COMPANY, Inc.
Metuchen 4, N.J.

Dazzling new beauty has been added to the White line—glamorous turquoise touches, gleaming copper glints, shimmering white—but, basically, White sells and sells fast because it's a darned good heater. Just read the wealth of features listed below—then phone, wire or write TODAY and get set, yourself, for new sales records, new profits.

White Glass or Zinc-in-ized Lining

1. WHITE GLASS Lining—Available in all models. Can't rust—ever!
2. ZINC-IN-IZED Lining—Available in all models. Slightly lower cost. Exclusive White process deposits heavy zinc coating—time-proved protection against rust.
3. White Protective Magnesium Anode—Double protection from rust makes tanks last even longer.
4. Extra-Thick Fiberglass Insulation.
5. Tank Supports—Reduce heat conduction away from tank.
6. Removable Front Panel.
7. White Enamel Finish—Color sprayed in "fashion right" tones—baked on by infra-red process.
8. Good Housekeeping Seal, all models.

ELECTRIC

9. 6.5% MORE Hot Water—than most utility requirements. White's exclusive "Water-Hotter" principle, diffuse, tempers incoming cold water, minimizes temperature drop.
10. Draw Necked Unit Port Construction.
11. Immersion Type Heating Units.
15. Timex-Disc—Automatic safety control.

GAS

9. Film of Flame—White's exclusive single port burner simply can't clog ... ever. Neither tank bottom with flame-tip heat, hotter than the flame itself!
10. White's Specially Designed Spiral Flex Baffle—Cuts heat loss.
11. Roberts-Hawke or Minneapolis-Honeywell Controls.
12. Relief Valve—Temperature pressure relief valve, can be installed easily at hot water outlet.
13. Inner Radiation Shield.
15. Cold Intake Tube—Runs all the way to bottom—eliminates diffusion of cold water with hot.
16. Easy Access to Air Adjustment Shutter.

White WATER-HOTTERS
Automatic Water Heaters
Electric or Gas—

WHITE PRODUCTS CORPORATION, Middleville, Michigan
Water Heating Specialists Since 1930 • Div. of Lamb Industries, Inc.
Your buyers normally may not ask about the roof... but with Terne, the roof becomes a feature you can sell! For after all, a house is a shelter and the roof provides the shelter. And a Terne roof offers the selling qualities that mean so much to prospective buyers—it will last as long as the house stands, it is fireproof, weathertight, windproof and can be painted any color, anytime, to harmonize with the house exterior and the surroundings. Above all, Terne makes the best roof for air-conditioned homes. So try the roof that will help you sell your homes... a Follansbee Terne Roof!

...and a Terne Roof Will Sell Your Homes!

**REFLECTIVITY**
Painted white or a light color, Terne will reflect more of the sun's heat than any other roof.

**LONG LIFE**
Many installations of Terne have been in service for more than 100 years.

**EXTRA BEAUTY**
Terne can be installed in either standing, batten or horizontal seams—each a distinctive design of beauty.

**SAFETY**
Terne is fireproof, windproof and, when properly grounded, will protect your houses against lightning.

*Roofing and sheet metal contractors everywhere will install Follansbee Terne Roofs. See them or write.*

---

**WOOD FLOORS PROTECTED BY CORKTITE CUSHION**

A new underfloor cushion, "Corktite" has been announced by W. R. Meadows Inc. Described as a resilient impermeable insulation for installation between a concrete slab and wood flooring, Corktite also eliminates the buckling and rotting of wood flooring from condensation of ground moisture. Cushion, which is also low in heat conductance, permits wood floor to assure approximate room temperature, provides firm foundation and produces floor of low sound transmission. T. R. Johnson, Dept. AB, W. R. Meadows Co., 7 Kimball St., Elgin, Il.

*Circle No. 8022 on reply card, p. 148*

**CARPET IN EIGHT NEW DESIGNS FEATURED BY MOHAWK**

The "new look" in carpeting comes with Mohawk's selection of eight modern patterns, some with all wool surface, others in Durlon and Nylon combinations. Designs also include high and low looped texture, tufting, etc. Shown above is "Park Row" of Durlon and Nylon, a grandada leaf in high and low loop texture, tufted in 12 and 15 ft. widths. Comes in mist green, beige, nutria, cocoa, spruce green, grey. Retail at approximately $9.95. Information from Nathan Nichols, Dept. AB, Mohawk Carpet Mills Inc., Amsterdam, New York.

*Circle No. 8023 on reply card, p. 148*
Mr. Clipper

Clipper made the world's first masonry saw, nearly 20 years ago... Clipper makes the world's finest masonry saw today. Let Clipper's famous 5-Day Free Trial prove it to you.

AUGUST

SOLD DIRECT by Factory Trained Representatives—Factory Branches in Principal Cities—Coast to Coast.
GENERAL OFFICES AND FACTORY • KANSAS CITY & MISSOURI

FREE TRIAL

The New 2 H.P. SUPER MODEL Clipper Masonry Saw has a heavier cutting head... oversize bearings and a heavy-duty blade shaft. Try it FREE on your job, and judge for yourself. The outstanding policy of FREE TRIAL has been in effect since Clipper invented the World's First Masonry Saw, nearly 20 years ago. Only through Clipper's Free Trial are you guaranteed Actual Test on the Job—Full Satisfaction—No Obligation.

CLIPPER BLADES FOR ANY JOB

ABRASIVE—Hard—Soft—Porous—Dense ... Wet or Dry—the same Clipper Abrasive Blade to cut any masonry material, faster, better, with guaranteed lower costs. Clipper Quality is your Best Buy! Specifications to Fit All Power Hand Saws.

BREAK-RESISTANT—Triple Reinforced ... in specifications to cut every masonry material... HARD to SOFT. A CLIPPER First! Polk-A-Dot design reduces side friction, delivers maximum power to cutting edge. Break-resistant —safer —lower cost.

DIAMOND—Clipper sells more because Clipper sells Quality. Blade after blade on tile to block, Clipper Diamond blades outperform, outcut and outlast any other blade. Dependable ...consistent quality. IF YOU DON'T KNOW DIAMONDS, KNOW YOUR MANUFACTURER!
The cost of that insidious monster, RUST, mounts rapidly with the endless chain of repair and upkeep bills for roofing, siding and trim. But how can you calculate the added headaches, the ill-will, and gnawing worry suffered by a homeowner faced with this condition on his new home?

On a stained and streaked building, rust doesn’t paint a very pretty picture... for the builder, the buyer, the dealer or the financing institution. Yet this condition is avoided so simply, so economically when double-dipped Stormguard Nails are used.

In a zinc coated nail FHA requires “hot-dipped”—Stormguard Nails are hot-dipped twice—their strong steel core is actually double-dipped in molten zinc. Stormguards check stains and streaks without countersinking or puttying. They drive easily, hold securely and prolong the life of costly roofing, siding and trim.

Guard your reputation for quality materials and workmanship—guard your customer’s investment—guard against rust with Stormguard.

---

Crezon plywood for strong siding, interior work

Crezon plywood is described as a strong, weatherproof and “permanapaintable” product for exterior siding as well as interior woodwork. Crezon itself is an overlay of tough phenolic resin and cellulose fiber which is bonded to exterior-type plywood to produce a siding free from checking, grain raising, cracking and other surface imperfections. Crezon is made by Crown Zellerbach, then supplied to eight plywood manufacturers who make Crezon plywood. Full information from Crown Zellerbach Corp., Dept. AB, 343 Sansome St., San Francisco, Calif.

Circle No. 8024 on reply card, p. 148

Clips anchor wood flooring to solid concrete

Problem of anchoring wood floors to concrete in all types of commercial and school construction is solved by Speedway with use of float and spacing strip together with its new Floor Clips. Both are set in fresh concrete with clips alternating on opposite sides of strips. Clips become more firmly anchored as concrete hardens, tops simply lift up for use when ready to place sleepers. Floats support clips, holds them at the proper level, prevents them from being buried in concrete. No time is lost in hunting for clips when ready to use them. Clips are also recommended for non-basement plans, or as furring anchors for brick. Wood floors thus anchored said to outlast others because buckling, warping and dry rot are eliminated as well as loose sleepers and squeaky floors. List: $35.00 per M. Information from Harry Killon, Dept. AB, Speedway Mfg. Co., P.O. Box 216, Richmond, Ind.

Circle No. 8025 on reply card, p. 148
**SLOAN’S BUILDING BRACKETS**

FOR SAFE CONSTRUCTION

Over 200,000 Sloan’s Brackets and Ladder Jacks in use today. Interchangeable folding Scaffold Bracket nails on or uses bolt hook attachment.

We manufacture a complete line of:
- FOLDING SCAFFOLD BRACKETS
- CORNER BRACKETS
- ROOFING BRACKETS
- AND LADDER JACKS

Notice Our staging equipment is one of the best if not THE best on the market today. A set of these brackets will pay for themselves on two jobs, and last a lifetime. For safety, compactness, durability, they have no equal. Each item is fully guaranteed.

Write for descriptive literature.

L. J. Sloan Scaffold Bracket Co.
P.O. Box 6399
Minneapolis 23, Minn.

A smart-looking extra for modern homes
... a room divider with shelves
of Carrara® Glass!

This attractive planter box and room divider owes much of its good looks to its shelves of beautiful, gleaming Carrara Structural Glass. Prospective home owners like Carrara — they appreciate its fine, polished finish; its resistance to moisture, burning cigarettes or spilled drinks; and its easy cleaning.

These Carrara shelves are supported by half-inch thick plywood boards, securely fastened to the posts. For additional construction details, ask your nearest Pittsburgh Plate Glass distributor.

---

**profits**

LIKE SALES GROW with
FAST-SELLING

Super-Glass

An authority on how to win sales and influence profits — SUPER GLASS bases its outstanding reputation on superior performance... makes fast sales a certainty with abundant pure rust-free hot water, attractive white easy-to-clean jacket... captures complete customer attention with its safe, low-cost operation. No wonder leading builders and architects choose SUPER GLASS—the perfect water heater for the modern home.

Available in a variety of sizes and models

A smart-looking extra for modern homes
... a room divider with shelves
of Carrara® Glass!

**Automatic gas or electric water heaters**

by Koven

**OTHER FEATURES OF KOVEN SUPER GLASS**

- lower fuel costs
- 100% automatic safety
- smart looks — sturdy construction
- long-life 355 lb. test tank
- trouble-free operation
- precision engineering

nationally advertised

L.O. Koven & BRO., INC.
154 Ogden Ave., Jersey City 7, N. J.

Plants: Jersey City, N. J. • Dover, N. J. • Trenton, N. J.
DEMAND THIS TRADEMARK!

GENUINE DOUGLAS FIR PLYWOOD

PLYSCORD®

INTERIOR TYPE GRADE C-D

SHEATHING

Here's why! PLYSCORD® is Plywood Sheathing QUALITY-TESTED® FOR:

1. Correct veneer grades—inside and out
2. Strength, rigidity and stiffness
3. Dependable glue-line performance

The true quality of plywood sheathing isn't always visible. What's inside—glue quality...inner-ply quality—is all-important.

*PLYSCORD® is quality-tested under established industry procedures, according to published Commercial Standards.

Insist on DFPA-PLYSCORD® when you buy, specify, or use plywood sheathing!

Douglas Fir Plywood Association (DFPA), Tacoma, Wash.—a non-profit industry organization devoted to product research, promotion and quality maintenance.

DOORS AND WINDOWS

Decorative privacy with new Beauty-Flex drapes

Beauty-Flex drapes of durable vinyl make a colorful interior draw-drape for windows, can also be used to partition-off rooms. Draw drape is made of vinyl strips, comes in wide variety of patterns and colors designed to fit and harmonize with almost any size or type opening. Drapes are easy to clean, mildew-resistant and can be installed with only a screwdriver. List price: $1.95 per sq. ft. Discounts to dealers. Armor Flex Products Inc., Attn. L. J. Nataline, Dept. AB, 2111 So. Andrews Ave., Ft. Lauderdale, Fla.

Circle No. 8026 on reply card, p. 148

New hardware provides safety for window work

More ventilation, easier cleaning, improved safety offered by Safety Window Hardware with its Safety-Tilt window balance and hardware. Balance tilts window into room without disturbing screens or storm windows; allows cleaning, painting etc. to be done inside house. Also eliminates hazard of open windows or climbing to reach window tops. Hardware of zinc and steel includes all necessary channels, brackets and hinges, assembled with balances for installation. Prices, special sizes on request. From Safety Window Hardware Corp., Attn. Louis Kaufman, Dept. AB, 121 Thirtieth St., Brooklyn 32, N.Y.

Circle No. 8027 on reply card, p. 148
Folding door is both flexible and solid

A folding door combining flexibility of fabric with strength of a solid core is offered by Grant Pully & Hardware. Door hangs straight and stationary, does not billow or rustle when closed. Solid core panels beneath textured vinyl fabric fold evenly and easily, blend with both modern and traditional interiors. Grant Folding Door is available in four colors and wide range of standard sizes: 2'6", 2'8", 3' and 4' wide, by 6'6", 6'8" and 8' high. Door lists from $27.77. From Grant Pully & Hardware Corp., Attn. B. Cooper, Dept. AB, 31-85 Whitestone Parkway, Flushing, N.Y.

Louver doors give full access to remodeled closets

Closets can be remodeled too, with Decor's white pine louver doors which fold open to permit 100% use of the interior space. Doors have brass knobs, are pre-hung, hinged and ready to slip into openings 6'10" high, with widths of 50½", 62½" and 74½". All four-door units which should take no more than 10 min. to install. Complete package, sanded and ready to finish, in any of the three sizes, at net price of $39.95. F.O.B. Grand Rapids. Information from Decor of Grand Rapids, Attn. P. B. Stiles, Dept. AB, 1555 Eastern Ave., Grand Rapids, Mich.

BEST BUY FOR SUBFLOORING?

FIR PLYWOOD
of course!

here's why...

- 50% time and labor savings
- Strong, solid, squeak-free
- Won't warp, twist or cup
- Fits standard joist spacing

- Adds strength and rigidity
- Fewer nails, less waste
- Seals out drafts from below
- Large, light, easy-to-handle


INSIST ON DFPA GRADMARKS!

DFPA grademarks are your assurance of plywood quality. Specify PlyScord grade for subfloors, wall and roof sheathing. Other grades for other jobs.

Plywood of other western softwoods available; look for this DFPA grademark.
You get more building, selling and profit-making advantages with National Homes

Every National Homes builder-dealer, regardless of his size or location, enjoys tremendous competitive advantages. With National Homes techniques, the builder-dealer is sure of his costs and can operate with less invested capital. He can build to his market in a wide range of designs and prices . . . offering far more in exterior styling, interior features, and full-time-living convenience. By actual comparison, the National Homes builder-dealer can offer more house for the money—anywhere! These are only a few of the many advantages helping National Homes builder-dealers win an ever-increasing share of the market.

Some of the other important advantages are:
- Trained Organization to assist with land acquisition, site planning, and the dealer’s entire building program.
- House Package that represents two-thirds of the building job. This is delivered to the site on schedule for the most economical use of local labor. There is no need for warehousing or inventory.
- Faster Completion Time that means a more rapid turnover of capital and higher dollar volume of profit.
- Favorable Financing of VA or FHA-Approved Mortgages by the National Homes Acceptance Corporation and more than 600 leading financial institutions.
- Advertising and Sales Promotion, on national and local levels of our brand-name National homes.
- Professionally Designed by Charles M. Goodman, AIA, and color-styled by Beatrice West, both foremost authorities in the home field.
- Dozens of Floor Plans and hundreds of exterior variations to suit every need and desire.
- Homes Produced Better and more economically . . . by the assembly-line methods of modern manufacturing . . . which means a lower selling price.
- Mass Purchasing of brand-name materials results in higher quality and in important savings that are passed on to the home-buyer.
- All the Advantages of a 25,000-house-a-year builder regardless of the size or location of his community.

For more details on how you may join the most successful home-building team in the country with a National Homes builder-dealer franchise, contact me personally, James R. Price, President, National Homes Corporation, Lafayette, Indiana.
In Colorado...
Mr. Arnold Cook, left, owner, and Mr. Duane Pearsall, Vulcan Sales Representative, make a final check of blueprints in front of Mr. Cook's new home equipped with Vulcan's Year-Round Baseboard "Home Conditioning" System.

ARCHITECT
W. C. Muchow, A.I.A.
1730 Glenarm Place
Denver, Colorado

BUILDER
Jerry Aronoff
20 S. Fairfax Street
Denver, Colorado

The First
Integrated Baseboard
Heating-Cooling
System in America

Vulcan Year 'Round Baseboard "Home Conditioning"
Helps To Sell Better Homes — Faster

EASY INSTALLATION
LOWER COSTS
Because it is baseboard, Vulcan's "Home Conditioning" System is simple and easy to install. Your qualified plumbing and heating contractor can install it. No special training or tools required. Reduced on-the-job time and fewer parts cut your installation costs.

The VULCAN Radiator Company
775 Capitol Avenue
Hartford 6, Conn.

AUGUST 1956

OUTSTANDING SALES APPEAL
Vulcan's completely new "Home Conditioning" system is a BIG sales feature for home buyers who are looking for a quality heating and cooling system at lowest cost - because it's Baseboard!
Here is advanced engineering that retains 100% of its heating performance and still furnishes a comparable amount of cooling comfort.

Write Today for FREE Bulletin

The VULCAN Radiator Co.
775 Capitol Ave.
Hartford 6, Conn.

At no obligation, please forward to me your FREE Baseboard "Home Conditioning" Bulletin.

Name...........................................
Company......................................
Address........................................
City........................................Zone......State..................
A Leading Tennessee Master Plumber reports
Copper Tubes Cut Installation Time Over 50%

Light Weight—"The light weight of copper tube and fittings makes installation easier and faster—makes possible prefabricated sections like this, for example."

Prefabrication—"This double-Y and other sections can be preassembled out in the open or at the shop where men can work easier and faster—no lost time waiting for construction."

Easy to Handle—"The light weight of copper tube and fittings makes installation easy and fast even in cramped working areas. Our men like to work with copper."

Save Space—"Preassembled sections are connected easily. Stacks with fittings were installed in standard width partitions—gave me an extra 10 square feet of useable floor space."

When Harold E. Orr, president of Leopold & Orr, Knoxville, Tenn., built his new home recently, he installed an Anaconda all-copper drainage system. Mr. Orr, who is also a vice-president of the Associated Plumbing, Heating & Mechanical Contractors of Tennessee, Inc., reports that installation time was cut more than 50 per cent. His explanations for the saving are quoted under the photos.


ANAconda
COPPER TUBES
Available through plumbing wholesalers
BATHS AND KITCHENS

Metal cabinet ensemble for every kitchen layout
Marvel metal cabinets come in variety of wall, base and sink units. Line is easy to install, of flush-streamlined construction for perfect alignment and is finished in thermal-baked white enamel. Base cabinets feature recessed toe space, chip-heat-stain proof plastic tops in color. Entire line has torpedo door catches, large shelf compartments. Prices from $10 to $50, sold direct to builder. Marvel Metal Products Co., Attn. M. Rottner, Dept. AB, 3843 W. 43rd St., Chicago 32, Ill.

Circle No. 8030 on reply card, p. 148

Precast shower floor makes installation simple
Fiat’s new Monterey design shower floor solved problem of building a separate threshold when installing a shower with a precast shower floor. Threshold and floor of the Monterey is cast of Fiat terrazzo in four color combinations. Complete monolithic floor eliminates most expensive construction step in built-on-the-job showers. Monterey is completely leakproof and rustproof, requires no sub-pan or double drainage. Wide range of sizes available. More information from Fiat Metal Mfg. Co., Dept. AB, 9301 W. Belmont Ave., Franklin Park, Ill.

Circle No. 8031 on reply card, p. 148

When you use White Top to roof a home you’re using the original crushed marble roofing aggregate that was first produced thirty years ago at our quarries in Marble Hill, Georgia. There was nothing like it then — there is nothing like it now. Anywhere. No matter what they call it, no other roofing material can approach White Top’s low absorption. No other has as high a reflective or insulation value. And to a growing number of builders and buyers, none other is so simply beautiful.

For all the facts on the finest roofing material made, merely attach this ad to your letterhead and send it to us at Tate.

FOR OPERATION HOME IMPROVEMENT
START AT THE TOP

CALCIUM PRODUCTS DIVISION
THE GEORGIA MARBLE COMPANY, TATE, GA.
ORIGINATORS AND LARGEST PRODUCERS OF WHITE MARBLE ROOFING
Durall Tension Screen installation starts with these—and ends in saving you time.

You simply slide the top bar off the screen and mark the screw position with a pencil, through holes provided for that purpose. So simple, it saves you minutes on each screen. So effective, it positions the screen perfectly every time. But that's only the beginning of the unique advantages of Duralls.

Here are more...

NEW CLAMP BRACKET
It makes Duralls so easy to install, that a novice looks like a professional. Tap it in the sill, drive one screw, "snap-in" the screen. It adjusts automatically for perfect tension.

COST LESS TO INSTALL
It takes only 5 screws to install each Durall. A man can easily install one in five minutes from inside the building. And there are sizes for all stock frames so they fit perfectly, with no expensive and time-consuming fitting on the job.

LESS EXPENSIVE TO BUY
They have no all-around frames, just top and bottom rails that hold the screen in the window under tension. They're all aluminum and top quality throughout.

LOOK SO GOOD
Fit in the window so taut and trim... they "look like a million." Made of "Alclad" aluminum, Duralls never rust, stain nor streak the house. Buyers appreciate that.

NO CALL BACKS
Duralls put up nine years ago are still going strong... tight and secure against insects. And they're made so perfectly there are no "call backs."

Electric heaters designed for bath or kitchen

Three new Cavalier Electric Heaters (two automatic and one non-automatic) are designed to fit flush in wall for space-saving. Wall box is of galvanized metal, exteriors of stainless steel. Grille edge is scientifically designed to stay cool, is ideal for use with rubber or plastic tile. Aluminum reflectors give maximum radiant warmth. Left is 1250 Watt automatic model, $21.34; center: 1250 Watt non-automatic, $14.20; right: 1500 Watt automatic, $26.70. All list prices. Cavalier Corp., Attn. M. H. Wessel, Dept. AB, Electric Heating Div., 343 West 1st St., Chattanooga 2, Tenn.

Variety of circuit arrangements in Uni-Pak

Walker Electric is now marketing a new line of interchangeable residential service entrance equipment, called "Uni-Pak". Line allows for maximum flexibility with its eight back boxes and front covers to fit dozens of combinations of factory-assembled interior units. Back boxes, interiors and front covers packaged separately to allow contractor to buy each item as needed on job. Available in 100 and 200 ampere with eight to 32 plug fused circuits and 0 to 5-30 or 60 ampere 2 pole appliance pull-outs. Wide price range. Information from H. F. Burnette, Dept. AB, Walker Electric Co., Inc., 125 Bennett St. N.W., Atlanta, Ga.
Symons FIELD REPORT...

Assembly-Line Pouring with Symons Wide Panel Forms...

F&S Construction Company, Phoenix, Arizona, is converting 615 acres of farm land, northwest of Chicago, into one of Chicago's largest private suburban housing projects. 1,350 homes in the $15,500 to $17,900 price range are planned.

Symons Wide Panel Forms were used on the 265 homes already erected. Seven sets were used over 35 times in the assembly-line pouring. Also, approximately 6,000 square feet of Symons Forms in 2' x 6' and 2' x 8' sizes with fillers, were used to construct the sewage system for the development.

Our engineering staff is experienced with all types of forming and will furnish complete form layout and job cost sheets on your form work—at no charge or obligation. Our salesmen give advice on form erection, pouring and stripping methods.


Rudy Gasten is resident manager for F&S and George E. Steele is general superintendent.

Catalogs and Additional Information on FORMS Sent on Request

AUGUST 1956
Look for the New Blue Super "Hush-Cushions"

HERE'S WHY—
1. Waste King attracts more home sales and rentals than any other visible feature costing up to five times more. It's your lowest cost, highest quality feature!
2. Waste King is now a household word that means greater convenience. Saves time, steps, and work by eliminating garbage automatically. It's your best new saleable feature!
3. Waste King features exclusive Lifetime Grind Control for clogproof, longer service and exclusive Super "Hush-Cushions" for smoother, quieter operation!
4. Waste King’s service record is best in the industry. Less than 1% callbacks. Relieves the builder of post-sale complaints.

“The Eyes Buy the Visible Feature!”

Waste King

PULVERATOR

America’s Finest Garbage Disposer

PULVERATOR

America’s Finest Garbage Disposer

New model doorchimes double as dinner chimes

Rittenhouse Company’s "Precedent" model is an eight-note electric door chime. Has solid, brushed brass chime tubes, suspended from hand-burnished walnut block. Comes with decorative xylophone-type mallet permitting chimes to be used for dinner call or other household purposes. Available complete with timer and transformer or without timer and transformer. Information from Rittenhouse Co., Attn. J. P. McCarthy, Dept. AB, Honeoye Falls, N.Y.

Dorphone intercom answers door for housewife

Instant two-way communication between any central point in the house and the front and rear doors is offered by Dorphone Inc. Intercom system, which uses "instant heating" type of electronic tube, has weatherproof outside units for mounting on wall or porch roof plus interior master unit finished in chrome for mounting in kitchen wall or other central point of home. Sensitive Dorphone system can be used for outdoor baby-sitting, and as a safety protection at night. Unit lists at $65. Discounts available. Information from Kenneth Edees, Doremus & Co., 120 Broadway, New York City, N.Y.
FREE WALL CHART

to help you sell

BESSLER
DISAPPEARING
STAIRWAYS
quickly . . .
profitably!
easily . . .

Here's a real 24-hour-
day salesman for the
famous line of Bessler
Disappearing Stairways.
Hang it anywhere in plain
sight, for ready reference
by you and prospects.
Seven Bessler models to
meet any home building
or remodeling need.

Millions of Bessler units
now in use. Millions of
homes, outbuildings, of-
cices, commercial estab-
stishments need this effi-
cient stairway. There's a
big market for you in
your community! Popular
prices!

FREE CATALOG!

Gives you complete
handy reference
data on entire
Bessler line, for
quick selling or ap-
plication to
stairway job.
Write for it now!
Ask for your FREE
copy of the Bessler
Wall Chart too.

BESSLER DISAPPEARING STAIRWAY CO.
1900-A East Market Street, Akron 5, Ohio

for Carlton Sinks cost
not a penny more!

When you put a Carlton Stainless Steel Sink into a new or
remodeled kitchen, you add permanent extra eye-appeal. For
stainless steel, when transformed by Carlton's exclusive
sparkle finish, becomes an object of sheer beauty that lasts
forever. No chipping or cracking of enamel . . . Luster that
blends perfectly with every color scheme . . . When you
want something extra in design and finish at no extra cost—
specify Carlton!

Don't overlook the special Carlton
rubberized undercoating that cuts dish-
washing clutter; changes garbage dis-
posal noise from a growl to a purr!
See for yourself how stainless steel's
extra resilience reduces dish chipping
and breakage. Carlton's narrower wall
between twin bowls almost eliminates
the splash from a swinging faucet,
while the deeper (7½") bowl allows up
to a full gallon more water capacity.

Special Note to Builders, Wholesalers, Architects:
A Carlton Stainless Steel Double Sink Bowl (32"x21") weighs
only 17 pounds, makes installation much easier. Stainless
steel, lighter than cast iron or porcelain on steel, saves you
money on shipping costs, too. Write for free Catalog 73,
illustrating complete line, and send the name of your distrib-

AUGUST 1956
This fine wood, as gracious as an old Colonial residence, as sturdy as a Clipper ship—and never forget how much sound pine went into the building of both—fits the mood of today's living with the true elegance of its simplicity.

If you choose, clear varnish can preserve the exquisite straw blondness of Crossett Royal Pine Floors to blend with smart contemporary furnishings or set off the mellow richness of prized antiques.

If you prefer a darker floor, Crossett Royal Pine is amenable to the exact tone you like, and dull wax will bring out the wood's attractive figure and burnish its gleaming surface to grow more beautiful with the passing years. (Point out this freedom of choice to your feminine prospects and see their eyes gleam.)

All this and cost economy, too, are yours with Crossett Royal Pine Floors, thanks to Crossett's continuing scientific study of pine and how to utilize it to the best advantage of the wood—and your home sales.

Easy to get right from your local supplier, together with matching pine trim, finishing and moldings, certified to Crossett Standards by registered trade-mark and official SPIB grade-mark.

Let Donley experience brighten your sales future. Today, the building trend is to modern ranch style homes. Fireplace needs have also "gone modern". To meet the demand, Donley Brothers have engineered double-faced fireplaces...projecting corner fireplaces...and three faced fireplaces...all incorporating the finest in contemporary design.

Donley furnishes all the necessary metal components...complete plans, drawings and other helpful information, to assist your customers in successful fireplace building. For fireplaces that draw...specify Donley.

DONLEY PRODUCTS IMPROVE THE HOME

FREE TO DEALERS inquiring on company letterhead...a 78 page book telling all about indoor fireplaces.
When they're on the verge of signing...

Suppose you've convinced this young couple that the design and layout of your model house is just what they want. You're not finished yet. They still want to know about the building materials you will use to make their house sound and solid. For example, they may ask you about the roof.

A Barrett Roof helps make the sale

You can help gain the confidence of your prospects with a roof of Barrett Asphalt Shingles. Through proved performance and national advertising, Barrett has built consumer recognition for fine roofing.

To be able to offer a Barrett roof as an extra selling feature costs you no more. Barrett Shingles are available in a wide range of styles and appealing colors. Your Barrett dealer has the complete line.
New, complete booklet on sliding door hardware

**HERE ARE THE FACTS:** about Stanley’s unique hanger that permits up to 3/8" vertical adjustment without loosening the door screws, making installation a cinch... about the sensational 2800 series of hardware for 2 or 3 by-passing doors, 4', 5', 6', or 8' openings... about the companion 2804 and 2808 sets with built-in header trim for 3/4” and 1 3/4" doors, respectively... about the new 2820 for single door in pocket.

Here, in short, is full information — specifications, applications, photos, diagrams — about Stanley’s complete line of top-quality, low-priced sliding door hardware. You owe it to yourself to send for this booklet and be fully informed.

Here, too, you will find the most complete selection of trim and accessories in the industry. In every respect, Stanley is the first name in sliding door hardware today.

**Concrete Repair does almost any retouching job**

Camp’s Latex Concrete Repair can be used for repairing broken step edges, cracks in walks, driveways, garage floors, wall cracks, tuck-pointing and smoothing rough surfaces. Repair is concrete color, waterproof, will not chip or crumble. It may be applied as thin as
"Or more than 1" thick, is self-curing, needs no primer, and results in surface resiliency. Complete 14 lb. kit, listing at $4.95, includes special blend cementatory material, 1 qt. rubber latex and trowel. Discounts available. M. A. Clark, Dept. AB, The Camp Co., Inc., 6958 South State St., Chicago 21, Ill.

Built-in barbecue adds sales appeal to house

Burr-Southern suggests a built-in barbecue to add extra sales appeal to tract development homes as well as custom-built models. Company's deluxe unit, called the "Bure-Fireplace Adjustafire", has a stationary chromed steel grill plus an adjustable firebox. Adjustafire is designed for building-in to either an inside or outside installation, is easy to install and sturdily made to withstand weather conditions. Distributed through jobbers and dealers with list price from $33 up. Information from the Rae Winks, Dept. AB, Burr-Southern Corp., 241 N. Allen Ave., Pasadena, Calif.

Special BeadeX finishes gypsumboard walls

New special BeadeX is offered for drywall finish to solve the problems of protection, reinforcement, and crookedness in one operation. BeadeX design, with metal and joint tape bonded together as one unit, uses wider metal portion to provide leg of sufficient width to cover completely the raw cut edge of gypsumboard at meeting of outer corners. Special BeadeX also eliminates need for wetting treatment of cut edges. Available through building material dealers at about ten cents per sq. ft. From BeadeX Manufacturing Co., Attn. Jack Boldrin, Dept. AB, 4615 Eighth Ave. N., Seattle, Wash.
SEVEN POWERFUL CONSUMER MAGAZINES
will carry this arresting ELKAY advertisement this fall . . . means that
3 out of 4 of your prospects should be reached by these ads. And,
present prices for stainless steel sinks are no more than cast iron.

Elkay Manufacturing Company

STAINLESS STEEL SINKS

Your home reflects your taste in its appointments and design
...so show yourself at your best by choosing an ELKAY Stainless
Steel Sink for your kitchen. Its glamorous, silver-like beauty
sets the pace for lovely kitchen life... blends perfectly with any
decorating scheme... softly reflects surrounding color hues.
Gives you more time for hostessing... stays so beautifully clean
with a wash of a damp cloth... no more scouring... no more
bleaching. Find out how little this lifetime sink does cost...
no more than many ordinary sinks... never needs replacement.
Write for literature and prices today.

ELKAY MANUFACTURING COMPANY
1874 South State Avenue, Chicago 30, Illinois
The World's Oldest and Largest Manufacturer of Stainless Steel Sinks... Since 1920

American Builder New products

TOOLS AND EQUIPMENT

New folding wood framing rule does many new jobs

New six-foot folding wood rule with special markings on reverse
side enables carpenters to lay out rafters (common, hip, valley and
jack), with speed, accuracy and simplicity. Master Framing Rule
works by manipulating angular folds to form triangles, bases of
which are held along edge of lumber. Tool is easily pocketed, can
be used as regular rule, is precalculated to eliminate additive errors
of stepping off rafter lengths with a square. List: $2.95. Master Rule

Compact, portable generator gives 3500 watt dual voltage

New addition to its line of portable electric generating plants is
announced by Pioneer Gen-E-Motor. Unit is compact, lightweight,
3500 watt dual voltage belt driven generator coupled with a
Briggs & Stratton 8 h.p. engine. Generator unit is skid mounted for
easy portability. Completely sealed, lubricated and of drip-proof
construction, the machine is capable of continuous duty operation.
Model SS-4365 lists at $475. Information from Pioneer Gen-E-
Motor, Dept. AB, 5841 West Dickens Ave., Chicago 39, Ill.

Circle No. 8040 on reply card, p. 148
Circle No. 8041 on reply card, p. 148

AMERICAN BUILDER
the new MULLER POWER TROWELS

These new 4-Blade Power Trowels finish concrete smoother than conventional 3-blade types. They can get on the concrete sooner, and are much less tiring to the operator because vibration and lateral pull are greatly reduced. Blade adjustment, engine throttle and power throw-out are conveniently located at the top of the handle. Timken Bearings maintain accurate alignment in all four sizes—24", 29", 34" and 44". Separate Floating and Finishing Blades are standard equipment.

Send for folder, prices, name of nearest dealer.

MULLER MACHINERY COMPANY, Inc.
Metuchen 4, N.J.
Cable Address MULMIX

Save Time and Money . . . Avoid Mistakes . . . Use

SIMPLIFIED
CARPENTRY ESTIMATING

HERE IS EVERYTHING YOU NEED to know to “take off” a bill of materials from set of plans and specifications for a frame house. Saves you time figuring jobs, protects you against oversights or mistakes that waste materials and cost money. Nothing complicated—just use simple arithmetic to do house carpentry estimating with this easy-to-use ready reference handbook.


1950. 5th Ed. 304 p. 123 illus. 60 tables. 5x8. $3.75

FREE EXAMINATION COUPON
Simmons-Boardman Books, Dept. AB-856
30 Church St., New York 7, N. Y.
Please send me a copy of Simplified Carpentry Estimating. If after 5 days trial I am not fully satisfied, I’ll return it and owe nothing. Otherwise I’ll keep the book and send $3.75 plus a few cents for postage and handling in full payment.

Name
Street
City State
☐ SAVE. Send $3.75 with your order. We pay postage, handling. Some trial terms.

Do You Believe There Can Be 100% APPEAL?

You will when you’ve seen these Two Smash-Hit Profit Makers

DEALER CONTRACTOR WRITE TODAY for INFORMATION about these
ARCHITECT

This Thrif-T TWIN KITCHEN CASEMENT UNIT

These two over-the-sink units are real work savers on the building job—real customer pleasers when the job is done. Everyone who sees them wants them. You’ll be smart to offer these two HOT CAKE items to YOUR trade. BUT—make up your own mind. Write for descriptions today.

E-Z-VENT WOOD AWNING OVER-THE-SINK UNIT

FIT OVER MODERN SINKS
FIT ALL TYPES OF WALL Frame, Brick Veneer, Masonry
CRANK OPERATED NO REACHING
COMPLETE READY-TO INSTALL
AUTOMATIC LOCKING
YEAR ‘ROUND WEATHERTIGHT
CARRIED IN STOCK
SEE YOUR DEALER OR WRITE FOR LITERATURE

ROACH & MUSSER CO.
880 Grandview Muscatine, Iowa

AUGUST 1956
Small plaster-mortar mixer moves easily to job

New line of small tilting-type plaster-mortar mixers is offered by Speed King. Shown is 4 cu. ft. mixer 4SKP (6 cu. ft. model also available), which features pugmill-type mixing by four sets of 3-blade paddles clamped to square shaft. Engine has built-in transmission drive. Simple shift lever disengages powers merely by loosening the drive belt. The 4 ft. model has low loading height of 34" and width of 29½". Lists at approximately $360. Information from W. L. Wolfe, Dept. AB, Speed King Manufacturing Co. Div., Jaeger Machine Co., 550 West Spring St., Columbus 16, Ohio.

Circle No. 8042 on reply card, p. 148

Lightweight drain pipe is moisture, corrosion proof

Lightweight plastic pipe designed for sewer and drain applications by Carlon Products. Ideal for sewer-to-house and house-to-septic tank connections because of its resistance to moisture and corrosion, the pipe is easy to carry (ten feet of four-inch pipe weighs only 14½ lbs.). Maker estimates one man can install 100 ft. of Carlon pipe in 40 min. with a saw and a can of quick-setting cement. Pipe comes in 10 ft. lengths in 2" to 6" sizes. Prices vary with size and shipping distance from $16.54 to $103.84. Carlon Products Corp., Attn. J. E. Dawson, Dept. AB, 10225 Meech Ave., Cleveland 5, Ohio.

Circle No. 8043 on reply card, p. 148

Arkansas Pine No. 1 Dense Dimension

Produced from selected superior shortleaf timber, Arkansas Pine No. 1 Dense Dimension saves you from the risks, penalties and kick-backs that go with green lumber. That's because our No. 1 Dense is pre-shrunk in modern steam dry kilns, by which it is stabilized for keeps!

Graded under classification requirements of the Southern Pine Inspection Bureau, Arkansas Pine No. 1 Dense Dimension safeguards your structures with big mill manufacture, stipulated moisture content, maximum tensile strength and engineered stress values officially certified by the SPIB Grade-Mark branded on each piece.

Arkansas Pine No. 1 Dense Dimension is sold east of the Rockies by your lumber dealer.

Our FREE Builders' Handbook brings you correct specification data. Write now.

Arkansas Soft Pine Bureau
756 Boyle Building, Little Rock, Arkansas

Circle No. 8042 on reply card, p. 148
nothing's more violent than a tea party!

Scorching utensils, acids, rough abrasions, anything that mars ordinary hard surfaces has no effect on Pomona Tile's "Space-Rite" Perma-glaze deck tile. Fused by an exclusive Pomona process, Perma-glaze has flint-like hardness. That is why this steaming kettle and potent lemon juice acid prove harmless to its lifetime jewel-like surface. Note the smart, new 6" by 4½" size tile in Pomona's textured Sun Yellow Perma-glaze. To guarantee complete client satisfaction, specify Pomona "Space-Rite" tile.

Write for free catalog with actual tile samples of full line of colors.

POMONA TILE MANUFACTURING CO.

629 N. La Brea, Los Angeles 36, Calif. • Webster 8-3863

Seattle • San Francisco • Pomona • Long Beach • Arkansas City, Kan. • Fort Worth • St. Louis

Phoenix • Salt Lake City • N. Hollywood • N, Kansas City, Mo. • Chicago • Denver • Dallas
They were browsing around in the new homes section.
Then it caught her eye. She pointed. So they stopped to look.
That gloved hand set up a chain of events.
She was attracted by the distinctive beauty of the Ro-Way garage door inviting inspection of the entire home.
They both figured (logically) that the builder hadn't skimped—anywhere!
They're the kind of people who like to get their money's worth ... today's smart buyers ... your new home prospects.
We think maybe a Ro-Way door helped sell the home they finally bought.
**TOOLS AND EQUIPMENT**

**Shure-Set tool can be used on steel and concrete**

Ramsay's new Shure-Set fastening tool is recommended for some 158 light fastening uses which include seating fasteners into light steel and concrete. Tool has base plate designed to level at right angles to work and protect surface from misaimed hammer blows. Neoprene hand grip keeps hand from sliding. List: $27.95. Packaged in metal carrying kit with long and short collars, \( \frac{1}{4} \)" and \( \frac{1}{16} \)" stud holders and drive rods. Discounts available. Clarke Tryon, Dept. AB, Ramsay Division, Olin Mathieson Corp., 12117 Berea Rd., Cleveland, Ohio.

Circle No. 8044 on reply card, p. 148

**Now construction materials can travel by rail**

The Rex Railporter is a portable transport for construction material which runs on a single rail. Loaded at point of supply, Railporter is started by engaging a clutch lever, follows rail unattended to destination where it stops automatically. Workers discharge hopper and return to loading point. Rail sections can be laid in a few minutes. Carries up to 1400 lb. or 13 cu. ft. liquid capacity. Running speed: more than 300 ft. per minute. Powered by 6 h.p. gasoline engine. Complete information from Chain Belt Co., Attn. Robert W. Engbring, Dept. AB, Milwaukee, Wisc.

Circle No. 8045 on reply card, p. 148

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**Structural Corrugated Glass Partitions Featured in 532-Home Long Island Development**

Quick sales of these fine homes show that the buying public approved the use of Mississippi Structural Corrugated glass partitions. The rhythmic pattern of the glass adds a note of distinctive styling and the rooms are flooded with softened, "borrowed light" that makes them seem more spacious and cheerful.

Yes, eyes become buyers when Mississippi Structural Corrugated glass, the modern material, is used to add sparkle to homes. Structural Corrugated glass is simple to install...so bright to behold...and it sells on sight.

Consider the use of Structural Corrugated Glass in your construction. Specify glass by Mississippi. Available in a wide variety of patterns and surface finishes wherever quality glass is sold. See your supplier today.

Write for free booklets, "Modernize Your Home With Decorative Glass" and "Figured Glass by Mississippi." Many ideas on ways to use this translucent figured glass in homes and commercial buildings. Address Dept. 34.
This is the Heatmaster System
...the ultimate in home heating and air conditioning

- Pre-engineered...new C-E Heatmaster is a ready-to-install year 'round comfort system.
- Packaged...standard piping and wiring materials and practices used for installation. No special equipment required.
- Easy to sell to builders...gives benefits no other system offers.
- Unit installs in 4-square feet of floor space...economical air conditioning with luxury of hot water heat; individual room control; priced to compete with any other system.
- Your opportunity: unlimited.

Here's the complete, compact C-E Heatmaster Home Heating and Air Conditioning System: efficient, gas-fired boiler unit, completely assembled with burners, circulator, controls, relays and all operating parts in place; a matching, hermetically sealed water chiller, completely assembled with compressor, evaporator, condenser and refrigeration controls in place (unit factory-charged with refrigerant); space-saving individual room convectors for heating and air conditioning through one compact convector in each room.

Here's why the Heatmaster System generates enthusiasm

The luxury and economy of hot water heat can now be combined with individual room control of heating and summer air-conditioning. Here, in this new pre-engineered, packaged system, builders and plumbers have features that simplify installation, cut costs, save time, and also appeal strongly to home buyers.

The complete "package" is ready to install for both winter heating and air-conditioning. It uses conventional piping and wiring. No special equipment or materials. Only normal plumbing skills. Room convectors fit between standard wall studs. The unit requires only four square feet of floor space.
PERFORMANCE PROOF:
Here's what the builder, plumber, homeowner say about a typical C-E Heatmaster installation:

THE BUILDER, GEORGE CARTER, SAYS, "I RECOMMEND IT"

"This new 'wet' system costs less to install. This house would require a five-ton forced air system, but with C-E HEATMASTER only a three-ton unit was needed. That means lower operating costs, which the buyer likes. There were no complications in construction. Floor is slab, and we installed piping before slabs were laid. I recommend it."

THE PLUMBER, VIRGIL MURRAY, SAYS, "SIMPLEST SYSTEM"

"C-E Heatmaster is the best and simplest system of home heating and cooling I know of. I recommend it. It's easier to install than a bathroom. Simply connect the piping to the package unit and the convectors in each room. About 50 manhours were required here. The whole summer-winter package is installed in a three-by-five closet."

Master Plumber Virgil Murray, who installed the plumbing in the Duckett home in Tyler, Texas, always keeps abreast of modern developments in his field.

THE OWNER, W. B. DUCKETT, SAYS, "BIG ADVANTAGES"

"This C-E Heatmaster system has proven more convenient, cleaner, more comfortable and efficient than the forced air systems I am familiar with. I consider it the most modern system I could install, based upon sounder engineering than the typical forced air system, which subjects a person to gusts and surges of hot or cold air. Individual room control makes for big advantage."

Take advantage of the many benefits C-E Heatmaster Home Heating and Air Conditioning offers by sending for more information now. Ask about the ABC Plan for builders.

HEATMASTER
HOME HEATING AND AIR CONDITIONING
the simplest way to heat and cool a home

COMBUSTION ENGINEERING INC., Home Equipment Division
971 West Main Street, Chattanooga, Tennessee

AUGUST 1956
Ever try driving a nail into concrete? Now you can do it easily, with SHURE-SET, the new tool that guides fasteners into mortar, concrete—even steel!

Simple, easy and inexpensive—the SHURE-SET tool uses no outside power—just makes your hammer power more effective. This tool holds and directs fasteners with pin-point accuracy—ends pre-drilling, star drilling, filling, plugging and chipping. Saves time, money and effort.

There’s no bend, bounce or buckle with SHURE-SET. Pins and studs go in where you want them. Ends the frustration, uncertainty and waste of other methods.

SHURE-SET by the makers of Ramset®—gives you a real advantage over old-style methods. Get the jump on your competition. Ask your supplier, or write now for full details.

COMPLETE KIT contains everything you need.
If you sell competitively to new construction... you need more than advance information on new construction projects—you need the fastest, most complete news service you can economically use—here's why **Dodge Reports** meets your needs:

**BETTER REPORTING**

More than 1000 Dodge Reporters located in every local area east of the Rockies give you faster, better coverage of the news, because only Dodge with this great reporting staff, backed by the prestige of Dodge Publications and Services, has such welcome access to so many news sources in all construction fields.

**BETTER SERVICE IN ALL THREE SPECIALIZED FIELDS OF CONSTRUCTION**

Only Dodge gives you three specialized services to fit your major interests. This specialization is one of the reasons for the better, fuller reporting that Dodge subscribers enjoy. More economical, too!

**INDIVIDUALIZED FOR YOU**

From the specialized Dodge Service, or Services, you select only the type and size of projects on which you require advance information. In General Building you may choose all or any selection from among 26 classifications... in Houses 3... and in Engineering 11.

Isn't this better than wading through heaps of omnibus news on all types of construction to find your live prospects? — Certainly it is more economical and resultful!

**FOR FULL INFORMATION ON DODGE REPORTS SERVICES WRITE TODAY. OR USE COUPON BELOW**

F. W. Dodge Corporation, Construction News Division
119 West 40th Street, New York 18, N. Y.

Please let me see some typical Dodge Reports for my area. I am interested in:

- [ ] Houses
- [ ] Engineering Projects
- [x] General Building

Name__________________________________________
Company_______________________________________
Address________________________________________
City_________ Zone______ State______

AUGUST 1956
take a good look at **ENGELMANN SPRUCE**

one of 10 woods from the **WESTERN PINE** region

Extremely light and strong for its weight, smooth and soft-textured, straight-grained — Engelmann Spruce has a wide range of uses from rough construction to fine interior finish. Its nearly-white color, small knots, ease of working suit it for paneling, moulding, window frames and built-in furniture.

Engelmann Spruce comes in 3 select, 5 common, 4 dimension grades. You can order it in straight or mixed cars— together with other woods from the Western Pine region—from most Western Pine Association member mills.

**the Western Pines**

**the Associated Woods**

Increased liveable floor space is an important reason for making "Every Interior Door a Sliding Door." When you specify Nordahl you assure lifelong, trouble-free operation for your buyers. Important, too, it saves you money: No service problems, reduced labor costs, and less materials! Nordahl sliding door frames literally open doors to more spacious living.

Get the facts to help you sell .

write for the FREE illustrated booklet to

WESTERN PINE ASSOCIATION

Yeon Bldg., Portland 4, Oregon
Smooth, easy-cleaning, decorative — uses for melamine laminate panels are multiplying fast!

Among the most decorative and durable of all plastic materials are the laminates made by fusing resin-impregnated paper into solid panels under high heat and pressure.

For many years these melamine laminates* have been a preferred surfacing for counters and work areas, as well as for fine furniture. Now their functional and ornamental qualities are being utilized for wainscoting, wall paneling, toilet partitions, doors, shower stalls, elevator cabs, push and kick plates, store and bank fixtures.

Easy-to-care-for melamine laminates require a minimum of maintenance — never need painting or finishing. The smooth surface washes clean with a damp cloth, and resists scratching, denting, chipping, cracking, burns and stains. It withstands heat up to 275° F. It is unharmed by alcohol, most acids and alkalis or boiling water.

Building suppliers stock melamine laminates in a wide range of deep tones, pastels, mosaics, marbleized effects, wood grains and all-over designs. The panels are available in two thicknesses (1/10 inches and 1/16 inches), in widths from 30 inches to 48 inches, and in lengths up to 16 feet.

These sheets cut neatly with a saw, and cement permanently to smooth plaster walls (cured), gypsum lath, sheathing grade plywood and building blocks. Properly installed, melamine laminates do not swell or warp.

*Monsanto supplies melamine resins for decorative laminates sold under these trade names: Consoweld, Corlex, Decarlite, Farlite, Fibersin, Lamin-Art, Micarta, Nevamar, Panelyte, Pionite, Plastilight, Railite, Resylite, Richelain, Textolite.

Present and future applications of plastics in construction are under constant study by Monsanto's structural Plastics Engineering Group.
You are invited to check them for expert technical counsel.
Monsanto Chemical Company, Room 1301, Springfield 2, Mass.
Homes with fireplaces sell faster... and more builders use Donley SUCCESSFUL fireplace plans and equipment

Recent surveys show that homes with fireplaces sell faster! And Donley is the builder's first choice for successful fireplace equipment. For over forty years, Donley has been the leader in the manufacture of metal components for successful fireplaces... fireplaces that when installed according to Donley plans assure trouble-free operation.

Send 75¢ today for the new 16th edition of Donley's "Book of Successful Fireplaces". Containing over 300 illustrations, this new 80-page book has complete step-by-step plans for building all types of fireplaces.

RIGID
... from top to bottom, side to side. No welds.

ROLL FORMED
... before steel is perforated. Openings placed exactly.

LEGs
... are of equal height. Uniform throughout.

STRAIGHT
... from end to end. No waves or ridges.

NAIL HOLES
... plentiful, staggered and elongated for ample nailing.

PERFORATIONS
... each stud indexed to align openings vertically.

New One Piece Roll Formed Stud
—Easy to Erect!

- Bostwick brings you Chan-L-Form... a new steel stud. Perforations are made after channel is formed. Openings are in line permitting easy placement of pipe or conduit. Rigid! Needs little or no preliminary bracing. Saves valuable man hours. Use Chan-L-Form! Sizes—2", 2¼", 3¼", 4" and 6". Don't wait!

See your dealer today!
For the latest charts and specifications, send for your new Chan-L-Form Catalog NOW!

THE BOSTWICK STEEL LATH COMPANY
103 HEATON AVE. NILES, OHIO

THE BROTHERS CO.
13910 Miles Ave. Cleveland 5, Ohio
Still more about air conditioning ... here's a full page of the latest manufacturers' literature. Complete Builder's Buying Guide begins on page 67. Use reply card on p. 148.

**INDOOR CLIMATE PROTECTION** all through the house offered by Timken-Scaife in a four-page brochure describing the firm's central air conditioning system. Photographs, cutaway drawings, and diagrams to illustrate the system in action. Air-cooler units for commercial building in a second brochure. Timken-Scaife Air Cooling, Scaife Co., G. M. Parker, Dept. AB, Oakmont, Pa.

Circle No. 8048 on reply card, p. 148

**COMFORT CONTROLS** with a “Tempo-therm” clock thermostat by General Controls. Four-page pamphlet with photographs, specifications and drawings describes the use of the thermostat as the heart of the comfort control system both for cooling and heating. Special air conditioning models available. Information from General Controls Co., Attn. Henry Safford, Dept. AB, 801 Allen Ave., Glendale 1, Calif.

Circle No. 8049 on reply card, p. 148

**LAKE-BREEZE COMFORT** at home is the title of Perfection's four-page brochure on its “balanced-comfort” air conditioning system. Builder's technical sheets showing various size and type models along with specifications, dimensions etc. also available. From Perfection Industries, Div. of Hupp Corp., Attn. Joseph Cully, Dept. AB, 7609 Platt Ave., Cleveland 4, Ohio.

Circle No. 8050 on reply card, p. 148

**WINTER AIR CONDITIONING** by Majestic in an eight-page bulletin complete with photos, cutaway drawings, specification and dimension tables. Companion air conditioning units for any type of Majestic furnace also detailed in two builder's brochures. Full information from Lewis Morton, Dept. AB, Majestic Co. Inc., Huntington, Ind.

Circle No. 8051 on reply card, p. 148

**LARGE CAPACITY AIR CONDITIONING** by Trane. New bulletin DS-399 has complete information on the largest capacity Trane centrifugals —“Duplex” CenTraVacs. CenTraVacs have two compressors on same side of a single evaporator and condenser with capacity of 1500 tons. Capacity tables, engineering data etc. included. From Trane Company, Dept. AB, La Cross, Wis.

Circle No. 8052 on reply card, p. 148

**BUILT-IN CONDITIONING** described in a four-page pamphlet by Lewyt. Air-conditioners suitable for apartments, residential buildings, motels and offices fit flush in wall. Photos, installation steps, diagrams and specifications included in the information. From Lewyt Air Conditioner Corp., Dept. AB, Long Island City, New York.

Circle No. 8053 on reply card, p. 148

**AIRLINE ENGINEERE** for life. Two eight-page brochures on Airline of Borg Warner system of central air-conditioning the home. Two, three and five-ton units depicted with photos, complete description of mechanism, plus detailed specification sheets. A “system for every situation” also described. Information from Ingersoll Conditioned Air Division, Borg-Warner Corp., Dept. AB, 760 E. Vine St., Kalamazoo, Mich.

Circle No. 8054 on reply card, p. 148

**COOLING BY WATER OR AIR** offered by Mor-Sun air conditioning. This six-page pamphlet pictures all types of firm's cooling systems including air-cooled residential, evaporator or condenser, air-cooled commercial, and water-cooled residential and commercial. Photos, dimensional drawings, specifications and other data. Morrison Steel Products Inc., Attn. C. A. Stahlka, Dept. AB, 601 Amherst St., Buffalo 7, N. Y.

Circle No. 8055 on reply card, p. 148

**AIR-COOLED ADD-ONS** by Janitrol, along with a waterless year-round air conditioner and the rest of firm's complete air cooling line all in a 12-page brochure. Photos, a great number of detail drawings, installation suggestions, specifications all included in the catalog, No. JS-257. From Janitrol Heating & Air Conditioning Div., Surface Combustion Corp., Attn. J. T. Calhoun, Dept. AB, Columbus 16, Ohio.

Circle No. 8056 on reply card, p. 148

**RESIDENTIAL CONDITIONERS** either air-cooled or water-cooled ... in an eight-page catalog by National-U.S. Radiator. Two, three, four and six-ton capacity models of various styles and adaptability pictured, diagrammed and detailed on specification sheets. File 30-F-1. From National U.S. Radiator Corp., Attn. Paul Conway, Dept. AB, P.O. Box 1047, Johnstown, Pa.

Circle No. 8057 on reply card, p. 148

**FRIGIDAIRE CONDITIONERS**, a complete line including air-cooled condensers, air-flow cooling coils, remote conditioners, multi-matic conditioners and master-matic conditioners, each described in one-page bulletins by Frigidaire. Photo, cut-

(Continued on page 194)
Builder shows three steps to

LIFETIME PERIMETER

1. Place Styrofoam flat on ground, next to exterior walls...

Wolfe & Gilchrist choose STYROFOAM for finest perimeter insulation

Keith Gilchrist, builder of contemporary homes, reports, "I've found Styrofoam the best ever for perimeter insulation in basementless homes. The way it protects against cold, heat and dampness is really something."

(All photos shown here were taken in Wolfe & Gilchrist's Holly Hill subdivision, northwest of Detroit, Michigan.)
Apply vapor barrier...

STYROFOAM® is a new kind of insulation—a Dow plastic foam—that resists rot, mold and deterioration. It has no food value—does not attract rodents and vermin.

A plank 9 feet long and 1 by 12 inches weighs less than 22 ounces! It's strong enough to support a commercial vehicle. Won't absorb water—even after a week's immersion only the open surface cells show any sign of moisture.

Here's an economical insulation—clean, easy to handle—available in various lengths, thicknesses. The thousands of tiny, noninterconnecting cells block out heat and cold. What's more, each cell lasts a lifetime!

PROVED FOR 10 YEARS—Since 1946, Styrofoam has established a consistent record of satisfaction in the field of industrial refrigeration. Here only the best is good enough.

Now that Dow has increased production, Styrofoam is available as comfort insulation. Builders, architects and home owners, too, can profit from its unique combination of properties.

AUGUST 1956

Pour concrete floor slab...

For further information, contact your nearest Styrofoam distributor:

Western Foam Products, Inc., Colma, Calif.
Pacific Foam Products Co., Los Angeles 13, Calif.
The Putnam Organization, Inc., Chicago, Ill.
Seward Sales Corp., Elkhart, Ind.
Styro Products, Inc., Kansas City, Kansas
Atlantic Foam Products Co., Ipswich, Mass.
Par-Foam, Inc., Detroit, Mich.
Floral Foam Products, Midland, Mich.
Edwards Sales Corp., Minneapolis, Minn.
Styro Sales Co., New York City
William Summerhays Sons Corp., Rochester, N. Y.
Structural Foams Inc., Cleveland, Ohio
The Emerson Co., Houston, Texas
Utah Lumber Co., Salt Lake City, Utah
S & S Sales Corp., Milwaukee, Wis.
Durofoam Insulation, Ltd., Kitchener, Ontario, Canada.

THE DOW CHEMICAL COMPANY, Midland, Michigan
Plastics Sales Department PL 533Y

you can depend on DOW PLASTICS
use SONOTUBE® fibre forms
for fast, economical construction!

Round columns of concrete formed with low-cost SONOTUBES are ideal for stilt and split level houses and houses at the beach, in the mountains or on any irregular terrain.

SONOTUBES can be hand-sawed to desired lengths on the job, are easily handled and require minimum bracing.

SONOTUBE Fibre Forms strip easily, too, after the concrete has properly set. You save time, money and labor with SONOTUBES.

Concrete columns formed by SONOTUBES have no mortar joints to loosen, no bricks or blocks to crack, no wood to rot.

Use SONOTUBES anywhere to form underpinning, gate posts, porch columns, driveway markers, stepping stones, etc. . . . and for interiors! Available in lengths to 50', from 2" to 48" inside diameters.

For the name of the dealer nearest you and for detailed technical information and prices, write

Sonoco Products Company
CONSTRUCTION PRODUCTS DIVISION
HARTSVILLE, S. C.

Los Angeles, Calif. Montclair, N. J.
5955 South Western Ave. 14 South Park Street
Akron, Ind. * Longview, Texas * Brantford, Ont. * Mexico, D. F.

Catalogs . . .
(Continued from page 191)

away interior shot, specifications included on each. From Frigidaire Div., General Motors Corp., Dept. AB, Dayton 1, Ohio.

Circle No. 8058 on reply card, p. 148

WATCHDOG CONTROLLING of home cooling offered in information from Minneapolis - Honeywell. Various devices that “stand guard” over residential cooling include: thermostats, air conditioning compressor controls, motor controls, pressure controls, water regulating valves, central control panels and dampers. Information from Minneapolis-Honeywell Regulator Co., Attn. Frank Miles, Dept. AB, 2753 Fourth Ave., Minneapolis 8, Minn.

Circle No. 8059 on reply card, p. 148

HOW TO ADD SELLING POWER in the form of built-in attic fans, ventilators, etc. is the subject of a 26-page booklet and literature from Emerson Electric. Fully illustrated with every type of office and residential fan, plus complete specifications, installation shots, combination ideas. From Emerson Electric Mfg. Co., C. A. Swanlund, Dept. AB, 8100 Florissant Ave., St. Louis 21, Mo.

Circle No. 8060 on reply card, p. 148

MOTEL AIR CONDITIONING along with cooling for multi-room buildings thoroughly covered in Remington’s 26-page catalog on the incremental system of air conditioning. Prepared especially for architects, engineers and builders of such structures, book has cost tables, installation photos, specifications and a good deal of technical data. From Remington Corp., Air Conditioning Div., Attn. W. W. Merritt, Dept. AB, Auburn, N. Y.

Circle No. 8061 on reply card, p. 148

COLOR KIT from Arco Paint includes, among many other things, swatches of more than 56 colors of exterior house paints, interior oil paints and enamels. Some 110 color schemes suitable for large scale developments or for single unit building, plus specification sheets, and detailed information . . . all in the 22-page brochure. Arco Co., Dept. AB, 7301 Bessemer Ave., Cleveland 27, Ohio.

Circle No. 8062 on reply card, p. 148

(Continued on page 196)
Wall-to-wall valance lighting dramatizes draperies and ceiling. The lighted wall bracket over the buffet is another instance where Light for Living provides an excellent selling tool in a builder's model home. Light for Living lets your prospective buyers "picture themselves" in your home. Builders everywhere are finding that Light for Living makes friends fast, and helps sell homes even faster... more profitably!

Light for Living provides a visible, dramatic selling tool in every room of your homes!

Next month, during National Home Week, watch! See the growing number of custom and merchant builders using Light for Living as a profit-making, traffic-building sales tool. Because Light for Living is so dramatic, so easy to see and appreciate, it is the showpiece of Live Better Electrically—and an important part of "Operation Home Improvement" and the national "House Power Program."

HERE'S A COMPLETE PACKAGE of 8 helpful booklets to help you create Light for Living in the homes you build. You'll get many excellent ideas to help add sales value through better lighting. It compares the cost of Light for Living with 39 other home selling features; shows how to make rooms seem larger with wall and valance lighting, more dramatic with downlights and spots. Gives tips on choosing fixtures. Plus a pocket-size copy of "How To Decorate And Light Your Home"—an authoritative book which wins high praise from decorators, architects and builders everywhere—and sells for $6.75 in the hard-cover edition. Make Light for Living sell more homes for you—faster and more profitably.

THE WHOLE LIGHT FOR LIVING STORY IS IN THIS NEW BUILDER'S PACKAGE—YOURS FOR ONLY $100
- Builder's Book Of Lighting
- Lighting Fixture Guide
- How To Decorate And Light Your Home
- Wall Lighting Guide
- Lighting Recipes
- Dimming Systems
- Outdoor Lighting
- Selling Sentences

Clip this coupon and mail it with $1.00 today!

General Electric Company, Large Lamp Dept. AB-8
Nela Park, Cleveland 12, Ohio

Please send me Builder's kits at $1.00 each.

NAME: ___________________
ADDRESS: ___________________
ZIP: ___________________
STATE: ___________________

Progress Is Our Most Important Product
NO BLISTERS

with

ARCO ALCYD HOUSE PAINT...

Test panels of Arco Alkyd House Paint and others were weathered outside for four months ... then attached to a test house for another four months. Inside a 75 degree temperature and a 70% relative humidity were maintained at all times. Arco proved most resistant to blistering. It was also demonstrated that Arco had the best adhesion characteristics.

Why not use Arco Alkyd on your next house? It flows on easily, dries fast ... is ready for recoating in only four hours. Its beautiful fade resistant colors defy wind, rain and snow—keep that fresh new look for years.

THE ARCO COMPANY
7301 Bessemer Avenue
Cleveland 27, Ohio

Gentlemen:
Please send me Arco's New Color Styling Kit complete with 111 professionally styled color schemes and 56 swatches to guide me in color styling and plot development.

NAME
COMPANY
ADDRESS
CITY

Circle No. 8063 on reply card, p. 148

Catalogs...

VARIETY IN PRE-BUILT HOMES made by Thuro Bilt. Information available on firm's line of homes which range in price from $8,000 to $20,000, include masonry, split level and contemporary designs. Featured is Contessa model in $12,000 price range with three bedrooms, 42' x 26' dimensions. Information from Thuro-Bilt Homes, Dept. AB, Fairbury, Ill.

Circle No. 8064 on reply card, p. 148

ABRASIVE WHEELS for building and construction trades pictured and described with detailed specifications in two catalog sheets from Simonds. Cut-off wheels for portable electric saws, cup wheels for portable grinders, information on just which wheel to order for which firm's tools. From Simonds Abrasive Co., Dept. AB, Philadelphia 34, Pa.

Circle No. 8065 on reply card, p. 148


Circle No. 8066 on reply card, p. 148

WHITESTONE MARBLE for roofing of homes, commercial buildings and institutions suggested in this four-page brochure from Willingham-Little. Marble from Georgia recommended for its insulation qualities, handsomeness, economy, and maintenance-free durability. From Willingham-Little Stone Co., Dept. AB, Atlanta, Ga.

Circle No. 8067 on reply card, p. 148

PREFAB FLOOR PLANS from Douglas offered in three folders showing 15 basic floor plans, 20 elevations and 150 variations. All with three bedrooms and one or more baths. In four price classes from $9,500 to $19,000 complete with lot. Another folder on builder-dealer franchises. From A. H. Lubin, Dept. AB, Douglas Homes Co., 1830 N. Grand Ave., Springfield 14, Ill.

Circle No. 8068 on reply card, p. 148

(Continued on page 198)
STREAMLINED
NUDOR
The Quality Aluminum Sliding Glass Door

ADDITIONAL NUDOR FEATURES
- Rich Alumilite Frames
- Luxury Plexiglas Handle.
- Adjustable Nylon Rollers.
- No Draft Weatherstrip.
  (certified wool pile)
- Adjustable Glass Stop.
- Adjustable Locking Hardware.

NUDOR'S QUALITY CRAFTSMANSHIP ASSURES
A LIFETIME OF TROUBLE-FREE OPERATION.

Nudor Step-Ease Threshold
NO TRACK TO TRIP ON

The Step-Ease threshold is an exclusive NUDOR feature. It can be mounted directly on finish floor in minimum time...no special construction or floor recessing for track necessary.

DOOR ROLLS ON FLAT STREAMLINED SILL...NO TRACK TO TRIP ON

Specifying NUDOR Horizontal Sliding Windows
Complete Your All-Weather Protection. Install NUDOR HORIZONTAL SLIDING WINDOWS.
- Finger-tip operation, rolls on nylon wheels...
- Certified Wool Pile Weatherstripping...
- Easy Installation. All advantages with same quality craftsmanship as NUDOR Sliding Glass Door.

See your NUDOR Distributor.

The Quality Aluminum Sliding Glass Door and Window Institute

Manufactured by NUDOR MANUFACTURING CORP., 7326 Fulton Ave., No. Hollywood, Calif.

"Member of the Sliding Glass Door and Window Institute"
Ohio contractor grades 3 subdivisions at once

In Columbus, Ohio, A. W. Burns & Sons Construction Co. contracted to level land and grade streets for three suburban housing projects located within a 5-mile radius.

To handle this hit-and-run earthmoving, the Burns Company used one 7½-yd. D Tournapull and one motor grader. Fast, 138 hp, rubber-tired “D” traveled between projects at traffic speed, through city streets, over regular highways. Machine shuttled back and forth to level land, cut drainage ditches, and sub-grade streets; often working in wet, slippery conditions. Finish-grading was handled by grader. Work on all three projects, was kept ahead of the building crews at all times.

"Very good for sub-grading"

Mervin S. Day, General Manager for Burns Construction Company, said, “The D Tournapull is very good for sub-grading on any job." According to Burns Company Officials, daily lubrication of “D" took only 10 to 15 minutes. The “D”s" electric controls made precision grading possible, with safer maneuvering between foundations and in other tight places. Big rubber tires rolled safely over soft clay and sand, worked over rough and uneven footing, did no damage to landscaping, curbs, and pavement.

Cut costs on your land-leveling

Look into the advantages of speed and mobility of Tournapulls for your scattered land-leveling, landscaping, street grading, and drainage assignments. Find out how the scraper may be interchanged with rear-dump, bottom-dump, or side-dump trailing units, or with go-anywhere lift-and-carry crane to increase future earning opportunities. Write for details.

If your earthmoving is done by outside contractors, write us for a list of contractors in your area using modern LeTourneau-Westinghouse earthmoving equipment. No obligation.

LeTourneau-Westinghouse Company
Peoria, Illinois
A Subsidiary of Westinghouse Air Brake Company

WATER LEAKAGE PROTECTION

FROM ROX MASONRY paint presented in a series of pamphlets: For use in basements, on exterior brick walls, floors, patios, driveways, swimming pools. Rox is pictured along with details on its applications and color chart of its six shades. From Rox Products Co., Dept. AB, Detroit 27, Mich.

Circle No. 8068 on reply card, p. 148

PRE-ENGINEERED STEEL buildings for churches, supermarkets, schools, offices and other commercial uses explained in a 16-page booklet from Butler Mfg. Photos, diagrams, and construction details plus basic designs and various methods of finishing them included in this information-packed catalog. Butler Manufacturing Co., Dept. AB, 7400 E. 13th St., Kansas City 26, Mo.

Circle No. 8069 on reply card, p. 148

PORTABLE POWER TOOLS by Skil: a complete listing of more than 100 models and accessories presented in a 58-page catalog. Many items shown pictorially to show construction details. Application and performance of tools, plus special section on working with plastics, laminates, metals and composition products. Skil Corp., Dept. AB, 5033 Elston Ave., Chicago 30, Ill.

Circle No. 8070 on reply card, p. 148

FOR A SLIGHT CHARGE . . .

SEPTIC TANKS, HOW AND WHERE to install them are the subject of a 16-page booklet by Brown Co. Contains complete instructions from choosing of site to grading land, building tank, tank cover, disposal field etc. All with detailed diagrams and plenty of information. Price: 50 cents. Brown Co., Dept. AB, 150 Causeway St., Boston, Mass.

NOW - THE
LOWEST PRICE
HIGH QUALITY
VAPOR BARRIER
YOU CAN BUY

SISALKRAFT
VAPORSTOP

For under concrete floors and in crawl spaces to assure DRY FLOORS at minimum material cost and lowest applied cost.

New Sisalkraft VAPORSTOP is fungicide-treated. It will stop the upward passage of moisture from the ground — for the life of the structure.

It gives you freedom from complaints... helps build your reputation!

Sisalkraft VAPORSTOP also lowers labor cost. Its wider width rolls means less laps, more coverage, less waste. Tough and strong, this new material can be handled without "kid gloves"... won't easily rip or tear.

Initial cost of Sisalkraft VAPORSTOP is lowest of all! Accepted by FHA and VA for use over sand, gravel, crushed rock, earth, etc.

Look at these job-size rolls:

<table>
<thead>
<tr>
<th>Size</th>
<th>36&quot;</th>
<th>48&quot;</th>
<th>60&quot;</th>
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<tr>
<td>Roll</td>
<td>500 sq. ft.</td>
<td>500 sq. ft.</td>
<td>1200 sq. ft.</td>
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<tr>
<td>Roll</td>
<td>72&quot;</td>
<td>84&quot;</td>
<td>96&quot;</td>
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<tr>
<td>Roll</td>
<td>1200 sq. ft.</td>
<td>1200 sq. ft.</td>
<td>1200 sq. ft.</td>
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</table>

Available at Lumber and Building Material Dealers

American SISALKRAFT Corporation
Here's the SISALKRAFT Line

The One Best Way to CURE & PROTECT CONCRETE

Genuine Orange Label

SISALKRAFT WATERPROOF, REINFORCED BUILDING PAPER

New, Permanent VAPOR BARRIER for under slabs and as a ground cover in crawl spaces

SISALKRAFT MOISTOP Polyethylene coated, rot-resistant Sisalkraft. Resists punctures, abrasions. Meets FHA minimum property requirements.

Low cost, permanent copper for CONCEALED FLASHING, thru-wall flashing and other waterproofing

COPPER ARMORED SISALKRAFT Pure Anaconda copper bonded to reinforced crepe kraft.

REFLECTIVE INSULATION and Vapor Barrier

SISALATION Moisture-proof, reinforced double kraft paper coated two sides with pure, polished aluminum.

Pure POLYETHYLENE FILM

SISALITE Waterproof, transparent, light-weight, economical, plastic film

See your Lumber & Building Material Dealer or Write for samples and bulletins showing application methods.

AMERICAN SISALKRAFT CORPORATION
CHICAGO 6 • NEW YORK 17 • SAN FRANCISCO 5
NOW Get the INSIDE TRADE FACTS on
HOUSE CONSTRUCTION DETAILS
Save Money and Time—Get Better Construction—
with these Professional Methods

Here, at last, is an exact working guide on every
detail of house construction from foundation to
finish. Tells you dimensions, materials, processes,
step-by-step working methods. Hundreds of scale
drawings and photographs make every step easy to
follow. Can be used for alterations in a set of stock
plans, for making additions or changes in a building,
or for complete construction of a dwelling.

Conforms with modern practice and building
regulations in all parts of the country. A book
you will refer to for years! The professional guid-
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Dormers • Siding and shingling • Cornices
• Porches • Exterior walls of wood • Ex-
terior walls of brick • Interior walls
finished in plaster, in plywood • Wall
panels • mouldings for interior trim •
Stair construction • Windows • Sash de-
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and door trim • Hardware used in dwell-
ings • Closets, shelves, built-in equipment
• Breakfast alcove • Sewing room • Floor-
ing • Chimneys and fireplaces • Mantels
and seats • Outdoor fireplaces • Scaffolds
• Garages • Electric wiring • Insulation
• Arches and gates • Lattice porch, lattice
trellis • Garden benches, tables • Swings
and other garden furniture • Picket fences
• Log cabins, camps, cottages • Barns
• Feeders and nests • Rabbit hutch • Septic
tank • Painting and finishing • Heating
systems • Air conditioning systems • Pre-
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which you want Modern
Authoritative Guidance.

236 Pages, Soft Cover, 12, Fully
Folioed. 2000 Illustrations.

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Send me for 10 DAYS' FREE EXAMINATION, "House
Construction Details." I will either return it in 10 days and
owe nothing, or send only $4.95 (plus shipping charges) in
full payment.

Name _______________________
Address _______________________

City & State _______________________

SAVE! Send $4.95 with this coupon and we will pay
postage. Same return and refund privileges.
Builder R. H. Curry (above left and inset) of R. H. Curry & Son, Charlotte, N. C., demonstrates importance of condensation control to homebuying couple.

“...not one case of blistering paint since we switched to Alfol Insulation!”

R. H. Curry of Charlotte, N. C., is a veteran builder who knows the importance of condensation control. "Blistering paint, rotting timber...I've seen too much of condensation's work," writes Mr. Curry, "to take a chance on my reputation. That's why we use Alfol Aluminum Foil Insulation!"

Positive vapor barrier
Mr. Curry knows that Alfol is the insulation that can neither pass nor hold moisture or vapor. Nothing "spongy" about Alfol. Its high thermal efficiency derives purely from the reflective action of multiple aluminum foil sheets. And its kraft-and-duplex backing provides a vapor barrier that is both positive and continuous.

By continuous, we mean Alfol delivers an unbroken seal from floor to ceiling, wall to wall. Application is across face of studs. No wonder Mr. Curry can report, "...not one case of blistering paint since we switched to Alfol Insulation!"

Free data book
The causes and effects of moisture condensation are covered comprehensively in the big new 24-page Alfol data book. Why not send for your free copy today? Learn how Alfol can give you better construction at lower cost.
TENSION BAND does it

Only READY HUNG DOORS are shipped in an ENGINEERED PACKAGE to assure delivery with JOINTS SQUARE and TIGHT.

CRATED* FOR DELIVERY IN PERFECT CONDITION

Tension in the steel band exerts equalized pressure (indicated by the arrows) at the corners to draw the frame in tight contact with the rigid door. Frame joints and mitres are therefore rigidly held square and tight by the door itself.

Spacer blocks between the door and frame serve a dual purpose:
1. They block the frame around the door during shipment, and,
2. Are used to maintain proper door clearances while the door is being installed. Faces are protected by cardboard when shipped by common carrier.

CALL YOUR LUMBER DEALER • READY HUNG DOORS MADE BY THESE LEADING WHOLESALERS

ALBANY, N. Y. Iroquois Millwork Corp.
Baltimore, Md. Central Building Supply, Inc.
BIRMINGHAM, ALA. National Woodworks, Inc.
BUFFALO, N. Y. Iroquois Door Co.
The Whitmer-Jackson Co., Inc.
CINCINNATI, OHIO Acme Sash & Door Co.
CLEVELAND, OHIO The Whitmer-Jackson Co.
DAYTON, OHIO Dayton Sash & Door Co.
DENVER, COLORADO Iroquois Door Co.
DENVER, COLORADO Lampert Company
HUNTINGTON, W. VA. Iroquois Door Co.
HOUSTON, TEXAS Southwest Sash & Door Co.
INDIANAPOLIS, IND. Midwest Building Industries, Inc.
LOS ANGELES, CALIF. Ready Hung Door Mfg. Co.
MARBOROUGH, IND. General Millwork Corp.
NEW YORK, N. Y. Bailey Whalen Co.
SIOUX FALLS, S. DAK. Ready Hung Door Mfg. Co.
ST. PAUL, MINNESOTA Minnesota Wood Specialties, Inc.
ST. PAUL, MINNESOTA Bailey Whalen Co., Inc.
ST. PAUL, MINNESOTA railroad Door Co.
TORONTO, CANADA The Whitmer-Jackson Co., Inc.
WACO, TEXAS Iroquois Millwork Corp.
TEXAS The Whitmer-Jackson Co., Inc.
WASHINGTON, D.C. The Whitmer-Jackson Co., Inc.
YEAL, CALIF. Ready Hung Door Mfg. Co.
ZIONVILLE, IND. General Millwork Corp.

AUGUST 1956
Now BURLINGTON'S ROLLING WITH WALLBOARD

More Gold Bond Gypsum Wallboard for Today's Building Needs

The Gold Bond Gypsum Wallboard you'll build with today... the Gold Bond Gypsum Wallboard your customers will live with tomorrow... that's what is rolling off the production lines at National Gypsum's new Burlington, N. J., plant right now.

This plant, one of the most modern in America, is National Gypsum's 38th and is another planned step in the company's five-year, $95,000,000 expansion program. Burlington now supplies the growing Delaware Valley U. S. A. trading area. This means relief for other Gold Bond plants... more Gypsum Wallboard for dealers and builders all along the line.

Gold Bond's top quality Gypsum Wallboard built the demand that built the Burlington plant. This same high quality board will continue to be produced at this new plant. For the full story on how Gold Bond Gypsum Wallboard ties in with the building plans for a growing America, write today. National Gypsum Company, Buffalo 2, N. Y.

GYPSUM WALLBOARD PRODUCTS

NATIONAL GYPSUM COMPANY

Gold Bond
BUILDING PRODUCTS

AMERICAN BUILDER
Supports for ceiling board

Here's a handy way of dealing with one of the most irritating problems of drywall construction: holding up the board while it is nailed off.

In picture 1, wooden strips are nailed across the previously placed board, projecting an inch or so beyond the edge. If the board is at the edge of the ceiling, a wood strip nailed to the plate would serve the same purpose. Nail holes are later filled with spackle.

In picture 2, one end of the next board is slid under the projecting strip ends.

In picture 3, the other end of the board is pushed against the joists, and held by two or three revolving strips (shown below). A single spike both holds this lock in place and serves as the swivel shaft. The thickness of the block between swivel and joist should be an eighth of an inch or so more than the thickness of the ceiling board.

In picture 4, the ceiling is nailed off, the strips removed.

Wm. Leczo, Norwalk, Conn.

Eliminate black marks

The aluminum base plates of power saws and routers will often leave black marks as they rub across the work. If the work involved is to have a natural finish, this can present a serious problem. A piece of the laminated plastic used for counter tops can be cemented to the bottom of the tool being used, and will prevent the making of these marks.

D. F. Crandall, Copake, N. Y.

How to keep nosing clean

Before setting into place the cast iron nosing for concrete stairways, try rubbing yellow laundry soap into the corrugations. This will keep the concrete from getting into the corrugations and setting up. Then, once the concrete has hardened, the soap can be removed with a stiff brush.

J. M. Tillett, Knoxville, Tenn.

Expand the garage

Here's a gimmick for the customer (or builder) who has a gar-

(Continued on page 206)
ANNOUNCING...
New Remington
Cartridge-Powered Tool
for Stud Fastenings

REMINGTON 'MIGHTY MITE'
STUD DRIVER sets a stud a
minute in steel or concrete!

Here's the "MIGHTY MITE"—small but
powerful partner of the full-size Remington
Stud Driver—the answer to any job re-
quiring a 1/2" diameter stud. It's the perfect
tool for builders, light contractors and the
"do-it-yourself" market... can be
rented or purchased. You can buy it
for only $34.75!

The "MIGHTY MITE" has
only three parts to handle... easy to load
and operate. The upper assembly is
unscrewed, the 22 caliber cartridge
with the desired 3/4" stud is inserted,
and it's ready to go. One rap of the
hammer on the firing pin, and
"MIGHTY MITE" rigidly anchors
wood sections or steel fixtures to
concrete or steel! No pre-drilling
required.

Safe, too. It's non-tilt—cannot be
fired at an angle; cocks only when
held in the proper firing position;
must be pushed firmly into position to
expose the firing pin. A four-inch-
square guard provides full protection
to the operator.

Send for the facts about the
REMINGTON "MIGHTY MITE"
—small, powerful and ideal for your
construction job—at the lowest pos-
sible price—

ONLY
$34.75

Keep blades clean

When a reinforced carborundum
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Write for “How to Select the Hunter Package Attic Fan to Cool Your Homes.” See our file in Sweet's.
Insulated broiler house
for raising healthy birds

QUESTION: I would like to get into poultry farming on a big scale. Where can I find plans for a good broiler house? I would appreciate any help you can give me as I would like to get started.

Henry Niesen, Watertown, S. D.

ANSWER: A broiler house of the type shown here may be built for about $1.35 to $1.50 per sq. ft. Figure ¾ sq. ft. of floor area per bird.

Be sure that both ends of house have louvers and that you install exhaust fans to carry off the dust—especially important to cut down respiratory diseases.

Vermiculite insulation may be poured between studs and ceiling joists to maintain constant temperatures.

Has drywall woes

QUESTION: Is it true that most drywall fix-up jobs end in failure? I have a living room ceiling with nail indentations. Also in some places the butt joints are showing through. My contractor has agreed to fix them but doesn't guarantee the job.

Gordon F. Rietveld Milwaukee, Wis.

ANSWER: Wait until the heating season is over. Then the lumber in your house will have dried out. Resetting nails, repatching with joint cement is procedure most often used. Driving new threaded nails will help. Heavy sanding of joint edges also may be in order.

Wants new church floor

QUESTION: We want to put in a wood floor with asphalt tile in the basement of our church. What is the best procedure to follow to avoid cold and dampness.

Michael Youchak Johnstown, Pa.

ANSWER: Lay 2" x 2" wood sleepers on a bed of hot asphaltum or building paper. Over these nail ½" plywood sheathing, then more building paper and finally your asphalt tile. Use treated lumber if you can afford it for moisture protection.

Crawl space insulation

QUESTION: We would like to insulate a crawl space against moisture and cold. Should we lay roofing paper on the ground and would it be satisfactory to use sand to hold it in place?

W. Rulon Lee Corvallis, Ore.

ANSWER: Roofing paper may be laid (Continued on p. 211)
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under crawl spaces to retard moisture. But spreading sand over it will retain moisture. A better way is to pour a 2" screed coat of concrete over sand or cinders and pitch it sufficiently for drainage.

By all means insulate between your floor joists for protection against cold and drafts.

Stains on cedar siding

**QUESTION:** After the last two hurricanes large black stains appeared under the edge of the cedar siding on the north and east sides of my house. There are also black spots around the sheathing nails. Can you tell me what to do about them?

**H. K., Vineland, N. J.**

**ANSWER:** Red cedar siding contains a material which is water soluble. If stains have not become oxidized you can remove them with a solution of equal parts water and alcohol. If stains are oxidized try a strong concentrate of trisodium phosphate and water. Check siding carefully for openings, which should be sealed against further damage. If siding nails are not galvanized or aluminum, problem may recur.

To screed or not to screed

**QUESTION:** When pouring a concrete slab is it necessary to provide screeds for a level floor. How do you keep stakes from puncturing the vapor barrier. Will this destroy the value of the vapor barrier?

**Michael Youchak, Johnstown, Pa.**

**ANSWER:** It is virtually impossible to get a level floor without using screeds. To avoid driving stakes you can place two sets of screeds 10" o. c. the length of your slab and work from these. They can be secured with small mounds of concrete, later pulled out and their voids filled in.

What's with this "wet" paint?

**QUESTION:** We would like to know whether some paints being advertised from $8 to $10 a gallon will really stick on wet surfaces. They say it can be applied in a gentle rain. Please give us names and addresses of companies making this product.

**Pepke Lumber & Fuel Co. Detroit, Mich.**

**ANSWER:** Except for a damp coat enamel that can be applied to new damp plaster, there is no exterior paint, to our knowledge, that will work on a damp surface. If there is we would like to hear about it.

Wants to fence off sounds

**QUESTION:** Would you please send information regarding the construction of a frame fence for use as a sound barrier?

**V. F. Vanecek Cleveland, Ohio**

**ANSWER:** Wood is a good sound barrier and insulator. The thicker you make it the better. It should be a closed fence with no spacing in between posts. You could use undressed or rough timbers if cost permits.

---

**Get a problem you can't solve?** Write and "ASK THE EXPERTS." In addition to American Builder's own staff, your questions will be answered by Joseph Steinberg, head, and Martin A. Stempel, instructor, of the Construction Technology Department of New York City Community College.

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Schlegel Woven Pile makes air conditioning and heating systems more efficient and economical. It's part of every good window. When you specify windows, strengthen your sales story with Schlegel Certified Woven Pile Weather Seal.
Employer must prove inability to increase wages

By JOHN F. McCARTHY
Attorney-at-law

Good faith in labor negotiations may require the employer to produce its books and records showing its financial position. This was a recent decision of the United States Supreme Court in a case arising under the National Labor Relations Act, more generally known as the Taft-Hartley Act. See National Labor Relations Board vs. Truitt Manufacturing Co., No. 486—October Term—1955, decided May 7, 1956.

Section 8 (d) of the Act requires employers and employees to meet and confer in good faith with respect to wages, hours and other terms and conditions of employment. The Act, of course, does not require either party to agree to a proposal or to make a concession.

In the case under discussion, the union, representing certain employees of Truitt Manufacturing Co., asked for a wage increase of ten cents an hour. The company replied that it could not afford such an increase. It contended that it was undercapitalized and pointed out that it never had paid any dividends. It took the position that an increase of more than two and one-half cents an hour would put it out of business.

At that point the union asked that the company submit full and complete information with respect to its financial standing and profits. The union insisted that such information was essential for the employees to determine whether they should persist in their demands. The National Labor Relations Board required the company to comply with the union’s request. The Supreme Court agreed with the Board’s action.

The Supreme Court was careful to point out that it was not saying that in every case where an employer raised the issue of economic inability to pay increased wages, the employees were entitled to financial data. However, the Court observed that in this case both the company and the union, in their effort to reach an agreement, treated the company’s ability to pay increased wages as highly relevant.

The Court noted that under the Taft-Hartley Act both employers and employees were required to bargain in good faith. It emphasized that bargaining in good faith required claims of the employer or of the employee, as the case might be, to be substantiated. The Court concluded, therefore, that the National Labor Relations Board had properly required the Truitt Manufacturing Co. to submit financial data in support of its position. The Court, speaking through Justice Black, said:

“Good-faith bargaining necessarily requires that claims made by either bargainer should be honest claims. This is true about an asserted inability to pay an increase in wages. If such an argument is important enough to be present in the give and take of bargaining, it is important enough to require some sort of proof of its accuracy. And it would certainly not be farfetched for a trier of fact to reach the conclusion that bargaining lacks good faith when an employer mechanically repeats a claim of inability to pay without making the slightest effort to substantiate the claim.”
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Alert builders are quick to sense the public reaction to air conditioning and are using this as a plus feature in their homes. Because he chooses the type of equipment that is installed, the builder has the responsibility of providing his customers with a cooling system that will give complete satisfaction.

While he must rely on the manufacturer and the sub-contractor to provide a unit that will be adequate to meet the demands of the structure, there are factors of design and construction which he can control. Not only will these help to reduce the cooling load, resulting in the use of smaller equipment, but they also reduce the operational cost which is most important to the homeowner.

The major task of a summer air conditioning plant is to reduce the heat load within a structure. While the typical residence will have some internal heat gain from occupants, appliances and lights, all of which must be taken into consideration when estimating the capacity of the unit, the major heat gains come from external sources. The sun's effect on exposed glass areas, walls and roofs, as well as the outside air temperature, are the most important factors which can be controlled by the builder.

**ORIENTATION**

Properly oriented, the house can be designed and placed on the site so that the sun is excluded during the hottest months of the summer, yet is allowed to enter through the window areas, in the winter, when the heat is desirable.

From the standpoint of summer comfort, the major walls and glass areas should be on the south, where they can be protected from the sun, or on the north where the sun is negligible. Wall and glass areas should be kept at a minimum on the east and west. These areas are more difficult to protect, due to the low angle of the sun in the early morning and late afternoon.

The diagrams in figure 4 show graphically how proper orientation of the house can take fullest advantage of the shade provided by the roof overhang.

In developing the house plan in relation to the site, care should be taken not to place a paved terrace, driveway or other similar surface directly in front of glass areas facing south or west. The reflected heat rays from these areas can counteract the shading controls.

**SHADING**

Whenever possible, it is advisable to take advantage of landscaping and foliage as devices to provide shade to east and west walls. The reflected heat rays from these areas can counteract the shading controls.

Whenever possible, it is advisable to take advantage of landscaping and foliage as devices to provide shade to east and west walls. Figure 5 shows some of the methods which may be used.

Heat retarding glass is most practical for use with air conditioning and should be given consideration for glass areas which cannot be shaded by other methods.

In addition, the use of louvre-type insect screens can be as much as 80 per cent effective in reducing the heat load, particularly for windows with a southern exposure. They are only 25 to 50 per cent effective on the east and west, since here the sun's rays are lower and may pass through the louvres.

The principal shading device for the average home is the roof overhang. Properly designed this can keep out the sun's heat in summer, thus reducing the cooling load, yet allowing the entrance of these rays in winter to help reduce the load.

**Fig. 1 AIR CONDITIONING PRINCIPALS**

Schematic diagram shows how the air within a home is circulated through a central air conditioning system. The warm air from the room is passed over a cooling coil and returned as cool conditioned air. The heat that is removed from the air is eventually discharged from the house by means of a condenser which may be either an air or water cooling tower.

Hot water heating systems may be used for air conditioning. Room units containing both heating and cooling coils are used in place of the conventional radiator. Radiant panels may be used for cooling purposes but separate provision must be made to control the relative humidity to prevent condensation on coils.
The design of the overhang is dictated by the path of the summer sun which rises in the northeast and sets in the northwest. At noon, the sun is more directly overhead in the southern latitudes than it is in the north. Thus the overhang projection must be made greater for homes built in the north. Figure 6 shows a simple method of calculating this overhang. It will be noted that the multiplication factor is greater for Minneapolis than for Miami.

**INSULATION**

Insulate walls, ceilings and floors as proper insulation is just as effective in reducing cooling costs as it is for heating.

Any of the types of commercial building insulation which are effective for winter insulation are adaptable for summer cooling. Reflective types, such as aluminum foil, are particularly practical where the insulation job is primarily for reducing the cooling load, as this material reflects up to 95 per cent of the long ultra-violet rays of the sun.

**ATTIC VENTILATION**

In an unvented attic, under a dark roof, the temperature may register as high as 155° F. Adequate ventilation between the roof and the insulated ceiling can reduce the amount of heat that enters the house. The larger the ventilators the better. In any case, the vents for gable roofs should never be smaller than 1 sq. ft. of free area for each 100 sq. ft. of attic floor area and should be located so as to provide free air movement through the attic space. With flat, or very low pitched roofs, it is desirable to double this amount and can best be accomplished with continuous soffit or eaves vents.

**ROOFS**

A light colored roof may be an important factor in reducing the cooling load within a structure. For example: white asbestos shingles reflect as much as 55 per cent of the sun’s rays while black shingles of the same material have little or no reflection value.

Flat roofs, because it is difficult to provide an adequate air wash beneath the deck, can let 25 to 50 per cent more heat into the building than a gable roof adequately ventilated. Here the lack of ventilation can be partially overcome by using a light reflective roof surface, such as marble chip, aluminum or special white roof paint. These materials may reflect as much as 30 to 50 per cent of the sun’s rays.

**HUMIDITY CONTROL**

Part of the job of air conditioning equipment is to reduce the humidity of the air within the structure. Dry air gives a greater cooling effect even though the actual temperature may be higher than that associated with heating. To reduce

(Continued on page 218)
the load on the cooling plant it is advisable to check the points within the home that are the sources of water vapor production and thus provide a suitable remedy for reducing this load at the source.

Bathing, particularly showers, load the air with moisture. A shower curtain, of certain absorbent materials, will continue to give off moisture for several hours after use. Shower doors, tub enclosures and bathroom exhaust fans will aid in alleviating this condition.

Damp basements and crawl spaces can contribute to the moisture content of the air. Basement walls should be waterproofed and crawl spaces provided with adequate moisture barriers. Proper ventilation of these areas will also help reduce the moisture problem. A separate dehumidifier may be advisable, especially for damp basements.

ACKNOWLEDGEMENT

Portions of the material in this article have been reprinted by permission of the University of Illinois Small Homes Council from its copyrighted circular, "Summer Comfort." Other circulars in this series are available for 10 cents. For a list of publications, write to the Small Homes Council, Mumford House, University of Illinois, Urbana, Ill.

Credit is also given to the National Warm Air Heating & Air Conditioning Association, 145 Public Square, Cleveland 14, Ohio. For further discussion of this subject; Manual 11, "Summer Air Conditioning," is available at $1.00 per copy.

Fig. 5 SHADING DEVICES

Fences or tall hedges are good protection for east and west walls when the sun is low.

Canvas awnings can reduce the heat load on glass areas as much as 75%.

Trellis work with vines provides a "plant awning" in summer and allows winter sunshine to enter house.

Trees which shed their leaves provide shade in summer yet permit the winter sun to help warm the house.

Overhangs with adjustable louvres provide accurate control throughout the year as they may be closed for summer shading and opened in the winter to take full advantage of the warm rays of the sun.

Fig. 6 ESTIMATING ROOF OVERHANGS

To find the amount of roof overhang to cast a shadow desired on the wall or window use the following formula:

\[ \text{Shadow height} \times \text{Latitude factor} = \text{Amount of overhang needed.} \]

1. Determine the height of shadow, in inches, desired (see sketch).
2. Select the factor, from the table, which applies to your latitude.
3. Multiply the desired shadow height by the factor. The result will be the length of the overhang in inches.

Example:

- Shadow height desired: 60 inches
- Factor for 40° latitude: .71
- Length of overhang: 42.6 inches
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- 3/8" gypsum board & 1/2" ac tile
- 5-1/4" x 9-5/8" lam beam
- 3-4" to floor

- 4" insulation
- 2" x 4" studs at 16" O.C.
- 9-5/8" sheathing
- 1-0-1/2

- 1/4" bent plate with 1/2" cut plate stiffeners - all welded to 3-1/2" Ø sleeve over column
- 3" Ø pipe column
- 3-1/2" Ø sleeve

- GA steel perf plate
- 1-0-1/2 L cont & anch to floor

- Cont. nailers
- Tunnel

- Perimeter heating detail

- Stirrup detail

- Typical section
Located on a well-traveled street in Tucson, Ariz., this 46' x 61' office and showroom of the Corbett Lumber Co. is one of the many inspirational designs for commercial buildings to come out of the West in recent years.

Built at a cost of $10 per sq. ft., it is of post and laminated beam (Rilco) construction. The ceiling is part acoustical tile (Simpson) and part red cedar boards. No finish floor was added to the four-inch concrete floor slab.

One unusual feature, borrowed from church architecture is the use of leaded glass inserts (red, blue and amber) at three roof offsets in the south wall. (A Cleveland dealer is contemplating use of leaded glass across the whole 100' facade of his new building.)

This Tucson showroom has a 167,000 BTU Carrier air-conditioning unit and American Radiator boiler and water heater. The former supplies air to perforated grilles located at the base of the windows. Actually the air is fed through a tunnel underneath the slab and up through slots in the floor. The system also warms the floor area in winter.

Like all builders, Strauss Bros., of Lincoln, Nebraska, aim for quick sales. Every element of their homes is selected not only for quality, but for salability. That's why Strauss Bros. chose ROTO-GLO. Pass & Seymour's top engineering and design have made ROTO-GLO durable, smooth operating and smart appearing, while cutting installation costs. ROTO-GLO national advertising in the "shelter" magazines has made it the most talked about switch among home-buyers, and it costs only pennies more.

To cash in on ROTO-GLO's popularity, Strauss Bros. made full use of Pass & Seymour's merchandising aids to present ROTO-GLO switches as a quality feature of their homes. A colorful mobile was displayed at the entrance of each home. Display cards pointed up the national advertising and tied it in with the model home. An eye-catching tag, suspended from every ROTO-GLO switch, told the story of exclusive roto-action, glowing knob and quiet operation.

You, too, should take advantage of Pass & Seymour's ROTO-GLO merchandising. For your FREE supply of new mobiles, display cards, switch tags and newspaper advertising mats, see your wholesaler or write direct to Department AB-4.
Builders looking for fresh ideas to pep up home sales can well look to doors with Visador lights and louvers. They are attractive — precision-built — and add comparatively little to door costs.

1. Doors with hundreds of Visador light and louver designs available through leading building supply dealers.

2. Visador is known in the trade as a leader for quality, service and styling. That’s why it’s wise to ask for doors with VISADOR.

3. Sold only through building supply jobbers and door manufacturers. If your current supplier does not have doors enhanced with VISADOR, write to us for a list of suppliers in your area.

A few of these designs are shown here.

G. O. Box 10312 * Dallas, Texas
What does HOUSEPOWER mean?

ANSWER:
It means faster-selling houses

IT MEANS 'GOING ALL-ELECTRIC' . .

Builder M. P. Hampton, Naples, Tex.: “Till two years ago we could build any type home with 110 volts; now we must have 220. We follow the recommendations of the Rural Electrification Authority. We put in six circuits. Our rate goes down for water heaters. Sixty-amp service is general but not enough. Our later homes have strictly electrical kitchens.”

IT'S AIR CONDITIONING . . .

Builder Henry R. Jackson, Atlanta, Ga.: “If a home has outlets for an electric oven, range and dryer and an abundance of outlets (one for every 10 feet of wall space) for miscellaneous appliances, and is prepared for anticipated future needs insofar as is conceivably possible—and if it is air conditioned—then I would say it’s adequately wired.”

IT'S BRINGING 220 TO THE KITCHEN

Builder O. G. “Bill” Powell, Des Moines: “We’re at fault for not providing enough circuits. The appliance people have gone faster than we have . . . Three circuits aren’t enough; you need seven, eight or nine. It gets to the point where wiring is holding up the walls. Everyone brings 220 to the meter, but it takes another $50 to bring it to the kitchen.”

IT'S HOW YOU DISTRIBUTE AMPS . . .

Builder Jim Leverett, Des Moines: “The problem is allocation of circuits—maybe two in the kitchen, one for two bedrooms. Christmas tree lights need a separate outside circuit. We’re doing more outside decorating, including floodlights. Actually you might say the problem is double: amperage into the house and distribution of outlets.”

ABOVE ALL IT HELPS SELL HOUSES . . .

Builder Norbert G. Happ, Northfield, Ill.: “I have standardized on 220 volt service with 12 to 20 circuits. This gives two circuits per room, with separate circuits for kitchen and basement. This eliminates overload circuits and means better performance from appliances. There’s no doubt—adequate wiring improves saleability.”

American Builder suggests one way out of our wiring dilemma is the formation of an Underwriters’ organization on the housing level. Thus everybody’s house would be subject to the same standards and critical inspection.

American Builder points out that heavy wattage appliances have an average useful life of about 8½ years. But that doesn’t mean there is any less need for adequate wiring; there is more need. People will simply get replacements.

American Builder thinks there is only one way to keep up with the utilities and the appliance boys. That’s pre-planning your wiring needs for all the electric living ahead. You can’t beat ’em, you know; so let’s join ’em.

American Builder, and everybody else, is agreed that 100 amps is minimum. The outlet distribution is the big variable. Here’s where some 105 local licensed wiring bureaus can be of help to you—if you contact them in time.

American Builder says every builder ought to be required to list his wiring: Three plug-in jacks in living room, three 220 volt outlets, 26 duplex plugs, etc. What better way to assure people of the electric living in store?
"TROUBLE SAVER" Scaffolding Accessories

1. Ladder Hooks
   - Has pivot that allows ladder to be placed along the valley with complete safety and convenience. Plate protects roof. Weighs only 6 lbs.

2. Adjustable Roofing Bracket
   - Provides safe staging at any pitch. Suited to all kinds of jobs, any type of roofing. Holds 2"x10" plank. Weight, 5½ lbs.

3. Ladder Jacks
   - One Man Jack
     - Adjusts to any pitch on either side of ladder. Weight, 20 lbs. a pair.

4. Rail-Type Jack
   - Use of side rails of ladder for support provides extra safety. Weight, 24 lbs. a pair.

5. "Trouble Saver" Shinglers
   - Two sizes. "Regular" holds a 2 x 4 staging edgewise. "Wide" holds it sideways. Held by just two nails. Can be removed without raising shingle.

---

THE STEEL SCAFFOLDING COMPANY, INC.
856 Humboldt Street, Brooklyn 22, N.Y.
Telephone: EVergreen 3-5510

Only Lufkin Chrome Clad Mezurall Tape Rules offer all these advantages:

- Strong Plated Steel Case Lasts Longer
- Chrome Clad Line Resists Rust
- Markings Bonded to Line Stay Easy-to-Read

First choice of the building trades. Lufkin Mezurall Tape Rules are practical and compact — ready for instant use. Durable jet-black markings are easy-to-read. Exclusive Chrome Clad blade will not chip, crack, or peel and has a self adjusting end hook. Concave blade extends farther unsupported for one-man use. Blade is easily replaceable without use of tools. In 6, 8, 10 and 12 foot lengths.

---

CONVENTION CALENDAR 1956


Sept. 10: Home Builders of Saginaw, 310 Court St., Saginaw, Mich. Monthly meeting; Bancroft Hotel, Saginaw, 6:30 P.M. R. O. Park, chairman.


Sept. 15-23: National Home Week. Organizations listed below are among those who have programs planned:

- Marion County Residential Builders, 143 E. Ohio St., Indianapolis 4, Ind. 75 builders will enter 200 homes. D. W. Thompson, chairman.
- Oklahoma City Home Builders, 328 Biltmore Hotel, Oklahoma City, Okla. Parade at these additions: Northridge Manor, North May & Kent Drive; Wildwood, N. E. 50 & N. Everest; Del Crest, S. E. 15 & Sunnylane Road. Gus Fields, chairman.
- Home Builders of Knoxville, (Continued on page 227)
WANTED!

Just one shred of evidence to prove AMERICAN BUILDER’S ’56 Technical and Marketing Guide isn’t the most comprehensive and usable sourcebook of building and buying data in the field.

Whatever your job... builder, contractor, sub or special-trade contractor, architect or consulting engineer... you’ll find it a valuable time-saver every working day of the year. Whatever your need... in design, structural materials, hardware, equipment, tools... this book is brimming with information to short-cut your problems.

This April reference issue has the answers that help you get ahead faster. Use it profitably... and often!

AMERICAN BUILDER

ADD...

A COOLING BREEZE

To Buildings Like These

with a BAR-BROOK BREEZEBUILDER WALL FAN

No improvising; no modifying problems in airtight building. NOW, a fan designed specifically for wall installation, anywhere. Large enough to move air throughout house. Easily installed; easy to clean; and good looking.

Heavy-duty UL approved motor. Cord and plug, or may be wired direct. Safety grille, fan and shutter finished in baked enamel.

WRITE TODAY FOR NEW CATALOG showing this and 27 other Breezebuilder fans.

BAR-BROOK MFG. CO., INC.,
6125 Linwood Ave.,
Shreveport, La.

FOREMOST SOURCE
for AREAWALLS

SAINT PAUL CORRUGATING CO.

Lux-Right

The Nation’s Best

Most complete line in U.S.A. Three shapes: Streamlined-straight, Round, Square. Special sizes our specialty.

COST CUTTER

LION UNIVERSAL TRIMMER

ACCURATE, RAZOR-LIKE CUT ANY WAY OF GRAIN. QUICK ADJUSTMENTS TO 45 DEGREES OR 90 DEGREES. MITERS, BEVELS, SQUARES, CHAMFERS—HUNDREDS OF USES! A TIME SAVER ON EVERY JOB.

WRITE FOR FULL INFORMATION

POOTATUCK CORP.
50 Old Stratford Rd.
Shelton, Conn.

FILING SAWs

FREE BOOK—"Money Making Facts" shows how people get business from home-owners, farmers, carpenters, schools, factories, etc. Send coupon for Free Book—no salesman will call.

The CAMP COMPANY, Inc.
6958 South State Street, Dept. AB-86
Chicago 21, Illinois

REQUIRES NO CHIPPING—NO ROUGHENING—NO PRIMING—NO CURING—

- The only concrete-color material that can be applied thin as 1/16" or more than 1" thick, as needed.

- Rough, Pitted, Trowel-Marked, Uneven or Broken Concrete and Masonry can be made smooth with a thin coat of LATEX CONCRETE TOPPING—INDOORS OR OUT—the answer to those "frozen" or "rain-pitted" concrete surfaces!

- 52-lb. drum includes 40 lbs. of powder mix, 1 gallon Latex liquid. Covers 100 sq. feet, 1/16" thick.

- If your dealer cannot supply you, one unit delivered to you for $10.50, 2 units $17.00.

The CAMP COMPANY, Inc.
6958 South State Street, Dept. AB-86
Chicago 21, Illinois

OVER 21 YEARS OF CONTINUOUS SERVICE
Transite Pipe gives you
greater freedom of design
also provides economy, long trouble-
free service and installation ease!

You'll like working with Transite® Pipe... because it
offers you the wide variety of shapes, sizes and fittings
needed for almost limitless freedom of design. Contractors like it... because it is easy to assemble and install. Homeowners like it... because of its reputation for long, trouble-free performance!

For further information on Transite Pipe for the home,
write to Johns-Manville, Box 60, New York 16, N. Y. In
Canada, Port Credit, Ontario. Why not write, today?

DOING ALL 4 JOBS WELL!

1. Transite Building Sewer Pipe with the
   Ring-Tite® Coupling, for conveying sewage to street sewer or
   septic tank.

2. Transite Gas Vent Pipe in round and oval shapes for
    efficiently and economically venting domestic gas appliances.

3. Transite Plumbing Vent Pipe for venting soil and waste
    pipes in building plumbing systems.

4. Transite Warm Air Duct for use in concrete slabs in perimeter-type
    heating and air-conditioning systems.

Johns-Manville
TRANSITE
PIPES FOR THE HOME
Made of Asbestos-Cement

If some building terms
PUZZLE YOU...

BANK-RUN is not a panic.
BUS CONDUCTOR is not a fare grabber.
FISH PLATES are for beams, not beams.

... this is a book
you need!

By
Herbert R. Waugh
and
Nelson L. Burbank
Former instructors in con-
struction and building
trades, Bridgeport, Con-
nnecticut and Cincinnati,
Ohio schools.

422 PAGES

OVER 12,000
TERMS

HUNDREDS OF
ILLUSTRATIONS

BEING SURE of the correct
meaning of any building
term can often mean
money to you! And with
many thousands of such
terms in use, not even the
most experienced can be
positive regarding the meanings of them all. The only safe

guard is to turn to an accepted authority.

Such authority may be a regular dictionary, yet not even in
Webster's Unabridged will you find many of the terms
which are constantly cropping up in the building industry.
That is why the authors, Waugh and Burbank, who knew
that they and their fellow teachers needed a specialized
book of definitions, decided to compile one. Then, while talk-
going to contractors, builders and architects about the project,
it was discovered that they, too, needed it just as badly. The
result is The Handbook of Building Terms and Definitions,
product of many years of painstaking research, compilation
and careful cross-checking.

The Handbook of Building Terms and Definitions is a com-
 pact, desk-size book approximately six by nine inches. The
port of speech and correct pronunciation is given for each
word. At the low price of only $5.00 postpaid, this is a book
which no one in the building industry can afford to be with-
out. Order your copy today on the coupon below. Full refund
will be cheerfully made if you are not completely satisfied
that this book will prove useful.

AMERICAN BUILDER BOOKS
30 Church St., New York 7, N.Y.

I enclose remittance of $5.00. Please send me postpaid, one copy
of HANDBOOK OF BUILDING TERMS AND DEFINITIONS. I have
10 days to examine the book and, if not satisfied, can return it
within that time for full refund.

Name

Address

City, zone, state

AMERICAN BUILDER
3042 Sutherland Ave., Knoxville, Tenn. Two sites one for $11,000-$15,000 class; the other $15,000-$40,000. Paul Waters, chairman.

Home Builders of Memphis, 2440 Central Ave., Memphis, Tenn.

Home Builders of Dallas County, 318 N. St. Paul, Dallas, Tex. Four sites: Bruton Terrace, homes in the $14,000-$18,000 range; Glen Oaks, $27,000-$40,000; Merriman Park, homes in the $23,000-$27,000 range, and Sparkman Estates, $25,000-$28,000 range. In Richardson one unit in the $15,000-$22,000 class. Leland G. Lee, Jr., chairman.


Home Builders of Richmond, 3122 West Clay St., Richmond, Va. Parade in residential areas of city. H. Dick Rathbun, chairman.


Sept. 27-30: Minneapolis Home Builders, 1750 Hennepin Ave., Minneapolis, Minn. Midwest Housing Conference for Wisc., The Dakotas, Ia., and parts of Central Canada, and Minn. Leamington Hotel, Minneapolis. W. D. Coffman, chairman.


Oct. 30: Home Builders of Maryland, 7 E. Lexington St., Baltimore 2, Md. Regional Mortgage Clinic for Md., Va., W. Va. and Wash., D. C. Lord Baltimore Hotel, Baltimore, 9:30 A.M. to 4:30 P.M.

Nov. 10-12: Montgomery Home Builders, 22 S. Perry St., Montgomery, Ala. First annual convention-exposition, Whitley Hotel, Montgomery.


AUGUST 1956
Put the smooth hydraulic power of the heavy-duty HOPTO to work on your toughest, costliest assignments and watch cost figures tumble and schedules roll on time! HOPTO is as easy to operate as an automatic drive car. Four simple levers control HOPTO's 180° swing, 11' digging depth, high lift and 180° tilt of backhoe or shovel bucket. Even the outriggers are completely hydraulic!

HOPTO does the work of sixteen men on a hundred and one jobs ... profitably! HOPTO is your answer to lower equipment investment with big work-capacity and all-around utility. Attaching equipment includes a crane and backhoes and shovel buckets in a wide variety of types and widths.

HOPTO also has a trailer-type unit, self-powered or power take-off operated.

WRITE TODAY for complete information and name of dealer nearest you

BADGER MACHINE CO.
WINONA, MINNESOTA • DEPT. 23
Interior Doors
2'6" x 6'8" x 1-1/2" Flush Hollow Core 6
2'4" x 6'8" x 1-1/2" Flush Hollow Core 2
Sliding Doors
3'0" x 6'8"
1'6" x 6'8"
Total 6
Note: All door frames, trim, casings, and saddles are to be ordered from the Door Schedule

WINDOW SCHEDULE

<table>
<thead>
<tr>
<th>Size or Code</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot; x 3'0&quot;</td>
<td>15 Lite</td>
<td>2</td>
</tr>
<tr>
<td>6&quot; x 3'0&quot;</td>
<td>Awning Type</td>
<td>2</td>
</tr>
<tr>
<td>6'0&quot; x 3'0&quot;</td>
<td>Casement</td>
<td>1</td>
</tr>
<tr>
<td>1'4&quot; x 3'0&quot;</td>
<td>Triangle Fixed</td>
<td>1</td>
</tr>
<tr>
<td>3'0&quot; x 3'0&quot;</td>
<td>Casement</td>
<td>1</td>
</tr>
<tr>
<td>3'0&quot; x 4'0&quot;</td>
<td>Awning Type</td>
<td>1</td>
</tr>
<tr>
<td>5'0&quot; x 3'0&quot;</td>
<td>Casement</td>
<td>2</td>
</tr>
<tr>
<td>1'0&quot; x 4'0&quot;</td>
<td>Casement</td>
<td>2</td>
</tr>
<tr>
<td>7'8&quot; x 1'6&quot;</td>
<td>Cellular Sash</td>
<td>6</td>
</tr>
<tr>
<td>12&quot; x 4'0&quot;</td>
<td>Gong of 4 in Garage</td>
<td>1</td>
</tr>
</tbody>
</table>
Total 19

Note: Window sizes are approximate size to suit the needs of local builders. Order windows in gangs or mullions, wherever specified.

Material breakdown by Joseph Steinberg, head, and Martin Stempel, senior instructor, Construction Technology Dept., New York City Community College.

NEXT MONTH: American Builder’s Blueprint House for September will be the “All-Gas” House, built by Burton W. Duenke, Kirkwood, Mo.

To sell more BUILDING PRODUCTS and EQUIPMENT pre-sell the BUILDER! American Builder reaches more builder-buyers than any other building publication!

WINCO VENTILATOR COMPANY St. Louis, Mo.

WINCO
TRADEMARK REG. U.S. PAT. OFFICE.

NEW HARVEY SLIDING DOOR HARDWARE
cuts costs and handling

One universal packaged set fits both 1/4" doors and 1 1/2" doors

HAR-VEY 707 SERIES

By reversing hangers between inner and outer doors as shown above, one set accommodates either size door.

AMERICAN BUILDER BLUEPRINT HOUSE #233 BUILT BY: MORTON BRO., JAMAICA, L.I.

TROUBLE-SAVING FEATURES
1. Self-lubricating oilite bearings
2. Sturdy, ribbed-steel hangers, nylon rollers
3. Vertical and horizontal adjustment. No need for plugging or drifting of screws
4. Track is pre-cut 1" short to allow for overlap

NEW LOW COST
Complete packaged set: 4 hangers, aluminum track, adjustable nylon door guide, and 2 large cup pulls for two 2 ft. doors only $4.87 list

GUARANTEED to be the smoothest, quietest sliding door hardware you ever used or double your money back!
Ask your dealer, or write Dept. 0-8 for all details.

AMERICAN SCREEN PRODUCTS CO.
GENERAL OFFICES: 807 W. 20th St., Miami, Fla.
Factories: California, Texas, Illinois, Indiana, Florida
Manufacturers' news

Because all of its products have been sold under the trade name of Amerock, American Cabinet Hardware Corp. has changed its name to Amerock Corporation. Detroit Steel Products Company's new name is Fenisstra Incorporated. 1956 is the year the following companies celebrate anniversaries: F. H. Lawson Company, 140th; Robinson Clay Product Co., 100th; Joseph Behr & Sons, Inc., 50th; and Supradur Manufacturing Co., 10th. Supradur's chairman of the board, John H. Steiner was presented with a tenth anniversary cake during International Home Building Exposition at the New York Coliseum. Thyser Manufacturing Corp. has announced plans for a five-year expansion program, including a public stock issue and the appointment of M. O. Gustafson as executive vice president. Aeronca Manufacturing Corp., expanding into the plumbing products field, has appointed Ernest H. G. Maron sales manager of its new metal products division.

Nicholas L. Maczok has been named manager of building coordination by D. J. Quinn, vice president of sales, plumbing and heating division, American Radiator & Standard Sanitary Corp. New supervisor, insulation board products, building materials sales of Barrett division, Allied Chemical & Dye Corp. is Sheldon H. Cady. Martin V. Wolf was appointed to the new position of manager of contract sales, built-in equipment division, Tappan Stove Co. R. A. McQuade is new sales and advertising manager, Pen instruments division, Burgess-Manning Co. To specialize on Amana Refrigeration Inc.'s new central air conditioning system, Elmer J. Dittrich has been appointed air conditioning application engineer. Robert A. McLaughlin is general manager of Pittsburgh Plate Glass Co.'s fiber glass division.

Lee D. Nutter has been appointed manager—builder sales for General Electric's home heating and cooling department. Promotion of six men on the executive sales staff of Youngstown kitchens division of American Standard has been announced by C. D. Alderman, vice president of sales. They are: M. L. Ondo, general manager of merchandising; I. W. Purvis, manager of distribution; R. H. Wack, assistant manager of distribution; H. F. Howell, kitchen sales manager; D. F. Sembach, manager of dealer sales; and J. C. King, manager of builder sales. I. G. (Dick) Rivers has been named to the newly-created post of general sales manager, Mastic Tile Corp. of America. New advertising manager of Philip Carey Mfg. Co. is Robert F. Quinn. L. W. Elliott has been appointed sales manager by Griffin Manufacturing Co. R. H. Jones is new general manager of the air conditioning division of General Electric. Maxwell D. Millard has been promoted to general manager of sales of the American Steel & Wire division, United States Steel Corp.
"A Dynamic Potential..."

...is created daily by millions of Americans in their purchases of U.S. Savings Bonds through the Payroll Savings Plan. Better than three out of four of United States Steel's American Steel and Wire Division employees are taking advantage of this easy automatic plan of saving.

"We in management feel that every employee, whether newly hired or already on the payroll, must be advised constantly as to the values of this Savings Bond Program. A program designed to maintain high employee participation is an integral part of our everyday operations."

Does your company present the advantages of The Payroll Savings Plan (and a Payroll Savings Application Blank) to every new employee? Are 75% of your employees enrolled in your Payroll Savings Plan?

Write to Savings Bond Division, U.S. Treasury Department, Washington 25, D. C. Your State Sales Director will be glad to help you take your place with American Steel and Wire and the more than 40,000 other companies that have successful Payroll Savings Plans.

The United States Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the Advertising Council and

AMERICAN BUILDER

AUGUST 1956 231
The Month Ahead

LIGHTING TIE-IN
Here's your chance to tie in with your local utility company and fixture distributor. Some 2,400 of them have been alerted about National Home Week. They'll want to help you with advertising and supply you with promotional aids. They'll even go a step further and send a man out to demonstrate their products. That's like having an extra salesman on hand—when you need him most.

SOUND DEADENING
If you plan to include air conditioning in your model home and have settled on a closet installation, take a lesson from the Austin air-conditioned village. Be sure to put in a sound-deadening material. Otherwise it will make like a thrashing machine, and you'd be better off with a utility-room job. For more on this subject see page 67.

THE 85 PER CENT RULE
Now that the 85 per cent rule on FHA loans for trade-ins applies, you hardly can afford to pass them up any longer. Offering to take trade-ins could be just the bait you need to land those National Home Week prospects. Your next step: set up a reconditioning program.

MORE ABOUT LIGHT
Next month we present the second of a series on adequate wiring or housepower. This one is on lighting. Find out how to "light-condition" your home.

Calling all contestants
September is your last chance to prepare your entry for American Builder's National Home Week contest. If you aren't yet familiar with the rules, here they are. You may enter as many houses as you like in either of two categories: under $16,000 and under $40,000. You should send in floor plans, photographs (not snapshots), construction data and sales information. Tell us why you think yours is a good house. You've got a chance at the grand prize and you've got a chance at one of the 15 merit awards. For who the judges are and what they'll be looking for, turn to page 77 of this issue. For more complete details write directly to us.

Whither picture windows?
In our next issue we are going to show you what's what with windows and doors. One trend we've noticed recently is toward slimmer jambs and mullions. Another is toward a more discriminatory placement of the picture window (especially in view of the protests registered by women at the recent Washington conference). At any rate, you'll want to get all the latest dope on this subject.

Another helping hand
Last month we pointed out that Fall is the season of upswing in remodeling. Now comes news that the September 29th issue of The Saturday Evening Post will carry a whole section of advertising geared to OHI. If you're interested in getting in on this free remodeling publicity, turn to the catalog section of this magazine and learn how you can get a merchandising kit showing how you can tie into this program most effectively. It costs just two and a half bucks...

It pays to be nosy
If you're in an area where vacation cottages are being built, and are considering trying your hand in this market, go out and see how the other boys made out this summer. If they're sold out, good; that means a healthy market in all probability for next year. But if some of them are stuck with a lot of houses, find out why. It may save you a buck.
If you're looking for a flooring that offers outstanding beauty ... wide color selection ... and unmatched utility ... be sure to consider Sofstep Rubber Tile. Available in 23 rich, glowing colors. Sofstep Rubber Tile harmonizes with every decorative scheme or style of architecture. The smooth surface reduces maintenance to a minimum ... it's quiet and comfortable to walk on ... and it's available in low cost .080 gauge as well as 1/8" and 3/16" thicknesses.

You'll find Sofstep Rubber Tile ideal for virtually every type of installation ... homes, institutions and businesses. For complete information and free color charts on Sofstep Rubber Tile write to Dept. 5-8 today.

4 of the beautiful Sofstep® colors

Asphalt Tile • Confetti • Aristoflex • Maticork • Parquetry Rubber Tile • Vinyl Tile • Cork Tile • Plastic Wall Tile

MASTIC TILE CORPORATION
OF AMERICA
Houston, Tex. • Joliet, Ill.
Long Beach, Calif. • Newburgh, N.Y.
National
No. 53 Trolley Hanger and No. 59 Covered Rail
The Efficiency Team

Built-in super strength for extra wear!

Now the exterior sliding door glides open and closed with the greatest of ease.

Large 2½ inch diameter wheels are equipped with hardened steel roller-bearings to tighten the load. The No. 59 Covered Trolley Rail illustrated below has been designed as a working partner for the No. 53 Hanger thus providing a perfect, even tread for the gliding hanger wheels.

The cover is spot-welded to the rail. No brackets are required as the rail itself forms a continuous bracket. Rail is made in 6, 8 and 10-foot lengths.