American Builder

OCTOBER 1956 • 75 Cents

How winter building can boost profits

HOUSEPOWER cuts complaints

Young builder's ideas pay off

SEE BLUEPRINTS, PAGE 100
The Kitchen Sells the Home... and the
Nutone Food Center Sells the Kitchen!

Combination Food Mixer, Blender and Sharpener
ONE MOTOR (below counter) DOES ALL!

Nothing excites a woman's enthusiasm more than a modern kitchen with Built-In Appliances to save work and space. That's why hundreds of builders say, "The Nutone Food Center is the best sales clincher we have ever seen!" It's so easy to install... just cut the kitchen counter top drop in the powerful motor unit... and it's ready to operate four full size appliances. It's fully guaranteed and the price is easy on your budget. Only $69.95 list.

See the exciting 2-page Nutone ad in Life, October 15 issue... Also Better Homes & Gardens, House Beautiful, House & Garden, McCall's, LIVING for Young Home Makers, Home Modernizing.

SAMPLE OFFER
Write for literature and Special Introductory Sample Offer for your Model Homes
Nutone, Inc., Dept. AB-10, Cincinnati 27, Ohio
A TRIAL INSTALLATION
then...
ALWAYS USED!

Discover How
CLOUD'S
TEMPERED OAK FLOORING
Magnifies Profits!

SEE YOUR LOCAL
LOCKWOOD DEALER

Get the oak flooring that's engineered to go down faster, fit snugly without requiring force, and requiring a minimum of sanding and finishing!

Cloud's Lockwood Oak Flooring is designed to save you builders plenty in labor costs. Find out for yourself what compartment, fan-type kiln-drying means... what snap side match design, the nail-groove feature, the splinter clipper and precision-milling mean in your operation!

Then notice how the beauty of Lockwood floors helps to sell homes on sight!

You'll certainly want to magnify profits and multiply sales when you've discovered the advantages of Cloud's Lockwood Oak Flooring!

CLOUD'S OAK FLOORING CO.
SPRINGFIELD, MISSOURI

OCTOBER 1956
QUICKER, EASIER and all ways better
FOR ALL SLIDING DOORS

600 SERIES
FIRST and only packaged sets with all these better features
- Aluminum track with built-in fascia . . . etched and anodized. Fits standard head jamb, 1/2" headroom. Doors can be hung after hangers are attached.
- Steel hangers with angle-slotted screw holes for easier plumbing of doors.
- Twin nylon wheels with oiled-for-life bronze bearings.
- Door stop limits sliding action of doors to prevent pinching fingers.
- Nylon and steel door guide installed easily with just two screws.

700 SERIES
Similar to 600 Series except track does not have built-in fascia or anodized finish
- Aluminum track . . . fits standard head jamb, 1/2" headroom. Doors can be hung after hangers are attached.
- Steel hangers with angle-slotted screw holes for easier plumbing of doors.
- Twin or single 1" nylon wheels with oiled-for-life bronze bearings.
- Door stop limits sliding action of doors to prevent pinching fingers.
- Nylon and steel door guide installed easily with just two screws.

NEW! "THRIFTEE PAK" SET
FIRST and only set for BOTH 3/4" or 1-3/8" doors with all these features
- Aluminum track, 1/2" headroom. Doors can be hung with hangers attached.
- Big 1" nylon wheels. One piece, husky steel hangers with slotted screw hole for easier plumbing of doors.
- Nylon and steel door guide uses two screws.

low as $5.50 list

CONSTANT IMPROVEMENTS KEEP STERLING AHEAD OF COMPETITION — HERE ARE OTHER FIRSTS FROM STERLING—

WRITE FOR OUR 24 PAGE CATALOG
See our Catalog in Sweets' Architectural or Light Construction Files

John Sterling Corporation
Formerly Sterling Hardware Mfg. Co.
2345 West Nelson Street, Chicago 18, Illinois
Two-way pay off
It's good public relations to form home owner groups in your developments. Fred De Blase, Rochester builder, found these organizations not only provide more enjoyable living for residents, but allows him to present "short courses" on problems facing the buyer.

Strike while the iron's hot
Don't forget! Now is the time to follow up on your National Home Week leads. You've probably got a good list of prospective buyers — and while your homes are fresh in their minds, the best sales results can be obtained.

You're on your own
Dissatisfaction with their present housing and the desire for newer homes by many families are among the strong points in the housing market, advises Nat Rogg, NAHB's able economist. However, he warns, how you make out depends on your own efforts; improved design, better merchandising and intensive sales and promotion efforts are all important items.

Help your buyers
It's a smart home builder who supplies his buyers with information on home maintenance. Blase A Ravikio, N.J. builder and president of Home Builders League of South Jersey, has established a fine relationship with his customers. At the time of sale, a 35-page manual describing features from shrinkage and condensation to sewers and laundry traps and how best to maintain them, is given to buyers. Result: the association has never had a complaint on any of his jobs.

A place in the sun
For the builder constructing homes on small lots comes this good advice from Southern Pine Assn. By planning the house around a patio, the entire lot becomes usable. An extra room comes into being that costs very little to add and has privacy and wind protection. A plank and beam ceiling and roof system opens up the plan to incorporate the patio while sections of the house together with louvered wood fences establish the enclosure.

Try something new
If you're looking for an out to the falling housing starts situation, you might follow the lead of builders who are switching to apartment and motel building. (See pp. 98 and 120.) To learn how the problem is being met nationally, see AB's survey on p. 23.

Keep your fingers crossed
If you're building in large metropolitan areas, you may be able to cut your home prices 50 per cent within fifteen years. So reports Julius Stulman, president, Stulman-Emrick Lumber Co., Brooklyn, N.Y. Laboratory research will enable crude wood to be replaced by wood panels that will serve as inner, outer and bearing walls, replacing 2x4's, shingles and plaster, he says.

For better TV viewing
Builders of developments beyond the normal TV reception areas might adopt this good sales feature scheduled by Masterplanned, Inc., for their Whittier Estates in Kingston, N.Y. A 100-foot-high tower will be installed to pick up signals of five New York City channels 90 miles away. Home owners will be charged $2 monthly for its use. Individual antennas would have cost about $200 each and would have been vulnerable to storm damage.
The new Seal-Flex Removable Window Operative Hardware is designed for use in all standard double-hung wood window frames. Both upper and lower sash can be quickly and easily removed by simply depressing the sash against the flexible left-hand jamb strip and removing window from the frame. Seal-Flex is available in two series: "Flextite Friction" with friction-type right-hand vertical jamb strip, and "Flextite Spring-Check Balance" right-hand vertical jamb strip. The Spring-Check Balance mechanism is completely invisible.

FLEXIBLE JAMB STRIP

The left-hand vertical jamb strip is flexible for movability... easily adjustable for tension. For use with both Flextite Friction and Flextite Spring-Check Balance right-hand vertical jamb strips.

ONLY SEAL-FLEX GIVES YOU ALL THESE FEATURES

1. USE OF STANDARD FRAME
2. ONLY MINOR REWORK REQUIRED ON STANDARD PLOWED SASH
3. INVISIBLE BALANCE MECHANISM
4. THREE BALANCE SELECTIONS
5. FULL FRICTION UNITS
6. 1/8" OR 1/2" PARTING BEAD SASH
7. SIMPLE ADJUSTMENT
8. FINGER TIP CONTROL
9. SMOOTH, QUIET OPERATION

WRITE FACTORY FOR COMPLETELY ILLUSTRATED LITERATURE
READER'S GUIDE

OCTOBER

3 The Opportunity Page
5 Reader's Guide
7 Reader's Guide to Advertising
9 Impact
11 The Building Outlook
13 Pulse of Building
17 Tomorrow's House

News
23 National news
25 Dickerman's column
26 Northrup's column
27 News of your region

MERCHANDISING
77 Editorial: How to keep from getting hurt in a changing market
78 They helped donate $1,000,000 worth of merchandising ideas

BUYING GUIDE ON TOOLS AND EQUIPMENT, HEATING
116 New equipment and tools will keep you competitive
124 There's progress in heating: are you with it?
126 How to get hot water heat into a $14,290 house

Features
82 Winter building is expensive
86 How soon will you be using this 1-2-3 way to custom build?
90 How remodeler George Burch keeps cost records
94 HOUSEPOWER: How it can help cut complaints

Houses & Plans
30 House of the month from your region
98 How to hedge the bet with a small apartment building
100 Blueprint House: How they customize to kill that "development look"
120 This motel of tomorrow pulls big business today
122 How to make one plan cater to your two biggest markets

Departments
129 The Payoff Departments
153 Supermarket for builders
155 New products and equipment
229 How to do it better
232 Ask the experts: Reader queries analyzed
238 Convention calendar
240 Manufacturers' news
242 Keeping up with the law
244 Technical Guide: What you should know about ventilation
270 Catalogs and manufacturers' literature
280 Better detail plate: dressing room space for a desert motel
284 The Month Ahead

Cover photo: Maxwell Huntoon
When you use Lupton Windows, you get one of today's best values. Their sturdy metal construction assures freedom from warping, swelling, shrinking and rotting. Their trim lines are an asset to any building. By combining fixed and ventilating units, you can offer home buyers a wide range of design possibilities. Example: The attractive bay, illustrated above, was assembled from two standard casements and a standard picture unit. With casements available in steel or aluminum; aluminum double-hung, ranch and jalousie windows; aluminum sliding doors and projected windows, Lupton Windows offer you a range of styles and sizes to fit almost any job. Contact your dealer for sizes and prices.

MICHAEL FLYNN MANUFACTURING COMPANY
Main Office and Plant: 700 East Godfrey Avenue, Philadelphia 24, Pa.
New York Office: 51 East 42nd Street, New York 17, N. Y.
Warehouse and Sales: 1441 Fremont Street, Stockton, Calif.
Warehouse and Sales: 2009 East 25th Street, Los Angeles, Calif.
"The better you plan—the better you buy—the better you build—the better you sell" ©

A
Admiral Corporation 167
Allen Manufacturing Co. 237
Alliance, Inc. 56
Allison, Inc. 253
Aluminum Company of America 47
American Brake Company, Inc., Herman 60
American Bunkfield, Inc. 273
American Brass Co. 278
American Builder 131, 220-222, 258, 278
American Cast-Iron Pipe Company 44
American Kitchens Division, AVCO Manufactur- 179
American Screen Products Co. 237
American Steel & Wire Division, United States 67
Steel & Wire Division, United States 52-53
American Telephone & Telegraph Co. 164
American Truck & Implement Co. 208
Anderson Corporation 14, 15, 133
Anderson Products Co. 270
Arco Company, The 231
Arkansas Steel Pipe Division 168
Armstrong Cork Company 66, 67
Aromatic Red Cedar Closet Lining Manufac- 45
tures Association 65
Atlas Electric Products Co. 243
Atlas Plumbing Corporation 72

B
Baker Machine Co. 249
Baker Products Division, United States 52, 53
Barber-Colman Company 188
Bar-Brook Mfg. Co., Inc. 283
Bell & Gentry Company 162, 163
Berger & Sons, Inc. C. L. 168
Berger Products Co. 211
Bender Disappearing Stairway Co. 243
Benedict, J. C. Co. 149, 151
Benedict Steel Company 198
Bensinger Corporation 278
Bostrom-Brady Mfg. Co. 273
Bostwick Steel Lath Co., The 271
Bragg Manufacturing Co. 179
Brown Company 165

C
Cabet, Inc., Samuel 242
Caldier Manufacturing Co. 240
Campbell Engineering Co. 130
Carr Machine Co. 30, 71
Case Manufacturing Corporation 148
Caseaus Window Glass Company 266
Chase Brass & Copper Co. 202
Chase Products Co. 275
Clipper Manufacturing Co. 45
Clother Manufacturing Co. 1
Comneapolis-Carroll, Inc. 236
Columbia-Geneva Steel Division, United States 52
Steel Division, United States 33-36
Consolidated Machine & Supply Co., Ltd. 139
Consolidated Machine & Supply Co., Ltd. 238
Consolidated Machine & Supply Co., Ltd. 128
Consolidated Machine & Supply Co., Ltd. 176
Corbin Division, P. F. & F. The American Hard- 171
Corbin Lock Company 176
Corbin, R. E. & Co. 236
Cummins Portable Electric Tools 64
Cummins Transfer Services 173

E
Eaton Machine Co. 227
Edison Engineering Co. 217
Eaton Manufacturing Co., Corporation 160
Eaton Machine Division, Commercial Construction 160
Elgin Division of the Murray Corporation of 228
Elkay Manufacturing Co. 184
Egan Manufacturing Co. 144
Eveready Briksaw Co. 28

F
Faure, Inc 230
Fasco Industries, Inc. 250
Fastenrite Fasteners, Inc. 237
Fleetkote Company, The 18, 19
Flying Dutchman Manufacturing, Inc. 180
Follansbee Steel Corporation 180

G
Garlin & Company, Inc. 218
General Bronze Corporation 49
General Electric Company 46, 188, 203
General Metal Products Co., The 243
General Tire & Rubber Company, The, Flooring Division 41
Georgia-Pacific Plywood Company 199
Giles & Kendall Company 278
Goldblatt Tool Company 278
Gold Hat Manufacturing Co. 147
Goodman, Inc. 127
Goodman Company 127
Grand Rapids Hardware Company 4
Grant Puiley and Hardware Corporation 228
Griffin Manufacturing Co. 265

H
Hansen Mfg. Co., A. L. 225
Hartley, H. & Co. 234
Hermann Saw & Manufacturing Co., The 274
Hill Manufacturing Company 274
Homanite Company Nova Sales, Inc. 225
Hone's Saw Company 274
Hoye's Windows, Inc. 108
Hypertex, Inc. 235
Illinois Limestone Institute 235
Inland Steel Products Company 216
Insulite Corporation 282
Insulation Division, Minnesota and Ontario Paper Co. 261
International Oil Burner Co. 260

J
Jasper Machine Company, The 253
J. F. King Manufacturing Co. 278
Johns-Manville 169
Junior-Pro Products Co. 278

K
Krause & Matheson Company 241
Krisel Corporation 241
Krausnick Corporation 249
Kensington Copper Corporation 269
Kentile, Inc. 161
Keystone Steel & Wire Company 144, 145
Kohler Co. 260

L
Leigh Building Products Div., Air Control Products, Div. 116
LeTourneau-Westeninghouse Company 266
Long-Lasting Coating Company 171
Louisville Cement Company 61
Louver Manufacturing & Supply Co. 261

M
Macklin-Dunlop Company 38, 39
Macon Mfg. Co., Inc. 256
Mail Tool Co. 230
Mall Wall Products, Inc. 210
Master Vibration Company 240
Mastif Tile Corporation of America 241
Maue Manufacturing, Inc., W. H. 166
Mengel Company, the 161
Michel & Heffler Machine Works, Inc. 322
Midget Louver Co. 176
Mid-Western Industries, Inc. 243
Mississippi Glass Company 265
Moly Corp. 253
Monarch Chemical Company 273
Moore Incorporated, Goodloe E. 275
Moore Company, Inc. 255
Muller Corporation 40
Mulkey Company, Sam 235
Muller Machinery Company, Inc. 263

N
National Gypsum Company 210, 213
National Homes Corporation 74
National Lumber 27
National Manufacturing Company 248
National Metal Products Co. 216, 218
National Metal Products Co. 216, 218
National Steel Corporation 256
National Steel Corporation 256
National Solder Lotion Division 256
National-U. S. Radiation Corporation 25, 31
National Paper Company 273
New Castle Products, Inc. 207
New England Furniture Mfg. Co. 249
Nova Sales Co., Homanite Company 225
NuTone, Inc. 225

O
Onyx Industries 247
Omar & Sons, D. W. 248
Overhead Door Corporation 54

P
Pacific Lumber Company, The 157
Pacific Telephone 327
Pace & Seymour, Inc. 281
Petersen Window Corporation 260
Pierson Company, Cincinnati 234
Pioneer-Flintkote 32E
Pioneer Gen-E-Motor 272
Pittsburgh Plate Glass Company 265
Pomona Corp. 251
Preway Inc. 217

R
Ramset Fastening System 252
Ready Hung Door Corp. 245
Red Devil Tools 265
Reflectal Corporation 255
Remington Arms Co., Inc. 262
Remington Rand Division of Sperry Rand Corpo- ration 203
Reuel Bond & Brass Incorporated 134, 128
Reynolds Metals Company 42
Richmond Plumbing Fixtures Division 136
Ridgeway Motor Car Company 268
Robertson Manufacturing Company 262
Rose Manufacturing Co. 238
Roshier Co., The 182

S
Schlage Lock Company 12
Schlumberger Manufacturing Co. 12
Skill Corporation 39
Solvent Process Division, Allied Chemical & Dye Corporation 265
Somer Products Company 286
Stanley Electric Tools 177
Steel Building Company, The 194
Sterling Corporation, John 167
Storm King Corporation 267
Superior Electric Company 277
Supreme Products Corporation 178
Syncro Products & Mfg. Co. 255
Syntron Company 230

T
Taylor Company, The 200
Tennessee Coal & Iron Division, United States 33-36
Steel Corporation 33-36
Tennessee, Division of The General Tire & Rubber Company 267
The Emmons Mfg. Co. 176
Thompson Co., Inc. E. A. 321
The All-Steel Co. 264
Timber Engineering Company 277
Trans-Tac Implement Division, Ford Motor Company 175
Truck & Motor Co., Inc. 43
Trans-Tel Corp. 257
Triview Metal Products 272

U
United States Plywood Corporation 213
United States Steel Corporation, United States 33-36
United Steel Fabricators, Inc. 174
Universal Atlas Cement Company 159
Union Company, The 113-115

V
Vento Steel Products Co., Inc. 264

W
Warren Shade Co., Inc. 235
West Coast lumberman's Association 215
Western Pine Association 281
Westinghouse Electric Corporation 192, 193, 199
Weyerhaeuser Sales Company 206
White Company, David 267
Whirlpool Corporation 282
Williamson Heater Company, The 29
Woodard Clothing Company 25
Woodall Industries Inc. 183
Woodward Corporation 196, 197
Wortington Corporation, Air Conditioning and Refrigeration Div. 173

Y
Yates-American 254
© 1956 American Builder
Make Selling EASIER with...

Builders Like This Complete Plan Service

Helping your prospects find the right plan for their new home means easier selling for you ... and Garlinghouse has the largest and finest selection of home plans ... all styles and sizes ... 1 to 4 bedrooms ... many in full color.

Garlinghouse Plan Books show pictures and floor plans with square and cubic footage. Your prospects will like the ease and convenience of choosing their new home from them. A kit of these beautiful books kept handy at all times helps turn prospects into contracts.

Best of all, complete working plans, specifications, lumber and mill lists are available for each design—at low cost. These plan sets are a fine investment because they eliminate unnecessary planning costs and both you and your customer know in advance what is being offered—thus avoiding misunderstandings.

FAST SERVICE—complete plan sets are mailed Postpaid within 24 hours after order is received.

GUARANTEE—All transactions with the L. F. Garlinghouse Co., Inc., are on a money-back guarantee basis. Unused plans may be returned within five days for full credit on other plans or for cash refund.

SPECIAL OFFER—FREE COPY OF NEW "Ranch and Suburban Homes" WITH ANY SIZE ORDER FOR ABOVE BOOKS

To introduce this brand new completely revised edition we are making this special BONUS offer. This is the finest "Ranch and Suburban" book we have ever published. Contains 126 beautiful new home designs in 2, 3 and 4 bedroom sizes. A regular 50¢ book—Free with any size order. Extra copies at regular price and discounts.

THIS OFFER GOOD UNTIL NOV. 15, 1956.
Impact

To The Editors:
American Builder
30 Church Street
New York 7, N. Y.

From Mrs. Gavin

To the readers of American Builder:
Dear Friends: I am going to try to answer personally all of the messages that I received at the time of my husband's death but it will take time.

I have always been aware of your love, devotion and respect for Ed Gavin but I am deeply touched by your sympathy and great kindness to me. My humble thanks.

—Sincerely
(Mrs. Bess Gavin)

The editors have their own letter from Mrs. Gavin. It is cherished.

HP Section for College Use

Sirs: I thought you might like to have copies of some of the promotion material we have recently released with reference to the splendid section you ran in June on Hardwood Plywood. We are going to use this workbook in 45 different college programs involving plywood and before the year is out believe that most of the total of 180 programs which we serviced last year will find that this data is valuable in their study course. We also expect to use it in the demonstration schools being planned by leading power tool companies. We are looking forward to receiving the 25,000 extra copies we ordered.

—R. D. Behm, Trade Promotion Program, Hardwood Plywood Institute, Chicago.

Permission Granted

Sirs: For more years than I care to remember I have been a subscriber and avid reader of American Builder.

Of particular interest to me were pages 94, 95 and 98 of the August issue, dealing with Levitt's operations, and I would like to obtain permission to reprint same.

—Wm. G. Kirkpatrick, chief engineer, Norwood Sash & Door, Ohio.

“Accurate, vivid…”

Sirs: It was very thoughtful to send me one of the first available copies of American Builder's September issue.

I thrilled to the reading and viewing of the section titled, "Smartest Uses of Gas Yet."

It is an accurate, vivid picture of building developments affecting the gas industry across the country.

—C. S. Stackpole, managing director, American Gas Association.

“Reaction—Tremendous”

Sirs: Before we wrote to give you our impression of the Cooper-Homes Charlie Bates story in your June issue, we thought we would want to get the industry's reaction.

In a word—it was tremendous. We have had letters, wires, phone calls and comments from all over the United States and territories. Everybody here, especially Tutt Cooper, Livoni and Charlie Bates extend their hearty congratulations and thanks for the nice job you did.

—G. Don Curphey, director, adv. agency dept., McCormick Co., Amarillo, Texas.

What Are the Public's Needs?

Sirs: It has become virtually impossible to finance a two-bedroom home, because the major insurance companies have suddenly turned thumbs down on two-bedroom homes. This attitude is fully as intelligent as financing nothing but two-bedroom homes ten years ago.

It is time we studied the needs of the American public instead of rushing from one extreme to another extreme, each time we come across some sticky houses. Take a cross-section of 100 families seeking homes, whose income is between $4,000 and $7,000 per year. In this bracket there will be a certain number of families who need only one bedroom and guestroom.

Today... in Pueblo... we are virtually building homes to order—everything from two-bedrooms to four... Yet now we have been forced to stop building two-bedroom homes, because we cannot finance them except on very rigid terms. The number of bedrooms that a home contains is in itself, a deceiving factor. One family may convert a bedroom to a dining room, while another family will use all three. I recommend that the lending agencies make an impartial survey of the public needs and be guided by that survey.

—John Bonforte, Pueblo, Colo.

We can understand why it's hard for even Philosopher Bonforte to remain stoical.

"That's my salami sandwich!"

(Cartoon by Virgil Partch—
Courtesy Pomona Tile Manufacturing Co.)
Huge quantities of a dangerous, invisible gas are generated by the normal daily household activities of an average American family of four; enough to condense into 76 quarts of a destructive liquid each week.

The soil under a building, especially in a crawl space, may also give up this gas at the rate of 336 quarts per week per 1000 sq. ft., when liquefied.

If this gas turns into liquid inside building spaces, it will foster the ROTTING of Wood, the CRUMBLING of Plaster, the PEELING of Paint, the RUST and CORROSION of Metal, even the BREAKING-DOWN of Brick, Concrete and Mortar.

This gas can also be a THIEF OF HEAT and FUEL in winter, as well as a destroyer of the building. With each pound of it that flows out of a building, there is an actual loss of 1060 Btu’s of latent heat.

THERE IS A PREVENTIVE!

Aluminum has almost zero permeability to all gases, including the destructive gas of water, known as “vapor.” Large quantities of vapor flow into ceiling and wall spaces, unless its path is barred. Condensation formation on or within scientific multiple aluminum insulation is minimized by the construction of multiple layers of aluminum, fiber and air spaces. Installation of this pre-fabricated material is easy. The aluminum sheets stretch with uniform depth from joist to joist”, and are a continuous vapor-barrier up to 750 ft. long, without breaks every few feet. Vapor infiltration under the flat stapled flanges is slight.

The heat ray reflectivity of its aluminum surfaces is 97%; absorptivity and emissivity are only 3%. This is important because the flow of heat rays, or RADIATION, constitutes 50% to 93% of heat flow through building spaces (depending on direction). The multiple layers of aluminum and fiber retard CONVECTION, while CONDUCTION is slight through the low density, multiple air spaces.

National Bureau of Standards tests were made under various extreme wintry conditions with quantities of vapor, to find if condensation would form in air spaces where reflective insulation was installed below a wood floor over a crawl space. The results are reported in an interesting and informative booklet of the National Housing Agency, “Technical Bulletin #38.” Just use the coupon to get a copy FREE.

INFRA INSULATIONS CAN BE PURCHASED everywhere through your preferred local dealer for 3¢ to 12¢ per sq. ft. depending on the type.

| NAME | | |
|------|------------------|
| ADDRESS | | |

Infra Insulation, Inc., 525 Bway., N.Y.C., Dept B-10
Please send NHA's “Technical Bulletin No. 38.”
The Building Outlook

SMALL TALK
REALM OF THE FUTURE
By the year 2000, construction will be the major industry in the United States. The sun will be its power source and water will be the top raw material. So predicts New York University's Institute of Economic Affairs.

WORLD OF WINDOWS
Most challenging product of tomorrow is the variable transmission window whose opacity to light and radiant heat can be adjusted manually or automatically by the user. This, says David G. Hill, president, Pittsburgh Plate Glass Co., will allow builders to maintain style and an expansive feeling while avoiding too much heat and variation in light intensity.

LOWER DOLLAR VOLUME
Expect a decline of 6.6 per cent in outlays for new residential construction this year over 1955. That's the word from U. S. Savings and Loan League which forecasts total expenditures of $15.5 billion compared with $16.5 billion spent during 1955.

ALUMINUM 2x4's?
Aluminum extrusions may soon “replace the 2x4 and other basic materials in home construction.” That's the word from Eugene F. Gurkoff, president, Capitol Products, Inc. One decade from now, he predicts, American homes will contain more aluminum (both in structure and furnishings) than any other metal including steel.

YOU WON'T GO WRONG
A good motto for all builders to follow comes from HBA of Mahoning Valley (Ohio): Watch your costs and know your markets.

NORTHERN EDITION
WHAT WILL YOU BE BUILDING? It probably won't be a colonial or otherwise “old-fashioned” design. A National Assn. of Real Estate Boards' survey reports a heavy preference for ranch-type construction with contemporaries running about equal to or over conventinals. Cities favoring the low, wide house included Philadelphia, Cincinnati, Columbus, Cleveland, Pittsburgh, Detroit, Grand Rapids, Chicago, Milwaukee and St. Louis.

HOW ABOUT HOUSING? In asking that question, F. W. Dodge Corp. comes up with a good point to remember. Although there hasn't been any drop in basic demand for new housing, effective demand is something else. The latter represents the number of new homes actually built and bought. And there definitely has been a drop in effective demand due primarily to financial factors. However, one industry official predicts: We're in danger of having too few houses and not too many if homebuilding doesn't pick up.

A CRITICAL YEAR FOR HOUSING LEGISLATION. That's how 1957 shapes up in the mind of Joseph B. Haverstick, NAHB president. Top problem is the need for a broad new program of assistance for veterans and non-veterans before the GI loan program expires.

A HIGHLY REGRETTABLE, BUT ALMOST CERTAIN RISE in new home prices will occur in the months ahead. This can be blamed, says John M. Dickerman, NAHB executive director, indirectly on higher steel prices and also on the tremendously high level of overall construction which has caused building materials costs to rise. And, says Irving Rose, president of the Detroit building firm, Edward Rose & Sons: Inflationary factors triggered by recent steel industry wage increases will up the cost of the $20,000 home about $1,000.
PRE-CUT "Color-Accent" BACKGROUNDS...

...designed to give you an inexpensive, colorful means of gaining full sales appeal from Schlage's recently introduced open-back lock stylings. Made of Con-Tact®, self-adhesive plastic, "Color-Accent" Backgrounds cost only pennies...can be easily applied in a matter of minutes...at the same time Schlage open-back designs are installed on your doors. Available from Schlage dealers in a wide variety of colors and patterns, "Color-Accent" Backgrounds allow you to individualize doorways...give each home a unique, personalized entranceway.

TWO NEW "EYE-APPEALING" IDEAS FROM SCHLAGE—
To help merchandise your homes!

"TOUCH OF QUALITY" PROMOTION PACKAGE...

...your invitation to a free, full-scale merchandising program — developed especially for you by Schlage. Here's everything you need to appeal to prospective home-owners with Schlage's "Touch of Quality" story — including an attractive 12-page "Model Home Booklet," a handsome display easel, colorful lock tags, ad mats and "drop-ins," plus a unique key presentation package for the new home-owner. An excellent means for impressing model home visitors that quality guides your choice of materials throughout your homes.

For further information on Schlage's New Merchandising Tools...
"Color-Accent" Backgrounds and the "Touch of Quality" Promotion Package...contact your nearest Schlage representative or write to Dept. Y-10, Schlage Lock Company.
Interrupting the down-trend of the previous two months, August housing starts, combined with an increase of building permit authorizations, held hope for continued strength in September. Building permit increase was widespread geographically. Rising material costs and hourly earnings may signify the upturn in new home prices which have been forecast by industry spokesmen.

1. **CONTRARY TO USUAL AUGUST DECLINE, housing starts for the month held at the July level of 101,000. Thus, the seasonally adjusted annual rate rose from 1,100,000 to 1,140,000.**

2. **NEW HIGHS in building material costs and hourly earnings were set in August. Continuing decline in lumber prices did not offset the 8% rise in structural shapes and other gains.**

3. **ANOTHER RECORD in construction activity was reached with outlays of $4.3 billion. Private spending equalled the Jan.-Aug., 1955, record while public expenditures were up 6%.**
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 Flexivents® 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
Stronger than the wall itself with new interlocking steel truss construction.

50% More Steel for Unequalled Strength

70% More Nailing Area for Greater Convenience

Leigh's new 2300 Series Pocket Door Hardware sets represent the industry's greatest advance in pocket door hardware. Built like a truss bridge, having both horizontal and vertical interlocking steel trusses, this is the easiest to install and strongest set ever designed. Yet, with all its advantages, it's amazingly low in price.

- Adjustable steel split jamb, built in a boxed section for greater strength and rigidity... actually stronger than the other wall supports, can't warp or sag.
- Steel trusses nail or screw to stud, giving unequalled strength. No other pocket door hardware offers the extra-strength feature of ten interlocking horizontal trusses.
- Ten horizontal steel trusses interlock into steel jamb. Wood nailing inserts are rattle proof, provide ample area for attaching wall and trim material.

Trouble-free operation is assured with Leigh 2300 Series Pocket Door Hardware. Heavy-duty hangers support the door from a center-mounted position. Four lifetime nylon wheels roll smoothly and silently, absolutely can not jump the track. The complete set comes in one convenient package, containing steel header and track, split jamb and horizontal trusses all with wood inserts; hangers with 4 nylon wheels; nylon duo-guide; rubber door stop; door pulls; all necessary screws and instructions.

Leigh BUILDING PRODUCTS DIV.
AIR CONTROL PRODUCTS, INC.
Leigh Ave., Coopersville, Mich.
Tomorrow's House

$1500 Prize Winner stays down to earth

A look at the plan of this grand prize winner in the Morton Arboretum Small House Competition will perk up the interest of any hard headed builder.

An amazing lot of living space is efficiently laid out in about 900 sq. ft., which should be both easy to build and quick to sell.

The entry by Gardner Ertman of Cambridge, Mass., won a $500 first prize in the two-bedroom class and the $1000 grand prize for that entry, plus another $500 first prize for a three-bedroom design. Nearly 650 entries competed for the $5400 in prizes, the main problem being "the establishment of an attractive, practical relation of interior and exterior."

The three elements that impressed a unanimous jury were:

a) relation of carport entrance to house proper ("handled quite directly and near the center of the structure");
b) "integration between living room and outdoors accomplished by a covered terrace separated from living room by a small planted area");
c) "both bedrooms carrying out the same theme by ample but visual access to planted areas."

 Builders will like the almost square plan and simple partitioning; buyers should like the easy view of greenery from every room, economical traffic pattern without loss of privacy.

Serving on the jury were L. Morgan Yost, John Normile, J. T. Lendrum, Douglas Haskell, Howard Fisher, Philip Will, J. B. Mason.
Big news from FLINTKOTE!
the self-sealing, hurricane-resistant SEAL-TAB
—a brand-new shingle with a brand-new idea that gives you a roof that helps sell the house!

Now Flintkote research and production skill has produced another superior product—one that's exciting news for you, your men, your customers and home underwriters. It's the new SEAL-TAB* Strip Shingle with these outstanding features—

1. **SEALS ITSELF DOWN**

   Each SEAL-TAB Shingle has a strip of carefully selected Flintkote-developed adhesive factory-applied on the underside of the shingle butt. The sun's heat bonds SEAL-TABS together to produce a completely integrated roof, so tightly bonded that even winds of hurricane proportions can't lift the tabs!

2. **TROUBLE-FREE APPLICATION**

   The exclusive Flintkote aluminum strip retards the action of the adhesive until it is needed. In addition, this aluminum strip keeps the shingles free in the bundle... they do not have to be broken apart on the job. A SEAL-TAB roof is quick and easy to apply, guarantees greater customer satisfaction.
Ask your Flintkote Representative to show you the new SEAL-TAB Strip Shingles today. They are available in a wide variety of beautiful colors. For complete information write: The Flintkote Company, Building Materials Division, 30 Rockefeller Plaza, New York 20, New York.

As soon as the editors and designers of "Best in the House" saw the new Flintkote SEAL-TAB Strip Shingle...they decided to use it on the roof of their model home. So your customers will see and read all about this new Flintkote material in the "Best in the House" advertising feature, in the October issue of GOOD HOUSEKEEPING. Be ready when the demand starts.

* A Trademark of The Flintkote Co. Patented—U.S. Patent 2,210,209—also patent pending.

FLINTKOTE
Originator of the Asphalt Strip Shingle

OCTOBER 1956
The famous R-O-W lift-out window is now better than ever. An entirely new principle of window balancing — LIF-T-LOX — serves to make these pressure-tight windows easier to raise and lower. The exclusive new balance also makes removal easier, since it is now necessary to have only enough side pressure to insure a good weather seal. The entirely self-contained balance works independently, does not attach to the sash — does not interfere with immediate removal.
Any window with wood frame and sash provides better insulation against heat and cold than a metal window. So too, any operating window is more practical than fixed glass. Fresh air is pleasant, the year around—it's a must during the seasons between heating and cooling. Of all operating windows, none are so trouble-free, so economical and so architecturally versatile as the double-hung style. Among double-hung windows, only R·O·W has the lift-out feature, plus the exclusive, new LIF-T-LOX balance.

See your local lumber dealer or write

R·O·W SALES COMPANY, 1333 ACADEMY AVE. * FERNDALE, MICHIGAN

OCTOBER 1956
That's One Important Reason Why It's...

... precision engineered

AMERICA'S OUTSTANDING LOCKSET VALUE

Precision engineering and skilled manufacturing, coupled with modest cost, provide a lockset that is unexcelled for real dollar value. NATIONAL LOCKset gives you a lock mechanism and case made of rust-proofed, selected cold-rolled steel. Cylinder is of five pin tumbler construction... solid Brass. One-piece wrought Brass, Bronze or Aluminum knob with matching rose... reversible latch bolt with full 7/16" throw... many exclusive features engineered to reduce wear and to resist wear... these factors and more are making new friends every day for quality-made NATIONAL LOCKset.

SEE NATIONAL LOCKSET ON DISPLAY, SPACE 765 - 766, COLISEUM, NAHB EXPOSITION.

Order it with Confidence
Specify it With Pride
Chain reaction: tight market cuts starts

Home Builders throughout the nation, though feeling the pinch of a tighter market, are taking it in stride. By cutting down their output and switching, where feasible, to custom building, they feel they can wait out the storm until things pick up again. (NAHB president, Joseph B. Haverstick, citing a "critical" period has warned builders to pull in their fences—see p. 25.)

Since government statistics have shown industrial building leads construction activity, it was fair to assume that home builders might have entered the field. Some have, but not to the extent expected. These points are clearly indicated by replies received to an American Builder survey which asked: "With housing starts below those of 1955 and money continuing tight, is there any trend of home builders in your area to switch to light industrial building? If not, how are they meeting the situation?"

Typical reply came from Joseph W. Van Briggle, executive vice president, HBA of Indiana: Some of the state’s most active home builders have always been willing to take a little light industrial work and it is quite likely that home building may be slighted in favor of an increased interest in the commercial type of work.

"But," he added, "most builders are reducing the volume of operations if they have been speculation builders and are switching to an operative form—building only as orders are received. Others who have been operative builders are doing custom building, generally in higher price ranges. These men report they are not too badly hurt as their dollar volume is only slightly reduced and margin of profit is better."

Signs that home builders are anxious to get their feet wet in the industrial end of the business comes from Norman, Okla. W. T. Jameson, secretary-treasurer of the local HBA reports two builders who follow light industrial building—one who has done it all along and another who recently entered the field. Both do a great deal of store front work, filling station and business building along with their home construction activities. Others, he noted, are seeking bids for the same type of work. Jameson, too, takes an optimistic view of the future.

Paul Waters, executive vice president, HBA of Knoxville, knows of several builders who now do some light industrial building. And, from Phoenix and New Orleans comes word that there is some switching to light industrial. Meanwhile, the monthly publication of HBA of Metropolitan Washington reports about five per cent of the area’s builders have turned over to the

Cont. next page

Mr. WHAT and Mr. HOW

Every article in American Builder has two points of view: WHAT to build and HOW to build it. That’s why nobody covers American building like American Builder.

Similarly, every page of American Builder is written in our shop from two points of view: WHAT is the best story-idea for the page and HOW can the page best be prepared for easy but instructive reading. That’s where the team of editors shown above comes in: Joseph B. Mason, our new Editorial Director, handles the WHAT. Walter Reese Browder, our new Editor, handles the HOW.

It’s a pleasure to announce their appointment.

Joseph B. Mason was Editor of American Builder from 1929 to 1945. He has also been Editor of Building Age, Building Editor and Director of the Building Forum for Good Housekeeping, executive editor of Architectural Record and Building Editor of Family Circle. He is a graduate of the University of Wisconsin and has a Ph.B in Engineering and Journalism. He rejoined American Builder in 1954.

Walter Reese Browder has been the Managing Editor of American Builder. He has an M.S. degree from the Graduate School of Journalism, Columbia University, and a B.A. degree in Journalism and English from Washington and Lee University. He is a Phi Beta Kappa and has spent the last ten years in the housing and home furnishing publishing fields.

—Arthur J. McGinnis, Publisher
Reaction, cont.

building of service stations and small shopping centers. Although there is no general trend to light industrial in the Dallas area, Herbert DeShong, executive secretary, HBA of Dallas County, reports about half a dozen builders cross the line annually.

Remodeling picks up

Remodeling, up to now an industry step-child, shows signs of becoming a full-fledged member of the family. Such is the case in the Kansas City area where Leo D. Mullin, executive vice president of the HBA reports a good number of builders are engaged in home building improvement activities. In Knoxville, the remodeling field is wide open, reports Waters. The 10-to-20 builders are now building mostly contract homes and speculative builders are maintaining very small inventories around Tacoma. That's the assertion of Clarence Wilson, executive secretary of Tacoma Master Builders Assn. who also said some are doing considerable remodeling. Another area where some remodeling is being done is Des Moines. However, wired G. R. Rex, HBA executive secretary, “most builders are just slowing down their pace.”

Adjusting to market

Many areas find industry members simply adjusting their operations to meet the falling market. Such is the case at Minneapolis where Lawrence W. Nelson, executive vice president of the local HBA, reports most builders anticipated the tighter market. Cutting down on the number of units under construction has also been the answer, Bingham and Greater Boston HBAs report. Although they consider the market healthy with no backlog of unsold houses, E. Price Sampson, secretary Albuquerque HBA, says local builders are either curtailing operations or switching to custom building. And from Leon N. Weiner, vice-president, Delaware HBA, the word is that builders in his area are seeking a solution by diversification and intensified effort to reach the higher-income buyer.

Evidence of increased demands for new homes this fall and in 1957 is cited by Urban C. Remmel, executive secretary, Colorado Springs HBA. But, he added, builders are cautious. Only one real note of pessimism was evident. Said Earl Staten, executive vice president, Utah HBA: “Meeting situation by releasing construction crews. Unemployment among tradesmen including expert carpenters and other craftsmen is increasing because of slow sales.”

On the other hand, Walter Olsen, Chicago Metropolitan HBA, wrote: “No situation has developed in Chicago. There is a little less residential construction in 1956, which likely will be made up this autumn, and we believe starts will equal 1955... Home sales are a little harder, money is a little tighter, land is a little higher — as are some materials and labor costs. Homes are being built and sold as usual.”

Olsen concluded by quoting George Arquilla, NAHB regional vice president and a past president of the Chicago association. “We're facing normal times.”

FHA must liberalize terms

With the curtain due to descend on the GI home loan program, revamping of FHA is a “must” according to industry members queried by American Builder. Replies make it clear that Congress and administration officials must act — particularly regarding down payment requirements — if home builders are to continue the remarkable record they set in the past decade. Also included as a “must” in any FHA revisions is a desire for more realistic appraisals.

“If GI home loan program expires in 1958, would like to see 1957 housing bill contain terms permitting purchase of a home up to $10,000 value with two per cent down payment and a graduated scale... to a maximum insured mortgage of 80 per cent of $20,000,” replied Miami builder James M. Albert. He believes such terms would make the economy home available to all at a reasonable figure while providing for orderly transition from the GI program.

Agreeing on the need for more liberal financing terms is Ralph E. Staggs of Phoenix who would like to have Congressman Teague’s entire program adopted.

Ask appraisal changes

Along with a low down payment program, George M. Pardee Jr., of Los Angeles also asks for more realistic appraisals from FHA so that minimum down payments are actually minimum and FHA appraisals equal to sales prices of the homes. Other Los Angeles builders concurred, asking for an early Congressional hearing.

Regarding appraisals, Robert J. Gump, Dallas, has the impression that recent liberalizations have given more realistic allowances for overhead in medium and upper brackets. However, he adds, “Our growing use of air-conditioning makes mandatory FHA get better current figures on a.c. costs in certifying earnings eligibility, I believe many buyers now knock out because of dated operating cost figures.”

A more liberal FHA with more realistic appraisals is also the desire of J. F. Carabin, president, Cincinnati HBA.

Scores ‘reasonable value’

“One thing I would very definitely like to see done away with is the one-year warranty, also having to show the buyer what the FHA ‘reasonable value’ is on their commitment,” writes R. O. Woodson, Corpus Christi. “In many instances the ‘reasonable value’ will be so low that we cannot sell for their price. When we put our price where we have to and show ‘reasonable value,’ many times it kills sales for us.”

A three-point program for FHA as outlined by a Phoenix building firm would include:

1. Incorporation of further low down payment provisions enabling low income group to buy housing.

2. Legislation providing service housing in order to induce reenlistment in the armed forces.

3. Further provisions encouraging housing for the elderly.

AMERICAN BUILDER
Storm warnings hoisted; Haverstick advises builders

Joseph B. Haverstick, NAHB president is worried. He's worried about mortgage money; he's worried about the shift to higher-priced homes; he's worried about falling Storm warnings hoisted; Haverstick advises builders president is worried. He's worried about the number of builders going out of business this year.

(These worries led to an emergency meeting of NAHB's officers and policy committee Sept. 10-11 which charged that the administration's "money managers" were making decisions that had dried up mortgage money under the guise of preventing inflation. "The time has come—in fact, the time has passed," a statement said, "for the homebuilding industry to state in the most vigorous terms at its command that the Government must reaffirm its fundamental belief in..."

Cont. page 268

DICKERMAN'S COLUMN

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

Credit controls hit housing industry the hardest

Home building volume in the last few months has been steadily declining. Industrial and commercial expansion, as well as economic activity in general, has been climbing to new heights. Federal Reserve Board and fiscal authorities have been applying the monetary brakes in an effort to hold inflationary tendencies in check.

All efforts to ease arbitrary credit controls on housing and to divert credit into home mortgages to check the decline in residential construction have, as of this writing, come to naught. The reason assigned: Inflation must be stopped. To those of us in the housing industry this position of government officials has seemed highly inconsistent. Tightened credit has had little effect apparently on burgeoning commercial and industrial development and yet it has had devastating effect on housing which already was showing signs of a decline at the time controls were placed on the industry.

Even a year ago, FHA-VA loans in most parts of the country were available only at substantial discounts. This reflected the relatively poor competitive position the 4 1/2% FHA-VA gross interest rate gave mortgages compared to other available investments. Keep in mind the typical prime lender actually nets only 4% or slightly less after paying the normal 1/2 of 1% servicing charge to the local mortgage company.

Discounts a headache

Since the rise in the prime rate to 4%, increase in the Federal Reserve discount rate to 3% and sale of utility offerings at nearly 4%, stock brokers loans at 4 1/2%, the long-term FHA-VA paper has been unmarketable except at ruinous discounts.

Home builders have been absorbing these discounts on insured and guaranteed loans in order to stay in the FHA-VA market. In the meantime, the rise in costs of land, materials and labor has drastically narrowed the profit margin out of which these discounts must be paid. Builders simply can no longer afford to pay the discounts and continue to shoulder the building business risks. Here is a curious anomaly:

The home builder who finds that the cost of materials and equipment to go into a proposed house has gone up $800 or $1,000 in a given period of time can obtain recognition by FHA and VA of this fact when the time comes to evaluate the house. The same builder who is forced to pay the same amount in the form of a discount to get a permanent loan for the consumer cannot get this cost recognized. By some strange reasoning, this discount is presumed to be illegitimate and therefore not recognized by the insuring agencies. Of course, a discount is the only way that the market may compensate for a frozen rate.

Why not unfreeze the interest rate some would suggest? FHA rate could be raised by Administrative action; VA rate could not, since it is established by Congressional action. Congress might or might not agree to a rise—but the question is academic until next year when Congress convenes. If FHA rate is raised the two government-insured and guaranteed programs would become imbalanced in favor of FHA and VA program would wither in the vine. This might create considerable political problems for the administration.

This is the dilemma facing government officials today. It does little good to say they should have anticipated this possibility and provided for it no matter how clear this fact is in retrospect.

Government must act

NAHB leaders for months have been calling this growing problem to the attention of responsible government and financial authorities. They have pointed out that it is FHA and VA housing on which lower and middle-income families must depend for long-term, low down-payment loans. It is this very group to which public housers and those who believe in socialized credit and socialized housing point as needing assistance. The continued "head-in-the-sand" attitude on the part of those responsible for fiscal policy must have but one result—reduction in low cost housing volume by private enterprise and corresponding increased demands by public housers for tax subsidized housing.

Unless this increasingly critical situation is remedied by strong administration action between now and the convening of Congress, we may expect a deluge of housing bills of every conceivable kind and description. Many will attempt to project the Federal government via socialized credit or direct construction into an ever increasing portion of our housing economy. The very authorities who have been blind to essential requirements of FHA-VA market will undoubtedly look with horror upon such proposals. They now have it in their power to act. It is sincerely hoped they will.
Research homes

Opening of Homestyle Center—the permanent research village of 50 houses announced last year for Grand Rapids, Mich.—is now experimental, modern, slated for next Spring, at which architectural designs time twenty-five of the houses will be completed. The remaining twenty-five will be constructed during the following three-year period. Included in the first group of homes will be all price ranges—from $8,000 to $17,000, $17,000-$50,000 and $50,000-$200,000; architectural designs embracing experimental, modern, contemporary, traditional, modernized and imported; representative houses from the east, south, midwest, southwest, west and northwest; homes for families of two members to those with over five persons; and dwellings representing urban, suburban and farm living.

As previously announced, once the original fifty homes are built, five to ten homes will be removed each year and replaced by new designs. All will be kept open the year around for public and industry inspection.

For a preview peek at what you’ll be seeing at Homestyle Center, be sure to watch forthcoming issues of American Builder. You’ll learn what to expect in “Tomorrow’s House.”

Events and people

NAHB’s 13th annual convention, slated for Chicago, Jan. 20-24, again calls for sessions of interest to both small and large-volume builders. Subjects announced by convention committee chairman Leonard L. Frank include: "problems of the one-to-twenty builder," "community facilities," and the "economic outlook for 1957.”

Newly-created merchandising department of NAHB will be headed by William A. Molster . . . Bernard E. Loshbough was appointed general manager of the National Housing Center. He was associated with Ford Foundation.nation and appliance stores, as well as cabinets and floor, wall, ceiling, and counter top materials.

Most popular clinic of all at the first two expositions was one dealing with mechanical handling of lumber and other materials. The increased cost of unloading, storing, and loading lumber, roofing, gypsum board, and other heavy materials has sharpened dealer interest in cost reducing equipment such as lift and straddle trucks.

The materials handling clinic this year will include actual demonstrations of freight car unloading and other operations inside the spacious amphitheatre.

Power tool demonstration

Another action-type clinic will feature demonstrations of power tools, which are being sold by an increasing number of dealers each year to the do-it-yourself trade, as well as to carpenters and contractors. Recent surveys indicate that nearly half of the dealers handle one or more lines of power tools.

A brand new type of clinic will be devoted to concrete mix operations which have begun to attract widespread attention of dealers, especially those who believe that it pays to offer every type of material and service that customers might need in connection with building.

Will stress merchandising

Other clinics at the Chicago Exposition will deal with a wide range of management subjects, with special emphasis on merchandising. In that connection, one clinic will center around a model retail lumber store which will show the latest ideas in store layout and display techniques for the guidance of dealers who wish to make a strong appeal to the consumer trade.

Methods of building sales by proper use of consumer financing, including installment selling and mortgage credit, will be the subject of another clinic for dealers seeking a larger consumer business. These attractions, plus the product exhibits and entertainment features are expected to result in the largest dealer meeting ever held.

DEALER’S VIEWPOINT

Lumber dealers to get the “how” of building

The expanding interests of retail lumber dealers are graphically illustrated by the management clinic subjects planned for our third annual Building Products Exposition in Chicago during December.

Two of the clinics are devoted to specialized aspects of housing. One features the use of component parts in home building, and the other will deal with the homes which we have had designed in accordance with the recommendations of the Women’s Congress on Housing. More and more dealers are concerning themselves with the building of homes rather than merely supplying materials to be used for house construction.

Kitchen remodeling is the theme of another clinic. Dealer interest in this subject ranges from supplying cabinets for new kitchens to taking contracts for the complete remodeling job, including equip-

Ranch style now traditional,
3 bedrooms the rule in Chicago

Ranch homes are now considered a traditional type of architecture; and three bedrooms is the rule rather than the exception. That's what the Chicago Metropolitan HBA learned from its builder members in an attempt to find out what's happening with homes, builders and people in the Chicago area.

Of the ninety-two builders who replied to the survey, all built from one to 200 homes in 1956 in the $14,000 to $100,000 price range and are responsible for constructing over 4,500 houses this year. Answers give a clear picture of what is going on in the area.

“Splits” on the rise

Although the three-bedroom trend has definitely been established, three builders replied they were offering five bedrooms, while 17 offer four. Only nine provide two.

In an area where the split-level was a novelty two years ago, over half the builders now erect “splits.” These have surpassed one-and-one-half and full two-story homes.

While financing continues to be a thorn in the side of the builders in almost all sections of the country, seventy-five of the ninety-two builders building in various price ranges. Care was taken, he noted, that nothing substantial had been added by his office in these cases over minimum local FHA standards.

“We then,” he added, “deleted from the cost of these houses, every item which the builder had included . . . over and above the minimum required by our rules. Results were, to say the least, astounding. We found almost any house . . . could be reduced from 15 to 30 per cent in price.”

Edwards asked builders to give buyers a chance to purchase a lower-priced home by showing “stripped-down” models as well as the models currently being offered. He promised the FHA Detroit office would expedite appraisal requests on a new stripped-down plan for a house or a rework of a current FHA commitment for insurance.

There also was a possibility, he continued, that savings in land development cost might be effected in certain instances. If, for example, there was an isolated area or section of a project not suitable for $15,000 homes, FHA land planning and subdivision departments might suggest methods of cutting site improvement costs.

Many builders, admitting they had introduced “gimmicks” in new models, said they will have to be continued. But, they conceded, a stripped house might appeal to some.
Eveready BrikSaw’s Exclusive Labor-Saving Features Mean more job profits. The simple, practical design allows High Production — Low Cutting Costs — Practically no Maintenance.

You Can’t afford to be without an Eveready BrikSaw — Wet (dustless) or Dry. Your dealer can serve you Today From Stock — Call Him Now!

FREE BOOK
Contains detailed guide for lower masonry cutting costs.

Your Local EVEREADY Dealer has a Complete Stock of Genuine EVEREADY Saws, Blades & Parts — Call On Him! Ready-Cut

EVEREADY DEALERS...
In Most Principal Cities in the United States and Canada
Write for the Name of Your Nearest Dealer
EVEREADY BRIKSAW CO., 1505 S. MICHIGAN BLVD., CHICAGO 3, ILLINOIS

XTRA CUT — Wet or Dry Abrasive Blades — Consistent uniform Quality for fast cutting.

READY-CUT Diamond Blades — SPEED — Accuracy — Efficiency on Most All Masonry Materials.

TUFFIE 3-Ply REINFORCED BLADES — Safer, Stronger — Lower Priced — a fast cool cutting blade — virtually unbreakable — for all hard to soft materials.

Your local EVEREADY Dealer has a complete stock of genuine EVEREADY Saws, Blades, and Parts — Call on him.
now, adding Cooling
to Williamson Heating
is as easy as installing
a telephone!

Yes, you can now delay that important "Yearround Air Conditioning" decision until your home is completed and your buyer decides whether he wants cooling added to his heating equipment immediately or not. Simply install a WILLIAMSON Warm Air Furnace with a cooling coil enclosure—the latter at practically no extra cost. When the buyer decides on cooling, it can be added almost as simply as adding a telephone.

Remember, Williamson has a size and a type of central cooling unit and furnace to fit any size home you are building. No water required—no costly plumbing.

See our 12 page insert in SWEET'S Light Construction File.

High Boy with Cooling Coil Enclosure

“A” Type Plenum Coil

Outlook Waterless Refrigeration Condensing Unit (for all Weathermatic units)

THE WILLIAMSON COMPANY
3330 1-10 Madison Road, Cincinnati 9, Ohio

Send on further information on WILLIAMSON'S Plan for adding Summer Cooling.

Builder
Name

Address

City_________ Zone_____ State
Ohioans got a look last month at a city in the making. What they saw was the first completed part of what is expected to be one of the largest and most modern close-in, completely planned communities in the U.S.: a city of 10,000 named Forest Park.

The house shown here is one of several in the development, which includes designs ranging from $14,000 up to $60,000.

An estimated 10,000 daily visitors thronged to the three-day opening during the last week of September. Here the crowds viewed gala ceremonies attended by the governor of the state and other notables.

To date, about 300 houses have been put up, of which some 200 have been sold and occupied.

When completed, Forest Park will cover a 3,700-acre tract acquired 20 years ago by the federal government as the site of one of three huge “Greenbelt” communities. Neighborhoods will contain houses in similar price ranges cleverly divided and screened from other areas by means of natural land dividers such as ridges, streams, and planting.

Improved lots are available for sale to members of the home building industry as well as individuals who want to build their own custom homes. Lot sizes will vary according to the neighborhood and location from about 4,000 to 12,000 square feet.

What makes Forest Park different from the usual housing subdivision, according to builder Marvin L. Warner, president of Warner-Kanter Cos., developers of the area, is that “its economic justification has been subjected to intensive study by experts over a long period of time. The property is fully protected against the intrusion of blight and deterioration.”
REAR DOOR of tri-level type shown on opposite page opens into family-recreation room with full-length windows facing lawn and woods. At extreme right is sliding glass door leading to living and dining room.

ON SAME LEVEL as recreation room are the laundry, utility room, and garage. Upper level contains three large bedrooms and twin baths. Third level, with living-dining room and kitchen, views landscaped terrace.

TRI-LEVEL "EDEN" is one of the most popular designs in the development. Price ranges from $21,900 to $23,000, varying with choice of roof lines, siding, materials, other construction details.

for a city-in-the-making

RECREATION AREA is planned as shown in scale model above. Located in nearby Winton Woods Park, it will provide parking space, swimming pool and kiddies' playground.

COMPACT KITCHEN features open design. Viewed from living room, curtained sliding-door-wall at extreme left leads to landscaped terrace.
Photos taken at the residence of Mr. and Mrs. Edward L. Ayers, New Smyrna Beach, Florida. Plans by David A. Leete, A.I.A., Daytona Beach, Florida. Drawers molded of BAKELITE Phenolic Plastic by Boonton Molding Company, Boonton, N. J.

Twenty-three drawers were used in this house. Because sizes are standardized, hand fitting is virtually eliminated. The color and finish are molded in...just slide the drawers into place. Above is a demonstration of their flexibility. Drawers have molded-in slots for compartmentation. Typewriter compartment has front painted to match molded drawers below.

Black-topped counters and stainless hardware harmonize with the shiny black molded phenolic drawers, set off the finish of wood panels. And, they clean with the wipe of a damp cloth.

No wonder homeowners are enthusiastic about drawers molded of BAKELITE Phenolic Plastic. These drawers can be built-in anywhere in the house. They are easy to clean. They have the attractive appearance necessary in the finest houses. Yet their costs are comparable with conventional drawers of quality construction.

Built-in drawers give your houses important new selling features. Why not write for descriptive folder giving sizes available and listing of manufacturers. Dept. UE-5.
BUILDERS!
BUILDING SUPPLY DEALERS!

A GREAT NEW WAY
to add **sellable quality** inside and outside a home
NOW NATIONALS, INC.

30% MORE STRENGTH
when ALL concrete is reinforced

DON'T LET THIS HAPPEN TO YOUR CONCRETE! Both these driveways are about the same age. Yet one is badly cracked, broken, and ugly. The other is smooth, good-looking, and free of cracks. The only difference is welded wire fabric reinforcement. Wire fabric makes homes easier to sell... makes concrete easier to sell. Be sure all the concrete you use, or sell, is reinforced with American Welded Wire Fabric.
You know the value of reinforcing concrete with American Welded Wire Fabric. You know that in concrete slabs on the ground it increases the strength and, therefore, the durability of concrete about 30%... and at a cost in the average house, depending upon location, of less than $25—less than 10% of the cost of concrete itself. How can anyone afford not to reinforce his concrete? He can't!

And consumers will know. About 3 million home buyers and home owners will read about the advantages and the extremely low cost of wire fabric reinforcement. They will read about it in advertisements in Better Homes and Gardens, and in Small Homes Guide. People buying new homes and people who are remodeling existing homes will want longer-lasting, better-looking, reinforced concrete inside and outside their homes. Give them this better concrete with American Welded Wire Fabric Reinforcement.

BUYERS WILL ASK

"is it Reinforced"

USS American Welded Wire Fabric
HOW NATIONAL ADVERTISING AND PROMOTION 
of wire fabric reinforcement 
pays off for Builders and Building Supply Dealers!

BUILDERS! Tie-in with the nationwide promotion of American Welded Wire Fabric Reinforcement. American Welded Wire Fabric is the lowest cost extra value you can put in your home. Use it, and tell buyers about it. Tell them in your advertising, in your promotion and publicity, and at your demonstration homes. See your building supply dealer and work out a tie-in promotion that will help both of you sell more, more easily. Send the coupon for free merchandising aids that will help you.

BUILDING SUPPLY DEALERS! Here's a ready-made opportunity to increase your business! People are being told in national magazines about the value and the low cost of Wire Fabric Reinforcement. And you're the fellow who can supply it! Tie-in, using the free merchandising aids offered below. Advertise and promote American Welded Wire Fabric, and you will sell—not only more fabric, but more concrete. Work out a cooperative program with builders you supply. Send the coupon today.

FREE MERCHANDISING AIDS...
Newspaper mats! Handouts! Brochures! Booklets! Envelope stuffers!

American Steel & Wire Dept. 96-A, Rockefeller Bldg. Cleveland 13, Ohio

Today, rush a free merchandising kit which will help me increase my business.

Name .......................................................... 
Firm ............................................................ 
Address ........................................................ 
City ............................................................... 
State .............................................................
Unequalled Selection for type, size and capacity of pumps and water systems is made available to you with the complete Deming line.

One Reliable Source for all types of pumping equipment saves you time and money.

The Deming line includes all types of water systems in a full range of capacities; cellar drainers; sump pumps; vertical and horizontal centrifugal pumps; turbine pumps; condensation return units; and many others.

Nationwide Distribution: Deming Distributors and Dealers are located in all areas for local service.

Write for free, illustrated literature. Please state type, or types, of pumps, or water systems, in which you are interested particularly.
America's Most Complete Line for WEATHER-SNUG HOMES

Quality Building Specialties

M-D MACKLANBURG-DUNCAN CO.

Numetal WEATHER STRIP
This complete package unit means easier handling for you . . . easier installation for your customers. M-D Numetal door sets are available with regular door bottoms or with threshold and exposed hook.

HANDY PACKAGED SETS! Ready to hand customers! Ready to use!

Numetal DOOR BOTTOMS

On-GARD WEATHER STRIP
This stainless steel or bronze coil weather strip is packed two ways—six 18 ft. rolls in free display carton, or in 100 ft. individual cartons.

BUILDERS
For highest quality and dependability always specify M-D products. Sold by hardware, lumber and building supply dealers throughout the country!

DEALERS
Order Today! Your order shipped same day it is received! All M-D products are fast sellers, nationally advertised.
Easiest in the world to put on

This easy-to-put-on weather strip makes friends as it makes you profits. Works perfectly on windows, storm sash or doors. Made of wool felt and white metal. Each individual carton contains one 18 ft. roll with nails and instructions. Packed 12 cartons in display case.

Automatic DOOR BOTTOM

Here's the perfect automatic door bottom and draft eliminator for ALL doors. Completely solves old problem of clearing rug or floor every time door opens. Easily installed on right or left hand door. Smartly designed with silvery-satin finish — will not rust or tarnish. Furnished in standard lengths—28", 32", 36", 42" and 48". Packed in individual cartons.

CALKING COMPOUND

World's best calking compound available in loads, with or without nozzle...hand squeeze tubes...or 1/2 pt., pt., qt. and gal. cans. Also 5-gal. and 55-gal. drums—gun or knife grade.

GLAZING COMPOUND

You can recommend this glazing compound with complete confidence that it always "stays put." Packed in 1/2 pt., pt. and qt. cans, 25 lb., 50 lb., 100 lb., and 880 lb. drums.

ASPHALT CEMENT

Ideal for sticking down asphalt shingles and general repair work on roofs and flashings. Comes in handy loads, with or without nozzle; 31/2 lb. and 10 lb. cans; 50 lb. pails and 550 lb. drums.

MACKLANBURG-DUNCAN CO.
OKLAHOMA CITY 1, OKLAHOMA
Leaders in the Building Specialty Field for 35 years!
Master Makes It June in January

The Master B-100 portable heater takes the sting out of winter; lets you do all kinds of jobs all year round. Saves time lost to cold weather... you just plug it in the nearest electrical outlet and the heat pours out; costs only 12¢ an hour to run. This mighty furnace on wheels weighs only 78 pounds... is so compact one man can handle it easily, yet delivers 100,000 BTUs of circulated forced air heat every hour. Use it when pouring concrete, plastering, lathing, finishing. This Master goes almost anywhere a man can; moves from job to job in your car trunk. It's safe too... burns kerosene or No. 1 or 2 fuel oil so completely you don't even need a vent; will run overnight without attention. See your Master distributor or fill out and mail the coupon today for all the facts on the B-100 and larger models. No obligation.

MASTER VIBRATOR COMPANY, 358 Stanley Ave., Dayton 1, Ohio
Sure, send me the facts on how Master heaters can help me lick the cold weather problem. I'm interested in:

☐ Small Master B-100 Portable Heater  ☐ Larger Master Portable Heater

Name ____________________________
Firm ____________________________
Address ____________________________
City ____________________________ Phone ____________________________

A compact furnace on wheels

MASTER

AMERICAN BUILDER
there's more vinyl in every tile of Bolta-Floor

WEARS LONGER,
STAYS BEAUTIFUL LONGER,
...with or without waxing

Specifying floor covering can be touchy business...you can save, but be sorry! With the high percentage of vinyl in Bolta-Floor, you're sure of a more dense surface for greater wearability, easier maintenance as well as a rich natural lustre that lasts years longer, with or without waxing.

Bolta-Floor offers a full line in colors, sizes and gauges to meet every requirement. It's available in 22 smart decorator colors...5 solid and 17 marbleized, in 4 tile sizes (6 x 6, 9 x 9, 12 x 12, 18 x 18), 2 roll widths (27" and 54") and in 3 gauges (1/8", 3/16" and .080).

For top quality and performance, specify Bolta-Floor and be sure.

The General Tire & Rubber Company, Flooring Division, Akron, Ohio
FULL-POWER SERVICE ENTRANCE

ENOUGH CIRCUITS OF GOOD-SIZED COPPER WIRE
It takes
3 things to bar
"Skimpy Wiring"
from your homes!

Three things can keep “Skimpy Wiring,” symbol of inadequate wiring, out of the homes you build. Just be sure their electrical systems are planned to have:

1) Full-powered service entrances of at least 100 amperes. (The minimum NAHB voluntary standard.)

2) Enough circuits of large enough copper wire to power every appliance used, even when other appliances are operating on the same line. Extra circuits, too, for the house to “grow on.”

3) Plenty of outlets to put the power where it’s needed, when it’s needed. Plus handily located switches which allow a homeowner to safely “light his way through the house.”

These are the essentials of modern home wiring. They add little to the overall cost of a house. They mean much to the electrically-minded homeowner of today. Plan for them... it pays!

FREE HOME WIRING WALL CHART!
Send today for Kennecott’s handy wall chart showing typical home circuit loads. Use it as a check list when planning electrical systems. Write Kennecott Copper Corporation, Dept. AB106, 161 E. 42 St., New York 17, N. Y.

Kennecott
COPPER CORPORATION
Fabricating Subsidiaries:
Chase Brass & Copper Co.
Kennecott Wire & Cable Co.
The American Super 8 leads in performance with twice the speed of Standard machines. The vari-speed 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.

An exclusive line
For your convenience there is an American Distributor in every principal city, who specializes in American equipment, supplies and replacement parts. He's on the job every day to serve you!

Out on the job
A phone call will bring help from your American Distributor promptly... equipment, supplies or expert advice. You'll find that with American Distributors, service is not merely a word but an action!

Guaranteed repairs
Factory-trained mechanics can quickly restore your American Machines to tip-top working order. It's a good plan to bring them in regularly for a check up. This avoids loss of machine-time in your busy seasons, assuring maximum year-round profits!
for GLAZED TILE
CONCRETE BLOCK
... BRICK and ALL
MASONRY MATERIALS

... BUY CLIPPER QUALITY
FOR GREATER SAVINGS

Clipper made the world's first ma-
sory 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!

4 Out of 5
Buy Clipper
... Because
Clipper
Guarantees
Results!

Call your Factory Trained
Representative for Same
Day Shipment!

For lowest possible cost, look for the
bright orange centers which identify gen-
une Clipper Superior Blades. Manufac-
tured under the most advanced Quality
Controls known to the industry — your
performance rim to stub, and blade to
blade.

- **ABRASIVE**
  - Hard — Soft — Porous —
  - Dense... Wet or Dry, there's a special Clipper
  Abrasive Blade to cut any masonry material, faster,
better, with guaranteed lower costs. Clipper Quali-
ty is your Best Buy! SPECIFICATIONS FOR 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... con-
sistent quality. IF YOU DON'T KNOW DIAMONDS,
KNOW YOUR MANUFACTURER!

**MAIL COUPON FOR FACTS**

CLIPPER MANUFACTURING CO.
2626 WARWICK • KANSAS CITY 8, MO. 64105

Send me complete information on:
- Genuine Clipper
- Diamond Blades
- Cliper Concrete Saws
- Break-Resistant Blades
- Wet or Dry Abrasive Blades
- Send my Factory Trained Representative to see me.

NAME ___________________________
ADDRESS _______________________
CITY ____________________________
STATE __________________________

**MAIL COUPON TODAY!**

CLIPPER CONCRETE
SAWS

Call your Factory Trained Representative
for a FREE DEMONSTRATION of a Clip-
per Concrete Saw. Let him show you how
these and many other features are nec-
essary for low-cost concrete sawing.

- **POSITIVE SCREW FEED** raises and lowers
cutting head smoothly without damage
from bumps or scraping. Fingertip con-
trol at all times. Dash mounted for con-
venience. A "Must" when using new
low-cost "GreenCan" Abrasive Blades,
to compensate for diminishing blade di-
ameters. A WHEEL 3-POINT NO-
BIND BLADE SUSPENSION. SELF-PRO-
PELLED mechanism for speeds up to
26 ft. per minute. PATENTED WATER
APPLICATION supplies water to the cut-
ting edge of the blade — just where it
should be — regardless of the depth of
cut. Guarantees fastest possible cutting
and longest blade life.

**WHAT HORSEPOWER
Do YOU Need?**

7½-14.6-25-36?

Yes... Clipper has the Horsepower...
gasoline and electric for all your con-
crete cutting jobs. Use Clipper Concrete
Saws for light work, or heavy produc-
tion cutting on highway and airfield
construction... road and street repair...
... trenching... industrial plant maintenance... sawing
before breaking... sawing openings
for machinery bases... sawing stone
or refractory slabs. Write for informa-
tion to convert your present Clipper
Concrete Saw to a Concrete Saw.
The woman you want to sell...is already sold on this monogram.

ring up sales with the big plus that only G-E home heating and cooling gives you.

And don't forget the magic part General Electric's quality products play in your sales picture. Example:—the super-efficient "Builder Special" G-E gas furnace. You can boast automatic, fast heat, clean heat—and tell a great economy story to the home buyer. Hitch these selling points to the world-famous G-E monogram—on your site signs and in your ads—and you'll have the big plus that will ring up the sales.

So get in touch with your General Electric dealer now. He's listed in the Yellow Pages of the phone book. He'll talk builder's language with you—specifically...costs, economical installation, savings and profits.

HOME HEATING AND COOLING DEPT., TYLER, TEXAS.

Progress Is Our Most Important Product

GENERAL ELECTRIC
Avoid “nailpox” and unhappy customers
with ALCOA® ALUMINUM NAILS

Nonrusting... Nonstaining... You won't ever have to explain away "nailpox" caused by rusting and staining when you use Alcoa Aluminum Nails. They're nonrusting, and nonstaining, and should always be used for siding, roofing, shingling... or any job where nails are exposed to the weather.

Now, for your convenience, Alcoa Aluminum Nails are packaged in handy amounts based on the application and size of job. There's no waste, no buying of excessive quantities— you get the exact amount you need.

ALUMINUM COMPANY OF AMERICA, 2252-K Alcoa Bldg.,
Pittsburgh 19, Pennsylvania.

Your Guide to the Best in Aluminum Value

Enhance your reputation for using quality materials in your homes... always specify Alcoa Aluminum Nails packaged in this box.

Alcoa Aluminum Nails and Fasteners are available nationally through Macklanburg-Duncan Co. and leading wholesalers of other Alcoa Aluminum products.
it pays to offer your clients that "extra" in modern home construction

an ALL-COPPER DRAINAGE SYSTEM

The fact that modern conveniences help sell houses has been proven by builders and architects throughout the country. Many of these extras "leap to the eye" ... built-in ovens, automatic furnaces, air conditioners, washer-drier combinations, even automatic garage doors. But a more basic convenience, and one that costs only a trifle in comparison, is an all-copper water supply and drainage system. By specifying Streamline® copper tube and fittings for drainage as well as for supply, you give your client an installation that will last the life of the building and will be free of the repairs and annoyances that plague old-fashioned plumbing. Streamline installations are free-flowing and practically clog-proof ... there are no caulked joints to leak, no rust damage to worry the home-owner. In addition, you can show your client a beautiful smooth copper-and-bronze system that's as modern in appearance as it is in function. It may cost more to use copper throughout, but the extra cost is negligible in view of the sales appeal and practical advantages. Contractors often report that the finished job costs less with Streamline tube and fittings, because of the shorter installation time and the fact that our compact 3" stack fits into a standard 2" x 4" partition, eliminating the need for furring.

REMEMBER—The advantage of using all-copper Streamline tube and fittings is worth many, many times the small extra cost! Write today for information kit No. 15 containing the detailed story of copper for drainage.

MUELLER BRASS CO.
PORT HURON 84
MICHIGAN
In our book, SERVICE...GOOD, DEPENDABLE SERVICE...is something every builder is entitled to.

And that's why ALWINTITE distributors are selected primarily on their ability to give you unexcelled service. They must not only be rated "Tops" and enjoy a reputation for reliability and integrity, but they must also: (1) carry complete warehouse stocks; (2) give fast, dependable delivery service; (3) have factory-trained personnel ready to help you with your window problems at any time.

ALWINTITE window and door products are engineered to enhance your reputation as a quality builder, — to reduce installation time, and to give trouble-free service. That's why you can always depend on ALWINTITE—products of General Bronze, world's foremost producer of aluminum windows. For latest catalog and name of nearest distributor, write to ALWINTITE DIVISION, GENERAL BRONZE CORP., Garden City, N. Y. Attn. Dept. AB-5610.

aluminum WINDOWS and DOORS

by GENERAL BRONZE CORPORATION

ALWINTITE DIVISION — GARDEN CITY, N. Y.
Comfort is a basic feature of today’s modern home. Builders everywhere recognize the sales and profit advantages of comfort features.

And one of the most important comfort features that makes any home more liveable, salable, and profitable is control of the right temperature in every room—at all times.

National-U.S. Baseboard Heating Systems provide the right temperature... control of delightful living in each room... and they supply it efficiently and economically. Write for complete information today.
National-U.S. Baseboard Heating Systems work to highest efficiency when they are supplied by National-U.S. Hot Water and Steam Home Heating Boilers. There are styles and sizes for every residential requirement.

National-U.S. Systems also assure an ample automatic year 'round supply of domestic hot water for kitchen and bath—at no extra cost. They are also ideal for use with snow-melting systems in addition to temperature zoning and cooling.

Write for bulletins on National-U.S. Boilers and Heat Distributing Units.
Ten thousand square feet to be covered with a polyethylene moisture barrier. The bed of sand has already been prepared as the film is laid out.

The first seam is started. A 6-inch overlap, taped or stapled is satisfactory.

The polyethylene film is pulled into position. Being tough and flexible, few men are needed to handle the light weight membrane.

Completely in place, steelwork is already being laid in preparation for pouring concrete for the slab.

Data courtesy of Wilson Lumber Co., San Antonio, Tex., distributors for "Visqueen Polyethylene Film" made by The Visking Corporation, Terre Haute, Ind.
Work moves fast with this simple electric sealer. Each 32-foot wide strip of polyethylene is joined to its neighbor.

The final seam is completed. Pipes and electrical outlets protrude through holes cut in the film. They are then wrapped tightly in small sheets of film and sealed with the main barrier.

**Here's how it's done...**

**A lifetime moisture barrier in only 2 1/4 hours**

Polyethylene moisture barriers are tough and long-lived ... go in fast with a big saving.

Today, more and more architects and builders are turning to film made of Bakelite Brand Polyethylene for a variety of moisture barrier applications. Polyethylene film is very light in weight, requiring fewer men for installation. Flexible in the most extreme cold, it is tough, unaffected by chemicals and easily sealed by heat, staples or tape. This application, developed by The Visking Corporation, is ideal for waterproofing almost everywhere ... for protecting materials and equipment from weather ... even for dustproofing in walls and subflooring.

Why not find out about using film made of Bakelite Brand Polyethylene in your next building? Your building supply dealer has complete information, or write Dept. QE-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*
The famous brand-name door that helps builders sell more homes!

- Feature The "Overhead Door" in your Model Home to dramatize and demonstrate today's outstanding living convenience.
- Let the 100 sq. ft. (or more) of the "Overhead Door" be your point-of-sale proof of quality for the entire house.
- Use the modern magic of the "Overhead Door" with Ultronic operator to draw more people to your Open House.
- Write for details concerning our cooperation in providing this push-button miracle with America's foremost garage door.
And, in 1956, more people are buying The "OVERHEAD DOOR" than ever before!

Only The "OVERHEAD Door" offers builders so many advantages...so much service!

COMPLETE RESPONSIBILITY for the satisfactory performance of The "OVERHEAD Door," wherever installed, is assumed by Overhead Door Corporation and its distributors. Each installation is guaranteed for one year, service provided whenever needed, and parts available on 24-hour notice.

The "OVERHEAD Door" is advertised in full color in Saturday Evening Post and Living, and is the only garage door specified by Show-House architects in these publications.

A complete line of doors—including Ultronic operation—in a complete range of styles and prices.

Widest variety of styles—standard patterns, individualized designs—is offered by The "OVERHEAD Door."

Top quality materials, the most expert craftsmanship make The "OVERHEAD Door" America's finest garage door.

Fast delivery, installation of The "OVERHEAD Door" helps keep jobs on schedule...keeps customers satisfied.

Guaranteed against defective materials and workmanship for one year; expert service available any time, anywhere.

America's pioneer and leader in upward-acting garage doors

OVERHEAD DOOR CORPORATION
Hartford City, Indiana

MANUFACTURING DIVISIONS
Hiliside, N.J. • Nashua, N.H. • Cortland, N.Y. • Lewistown, Pa. • Oklahoma City, Okla. • Dallas, Tex. • Portland, Ore.
2,000 HOMES
in
Kingston Estates
are being equipped with
AllianceWare®

Planned as a community of over 2,000 moderately-priced homes, Kingston Estates is now under construction in South Jersey. The developers offer five designs to provide a home to meet the needs of every family.

Over 500 homes have been occupied, with 150 now under construction. Featured in the homes are ample living areas, a powder room, 3 or 4 bedrooms and two ceramic tile baths. Smaller homes have one bath and powder room.

All sanitary ware fixtures are AllianceWare—porcelain-on-steel. Bathroom fixtures are in color—powder room fixtures in white.

For high quality at reasonable cost ... for modern design in a wide choice of color and white ... for lifetime beauty of stainproof enamel . . . and for bathtub units in recess, corner, or "junior" small space sizes, an increasing number of architects and builders choose AllianceWare. If you are not familiar with all advantages of AllianceWare, write for complete catalog.

ALLIANCEWARE, INC. • Alliance, Ohio
Bathtubs • Lavatories • Sinks • Closets
Plants in Alliance, Ohio; Colton, California; Kilgore, Texas

Kingston Estates • Delaware Township, Haddonfield, N. J.
Builder: Goodwin Housing Corp.
Plumbing Contractor: Harry Dolkin & Sons
AllianceWare furnished by J. Levitt, Inc.
It had to happen! The tremendous response to Mengel Doors in rotary-cut Gold Coast Cherry demanded matching plywood panels.

Now they're here—satin-smooth panels with all the beauty of this exciting wood imported from Mengel's exclusive African concession—but still priced lower than many other hardwoods!

See for yourself—ask your dealer to show you samples.

Door Department, The Mengel Company, Louisville 1, Kentucky.

Mengel Doors equal or exceed the requirements of Bureau of Standards specifications CS 200-55
for QUALITY and UTILITY
that helps sell homes faster--

Majestic
FOR NEARLY HALF
A CENTURY

BUILDING PRODUCTS WHOLESALE DIVISION

Majestic CIRCULATOR FIREPLACE
A heat-circulating fireplace that
includes all necessary components,
properly engineered, and serves as a
masonry form. New extended size
range! New super-tight, rigid damper
valve holds positively in any degree
of opening. Full smoke dome. "Radiant
Blades" assure greater heat circulation
and add to strength of firebox walls.
Send for Catalog SCC-56

Majestic FIREPLACE DAMPERS
Cast iron or formed steel, with break-proof
steel valve plate operated by a patented,
foolproof poker control. Properly engi-
neered for full throat opening, close
tightly to seal flue when fireplace is not
in use.
Send for Catalog SCC-56

Majestic CLEANOUT DOORS — ASH DUMPS
Majestic's formed steel and cast iron cleanout doors
answer the builder's need. Model 80-R is typical—
integral hinge on tight-fitting recessed door, handy
latch, wide frame for neatness, die-flanged edges for
strength. Ash dumps are available in steel or cast iron.
Send for Catalog SCC-56

Majestic WINTER AIR CONDITIONERS
Gas-or-oil fired, forced-air furnaces for
complete winter home comfort. Units for
closet, alcove, utility room or basement
installation, in up, down, or horizontal
flow design. Capacities range from 76,000
to 400,000 BTU output. In addition, Majestic
also furnishes a complete line of pipe, fit-
tings, and accessories for forced-air heating
and cooling.
Send for Specification Sheets

Majestic THULMAN CHIMNEY
The all-metal chimney that hangs on joists
for economical, time-saving installation.
UL-listed for all fuels and for zero clear-
ance from combustibles because it has
ample clearance built in. Chimney tops are
realistic wire-cut-brick embossed aluminum,
painted brick-red with gray mortar lines,
with tile-like rain cap.
Send for Form 5-H

Majestic THULMAN FIREPLACE
A UL-approved fireplace,
with required clearances
built in to save on initial
cost and installation time.
Complete with chimney, it
can be installed on a wood
floor and framed in with
ordinary construction.
Send for Form TF-2

Write Today!

The Majestic Co., Inc.
433 Erie Street, Huntington, Indiana

FOR ECONOMICAL, SPEEDY BUILDING --

NATIONALLY KNOWN
NATIONALLY ADVERTISED

HEATING AND AIR CONDITIONING DIVISION

Majestic INCINERATORS
Complete indoor disposal convenience
for both burnable trash and garbage.
Models for every market—economical
basement models in which the waste
itself is the only fuel needed, and
handsome gas-fired utility room models,
using either natural or bottled gas,
approved by A.G.A. Unique, patented
down draft action!
Send for Catalog 5IC-56

UNDERGROUND RECEIVERS
An "extra" that home buyers appreciate
... this neat, sanitary way to keep refuse
out of sight. Only the lid, with toe-tip
lift, shows above ground. Cans and bottles,
or garbage, are kept pest-free and odor-
tight. Durable steel—easy to install.
Send for Catalog SOF-56

SUMMER AIR CONDITIONING
With Majestic Air Conditioning, system-
matching is made extremely easy. The 2,
3, and 5-ton capacity units are available
as self-contained, water-cooled companion
units, or as evaporator units with remote
air-cooled compressor-condenser. Unique
system-switching and dampering!
Send for Specification Sheets

AMERICAN BUILDER
New SKIL
3/4 h.p. Heavy-duty Router

Gives smooth, fast, powerful performance in wood, plastic, and composition!

Here's the perfect answer to every contractor's or carpenter's routing needs! New SKIL Model 297 Router is lightweight, easy-handling, smooth-cutting...delivers more than enough power for routing out sink tops, grooving in shelves, dadoing, beading, rabbeting, mortising, veneing, and cove cutting...handles a wide range of decorative cutting jobs fast and accurately! Time-saving, worksaving new hinge-butt template kit brings new speed and simplicity to door and jamb mortising when used with Model 297. No calculations or layout required!

Check the new exclusive SKIL Router features. Let this powerful new SKIL tool help speed production and cut costs for you!

- **Super-powered motor** maintains highest working speed for smoothest and most accurate cutting under all conditions.
- **Exclusive type spindle lock** located on collet chuck for greatest convenience. Requires only one wrench for bit changing!
- **Handy depth adjustment.** Controls always stay in same working position.
- **Exclusive plastic chip guard** for extra safety! Fits either side.
- **Tough plastic sub-base** of "high-impact" polystyrene. Protects finished surfaces against marring.

NEW-DESIGN SKIL HINGE-BUTT TEMPLATE KIT!
Eliminates measuring, complicated calculations and layout! Jamb pins automatically position templates...no nailing of temporary door stops before routing. Speeds and simplifies hinge mortising of doors and jamb.

FREE!
Ask for free demonstration and free trial! Call your nearest SKIL Distributor—or mail coupon for information!

MAIL THIS COUPON
SKIL Corporation, Dept. AR-106
5033 Elston Avenue, Chicago 30, Illinois
In Canada: 3601 Dundas St. West, Toronto 9, Ontario
☐ Please send full information on SKIL Model 297 Router.
☐ I would like a free demonstration of SKIL Model 297 Router.

NAME

COMPANY

STREET

CITY ZONE STATE

OCTOBER 1956
How COPPER TUBES make installations of sanitary drainage systems easier and faster in this 200-home low-cost housing development.

Pre-assembly saves time, cuts cost: The basement lines are assembled and soldered ready for installation as soon as first floor partition studding is completed.

Easier, faster handling: The section, comprising about 13' of copper tube and 5 solder-joint fittings, weighs only 35 pounds, is handled by one man.

Fast, dependable connections: Solder joints are easy to make and they stay tight. The circular torch shown is a big time saver on a large job like this. (Water lines are also copper.)

Fewer joints and fittings: Copper tube comes in standard 20' lengths. A 20' length of 3" Type M weighs only 53 pounds. Easy to cut, too.

No costly, space-consuming plumbing walls: A 3" copper tube stack with fittings can be installed within a standard 4" stud partition.


ANACONDA® COPPER TUBES Available through plumbing wholesalers
GET THESE IMPORTANT BOOKS!

The three books at the left are a "must" for anyone who is interested in good masonry construction. One describes the type of workmanship recommended to secure dry brick walls. The second describes the specifications recommended to secure dry brick walls. The third describes the type of workmanship recommended for good concrete-block walls.

Each of these books has been endorsed by foremost authorities. Each has received a citation of merit from the Producers' Council and the American Institute of Architects. Each is fully illustrated, clearly written. Each contains a wealth of really valuable information.

These books are not advertisements for our product, Brixment. They are published and made available to members of the building trades solely as an industry service. Mail the coupon, today, for your free copies.

LOUISVILLE CEMENT COMPANY, LOUISVILLE, KY.
Manufacturers of
BRIXMENT FOR MORTAR

Louisville Cement Company—Dept. 1
Second and Walnut Streets, Louisville 2, Kentucky

Gentlemen:
Without cost or obligation, please send me a copy of each of your three books on masonry construction.

Name
Firm
Street
City. State
In all of its homes, throughout a wide choice of designs, the Douglas Homes Company of Springfield, Ill., features Reynolds Aluminum Traverse Windows... with lift-out vents that clean easily and screens that may be installed and locked from the inside.

This is the 5200 Series, with integral fin trim.
Its amazingly simple installation, combined with low basic price, cuts the builder's cost. Yet it stands out as an extra-value feature for the homeowner.
It carries to a new height the inherent superiorities of aluminum windows: lasting beauty without painting, freedom from rust, rot and warp.

Look at the details of this window... precision-engineered by Reynolds, with quality controlled from bauxite ore to "satinized" finish. For literature write to Reynolds Metals Company, Window Division, 2019 S. Ninth St., Louisville 1, Kentucky.

See Reynolds great new series, "CIRCUS BOY", Sundays, NBC-TV Network.
Here’s the perfect answer — in one inexpensive unit — for light and ventilation in inside bathrooms under FHA requirements (and outside ones, too!)

Trade-Wind Model 1701 Combination Light/Ventilator is a beautifully designed flush-type ceiling unit. Two 75-watt lamps provide brilliant illumination. And the time-tested Trade-Wind 100 CFM blower unit assures complete ventilation—for both inside and outside baths—eliminating steam, lingering dampness and odors.

Model 1701 installs between joists and the single unit cuts installation expense. The unit also includes a backdraft damper and is pre-wired, further eliminating extra work in running asbestos leads or installing a separate shutter. It can be wired to a single switch as required by FHA for inside bathrooms or 3 wires run to a double switch. The Trade-Wind Time-Delay Switch also can be used.

**Powerful Bathroom Ventilator**

This compact Trade-Wind Model 1201 Ventilator installs in the ceiling for complete bathroom ventilation. Can be wired with separate light to single switch as required by FHA for inside bathrooms. 100 CFM. Built-in backdraft damper. Optional white enamel or bright chrome grille.

*Trade-Wind Motorfans, Inc.* 7755 Paramount Blvd., Dept. AB, Rivera, Calif.
even blindfolded.

you can't run a cut off course...

Now straight cuts come automatically — with MAXAW's exclusive True Course Guide! Follows the cut like a rudder to assure straight-line sawing... keeps cut open, prevents binding or stalling, speeds cutting, saves motor. MAXAW offers 8" blade performance with a 7¼" blade — deeper angle cuts with less weight and bulk, twice as many sharpenings per blade, easier handling. Heavy-duty dynamically-balanced Cummins-built motors assure top power, compactness and dependability.

Let MAXAW speed your constructions jobs — see your Cummins dealer now!
here’s a Silent Salesman that Really Sells!

It’s the plus features that help sell homes today . . . such items as larger kitchens and ample storage space, with all closets cedar lined. These features add-up to greater sales and profits for you.

Because they add colorful eye-appeal and a delightful fragrance, Aromatic Red Cedar Lined Closets attract buyers . . . sell buyers! Your closing time is less.

And you’ll be amazed at the low cost. In most original construction, home builders report that installation of Aromatic Red Cedar Lined Closets add little or no additional costs . . . yet add at least $100.00 in appraisal value.

Before you plan your next project, make sure you check the extra profits of closets lined with Aromatic Red Cedar.

AROMATIC RED CEDAR CLOSET LINING MANUFACTURERS ASSOCIATION
221 N. LaSalle St. • Chicago 1, Ill.
How builders can profit from big change in roof construction

Roof deck over open beam construction increasingly popular with home buyers

1. TEMLOK ROOF DECK SAVES UP TO $250 PER HOUSE, SLICES LABOR TIME 50%

When you build with the new Armstrong Temlok Roof Deck, you’re assured faster, simpler construction . . . with savings up to $250 per house. That’s because Temlok Roof Deck is a 4-in-1 material. It provides strong decking, complete roof insulation, vapor barrier, and finished ceiling in one installation. Your men have less material to handle, do less sawing and nailing, leave less waste. As a result, a 30’ x 40’ roof can be applied in 12 man hours compared to 24 with conventional materials.

2. BEAUTY OF OPEN BEAM CEILING ATTRACTS BUYERS, SPEEDS SALES

Temlok Roof Deck does the same thing for your salesmen that it does for your carpenters—it makes their job easier. For Temlok gives them the powerful new sales feature of a beautiful open beam ceiling. Here is a rich-looking ceiling that prospects expect to find only in high-priced homes. It makes modern open-planned rooms look more spacious . . . yet blends equally well with both contemporary and traditional interiors. Temlok Roof Deck’s insulation value also cuts heating and air-conditioning costs . . . and assures a strong, permanent roof that lasts the life of the house without cracking or warping.
3. NEW PROMOTIONAL PIECES TO HELP SALES MEN SELL

To help you and your salesmen make the most of the many advantages of Temlok Roof Deck, Armstrong has prepared the various promotional pieces shown below. Each has a specific job to do. All will help put prospects in a buying mood. And all four pieces are free.

**Personalized booklet for prospects**
Make sure every prospect that goes through your house gets the complete story on the advantages of a house built with Temlok Roof Deck. This personalized booklet has your name and the name of the project imprinted on the front of the book without charge.

**Selling portfolio for salesmen**
Your salesmen will often refer to this valuable portfolio. It provides space for data about all the outstanding features of your homes. A page on Temlok Roof Deck answers many questions about this beautiful, practical roof-ceiling material.

**Eye-catching display for model home**
This smartly styled table display points up the chief advantages of Temlok Roof Deck. An actual sample of Temlok shows the sturdy construction and attractive ceiling finish. Display it prominently in your model home. Your salesman will find it a handy selling aid when talking to prospects.

**Full story on roof deck construction**
This concise 24-page booklet gives your designer and carpenters complete product information, test data, beam size and spacing charts, floor plans, photos of step-by-step application, and construction details. Send today for your FREE copy of "How to Build with Armstrong Temlok Roof Deck." For information on the promotional kit, write to the Armstrong Cork Company, 3710 Rider Ave., Lancaster, Pennsylvania.

*Plan your fall homes with*

**Armstrong BUILDING MATERIALS**

Temlok® Roof Deck • Temlok Sheathing • Temlok Tile • Cushiontone® Ceilings

OCTOBER 1956
Superior designs — First quality —

Complete size-and-type range

It's easy to meet any requirement of space, taste or budget when you modernize with Kohler fixtures and fittings. Kohler quality insures satisfaction. Special mounting features simplify installation.

The Cosmopolitan enameled iron bath, available in 4½', 5', and 5½' sizes, permits many bathroom arrangements. Other Kohler baths are graduated from 3½' to 5½' feet in length; 29 to 44 inches in width.

Kohler lavatories, of enameled iron and vitreous china, include the popular Hampton in both 22x19" and 19x17" sizes—and a range of built-in, wall-hung, leg and pedestal models with shelf, ledge, flat slab or back, and for corner or dental use. Closets of consistent design insure attractive matched sets—in pure lustrous white or soft pastel shades.

Kohler sinks, of acid-resisting enameled iron, afford a complete dimensional range, for counter-tops or cabinets. Kohler fittings—all-brass, chromium-plated—match the fixtures in style and quality.

Over the coast-to-coast

Mutual Radio Network

Kohler Co. will present the November 6th Election Returns

as a public service, continuing Kohler sponsorship of the year's three major news events—which included the Democratic and Republican National Conventions. Kohler messages on these broadcasts will serve the interests of dealers, contractors and distributors of Kohler products.

Kohler Co., Kohler, Wisconsin. Established 1873

KOHLER OF KOHLER

PLUMBING FIXTURES + HEATING EQUIPMENT + ELECTRIC PLANTS
AIR-COOLED ENGINES + PRECISION CONTROLS
EASY TO OPERATE—no toggle to flip...no knob to turn. Just a touch and it’s lit...quietly! Another touch...Touchette is off...without the loud click of the standard toggle switch.

VERSATILE...FITS STANDARD PLATES—no need to replace favorite wall plates. Touchette dimensions conform to the opening of standard toggle wall plates...permit an economical change over.

OPERATES ON FULL LINE VOLTAGE—needs no special wiring, relays or transformers.

RATING—15A-120-277V, AC ONLY—for incandescent or fluorescent lighting systems. Can be used in new 277/480V systems. Single pole, double pole, three-way and four-way models...brown or ivory button.

UNDERWRITERS' LABORATORIES APPROVED.


touch...it's lit touch...it's off
Enter the 1956
BILT-WELL Builder's Contest
Win a Free Trip to
EUROPE  HAWAI I  MEXICO  BERMUDA

...Send in a snapshot of a job you completed this year using
BILT-WELL Windows and/or Cabinets! That's all there is to it!

You too have an excellent chance
of winning one of these
wonderful trips

Send in a picture of your BILT-WELL application right away! Contest entries
must be in by midnight, November 30th, 1956.

For complete information on products in the BILT-WELL line of woodwork,
ask your nearest BILT-WELL dealer or mail coupon at right.

Manufactured by CARR, ADAMS & COLLIER COMPANY
Since 1866  •  Dubuque, Iowa
Here are a few typical entries which won prizes in last year's contest:

Striking application of BILT-WELL Casement Windows. Beautiful, full ventilation, BILT-WELL Casements add a note of distinctive charm to any home, new or old.

A unique combination of BILT-WELL Awning, Hopper and Picture Windows helps establish an excitingly different personality for this "new idea" home.

BILT-WELL Kitchen Cabinets provide all the warmth, beauty and efficiency of the most expensive custom-built wood cabinet installation, at just a fraction of the cost, in this contemporary, open-planned kitchen.

Versatile BILT-WELL Cabinets, used as a complete storage wall, add an important, but economical, selling feature to this modern home.

The BILT-WELL Line—WINDOW UNITS, Double-Hung, Awning, Casements, Basement, Storm and Screen. CABINETs, Kitchen, Multiple-use, Wardrobes, Storage, Vanity-Lavatory and Vinyl Countertops. DOORS, Exterior, Interior, Screens and Combination.
Buy Gum!

stain it mahogany — and forget shortages!

This is it — and you can sell it completely. Atlas Plywood Gum flush doors are harder and less porous than inferior imported doors — yet Atlas Plywood doors are priced competitively! And the harder the wood the easier the sale!

Atlas Plywood Gum flush doors can be uniformly stained in a variety of rich, deep Mahogany tones. Made of American woods throughout, Atlas Plywood Gum flush doors are skillfully crafted by experienced American workers — from forest to finished product.

Atlas Plywood Gum flush doors cost about the same as inferior foreign doors—but their difference pays off for you in sales and repeat sales. They are actually cheaper to stain and finish than the softer imported woods.

For complete information, send for free color folder. Write Dept. AB-10, 1432 Statler Building, Boston 16, Mass.
Illinois builder of 350-home project sold on Worthington units

Any home that costs $12,000 or more to build should be air conditioned!

That's how builder L. B. Pooley of Aurora, Illinois sees it. Air conditioning not only protects the buyer's investment, but also makes a home easier to sell.

Most convincing proof of this is offered by the quality 350-home development now under construction by builder Pooley and his son Bob. Worthington's Year-Round unit has been speeding up sales ever since the project first got underway.

Pooley explains his choice of Worthington equipment like this:

"Worthington's Year-Round unit makes it easy for me to offer air conditioning as an optional feature. Heating and cooling sections come in one trim-looking cabinet that's a cinch to install. If a prospect wants to hold off on air conditioning, I install the heating unit first. The cooling section can be added at any time!"

Like Mr. Pooley, you can make Worthington air conditioning the feature that sells your homes this year. Call your Worthington dealer. He'll be glad to go over installation and cost details . . . and show you how Worthington's Year-Round unit will pay off in quick sales for you.

You can also get full details by returning the attached reply card.

Worthington Corporation, Air Conditioning and Refrigeration Division, Section A.5.45-AB, Harrison, N. J.
SOLD!
The First 100,000 National homes!

Here's how you can profit from the next 100,000 National homes

As the largest producer of homes, National Homes has created a brand-name product that is being purchased by one out of every 48 home buyers... and the demand is growing!

To satisfy this demand, we have expanded our facilities... and we are ready to expand our builder-dealer organization accordingly.

This provides an opportunity for qualified builder-dealers to join the most successful home-building team in the world. National Homes builder-dealers—large and small—have the competitive advantages of a 25,000-house-a-year builder... with resulting higher dollar-profit.

For detailed information on how you can profit on the next 100,000 National homes, with a builder-dealer franchise, write to George A. Cowee, Jr., Vice-President for Sales, National Homes Corporation, Lafayette, Indiana.
Bathroom Beauty sells the house!

meet the Champion

the highest quality tub enclosure at the lowest market price

The modern homeseeker insists on bathroom beauty—that’s why builders across the nation feature tub enclosures and stall shower doors by Anoroc.

The Champion tub enclosure gives every home extra value—greater sales appeal—yet costs considerably less than most unrealistically priced units. The Champion has the looks, the class, the quality that help make the sale—at a bigger profit for you.

Here’s Why The Champion Has Scored Such Success

- Speedy one-man installation—needs no drilling
- Two one-piece towel bars requiring no assembly
- Exclusive Red Nylon Rollers on stainless steel stud
- Rattle-proof sliding doors
- Polished fully extruded aluminum frame
- Choice of sand patterned glass panels
- Available in 4’6”-5 and 5’6” for recessed tubs

Also Corner Enclosures and Stall Shower Doors

Every Size Is A Stock Size . . . Immediate Delivery Guaranteed

Specify The Champion

Bathroom Beauty Begins With ANOROC

ANOROC PRODUCTS, INC.
97-11 Northern Blvd., Corona, 68 N. Y.
When you can get a premium glass at no premium in price…"

"Sure, why not use it—and that means AMERICAN!"

The man-with-the-pipe is right! The more glassed-in areas there are on your projects, the more important it becomes to use the whitest, clearest, most lustrous glass you can find. And that does mean American LUSTRAGLASS or LUSTRACRYSTAL—for top quality at no extra cost.

- Prove it for yourself on your next job. Ask your American distributor how LUSTRAGLASS can give your client the benefit of more light transmission, and afford the least amount of distortion over large areas... how LUSTRACRYSTAL can save you as much as 35% in many applications. Look in your Phone Directory for the name of the American distributor in your territory.
How to keep from getting hurt in a declining market

What builders do about their bearish market in the next few months will separate the men from the easy-money boys.

Few are not being caught in the current squeeze between rising costs and vanishing mortgage financing.

Clearly, these are the two biggest problems facing builders right now. And there's probably not an active builder who's not worried about the immediate future of his business.

If, as many in the industry fear, the situation is forcing builders to price themselves out of their recent market, it will run them smack into a narrower field. Here customers are fewer and fussier, competition keener, and the selling tougher.

Chances are we'll come out stronger than ever. But what do we do meanwhile? How do you, as a builder, keep from getting hurt while your market declines?

If you could travel around the country, as we have been doing, talking with builders, seeing them in action, listening to what they're saying, watching what they're doing, you'd be struck by this one unmistakable trend:

Builders who are holding their own or doing even better are concentrating on merchandising.

Most recent evidence of this attitude was found in abundance at the NAHB series of merchandising courses in Washington this year. American Builder editors covering these meetings made a highly interesting discovery.

Before the sessions got under way, most of the builders we queried figured their need for merchandising know-how was not exactly immediate; but they could foresee a use for it looming ahead.

After the course was completed we asked these same builders what they had got out of it. The answers were quite sobering.

Having been exposed for three days to some of the top thinking in this field, most builders were in a near-panic to get back and jump into this business of merchandising with both feet.

Aside from testifying to the NAHB faculty's skill in rousing their students, this impromptu survey underscores what you must do—starting right now.

You must begin thinking about how to sell the house long before you build it.

What does this mean?

It means you have really got to do a lot more local research to find out what your market is like.

It means you have got to get the maximum mileage—but every last cent—out of your advertising dollar.

It means you have got to try every promotion technique you know—and concentrate on these that pay off.

It means you have got to improve your selling methods and management of your sales force.

It means, in short, that you have got to study (1) what your customers want and (2) how to give it to them at a profit.

FOR MORE ON MERCHANDISING, TURN THE PAGE
They helped donate $1,000,000

The customer is in the saddle again and he's driving the builder to school.
For the fourth time in seven months builders who thought they'd finished with books are this month going back to the classrooms. Their object: to learn how to sell better.
Until the last couple of years, selling a house was merely the routine result of building one. Today the more alert builders have changed their tactics.

They're starting to think about selling the house even before it's built.
To help them, last March the National Association of Home Builders, under the sure hand of Merchandising Director William A. Molster, drew up a formal course of study on the subject of merchandising. With the help of Ira Mosher Associates ("Theatre for Industry"'), it prepared a three-day program, offered it to NAHB members. Tuition was set at $135 and enrollment limited to

Four ways to cash in on expert merchandising know-how

1 Market Analysis: don't make a move before you get the facts on inventory of unsold new dwellings, volume of new building, financing sources and availability, employment and income, population trend, migration and mobility of your prospective market

2 Advertising: after you've analyzed your market, concentrate on the right media. Sell the "sizzle," not the steak

3 Sales Promotion: begin your thinking before you build. Keep it going after you sell

4 Selling: know what to look for in a salesman, how to help, train, pay—and motivate—him
worth of merchandising ideas

120. The seminar, held at the National Housing Center in Washington (AB, May 1956), lured builders of every type and size from all over the country. More than a hundred were turned away. When the course was repeated in May the response was even greater. The third session, in August, was again a quick sell-out.

American Builder editors covering this last meeting were struck by the aggressiveness of builder-students in their search for the latest in merchandising techniques.

Actually, the meeting turned out to be more than a lecture series. Professional specialists in each field led the discussions. But what developed was a forum in which builders exchanged information and ideas, learned as much from each other as they did from "the book." (Said one: "An expert is, after all, only someone from out of town.") For what they discussed, see story below. Could be you'll find some ideas you can use.

The 3 Rs of merchandising: vital to survival

Before any builder can plan a successful merchandising program he must get and analyze certain facts about his market—facts that will help him build the right house at the right place at the right price and terms.

Right now those "three Rs of merchandising" are vital to survival.

How do you get the facts? There's only one way, according to NAHB economist Nathaniel H. Rogg: "Study your local market. Forget the national picture and concentrate on the trends in your particular community."

Main cause of failure in the construction field, Rogg told the builders, is competitive weakness. Last year more than one out of four builders went out of business for that reason, as compared with only 17 percent of manufacturers.

How come? Explained Rogg: During the sellers' market builders didn't analyze their market thoroughly enough. Today every other stable, progressive industry is conducting market analysis, he said.

The building industry may actually come out of this period of transition to a buyers' market stronger than ever, but, warned Rogg, some builders will get hurt; some already are.

The all-important fact is that the home builder's competition comes not only from within the building industry itself but from the larger and much more threatening areas outside the industry. All are vying for the consumer's dollar.

To gird for battle the builder must first arm himself with the following information about his local market:
- inventory of unsold new dwellings
- volume of new building
financing sources and availability
employment and income
population trend
migration and mobility

It doesn't cost much to get this information. But if a special analysis is too expensive for a builder's budget, he may be able to get several other builders to share the cost. If not, there are other sources; e.g., shopping centers (which probably made sure to learn all about the market before they built), university research centers and graduate students, chambers of commerce, local newspapers, radio and TV stations, telephone and milk companies, utilities, local home builders' associations, local building permit data. Most are likely to share their data on request.

Kind of advertising: when, where, how

The first—possibly the most important—thing builders heard was what not to do: “Don’t advertise a house. That’s not what you’re selling.” No one wants to buy a lot of wood and glass and metal and brick. What people want—and what builders must sell—is comfort, pride of ownership, togetherness.

As Clarence W. Gosnell, Jr., of Alexandria, Va., put it, “We don’t tell everything in our advertising. We try to tease our prospects a little.”

The trick is to capture their imagination. Perhaps the way Dale Bellamah, Albuquerque, N.M., does. Says Bellamah: “We found a round bed seven feet in diameter. We put it in our model home and advertised it in the newspapers. It brought out more people than if we’d had a two-headed goat.”

Most builders have used advertising of one kind or another. Among those at the last seminar, eight out of ten use newspapers, either display or classified or both. Seven out of ten use road signs or billboards. The same number use brochures. A much smaller proportion use TV and radio. Only a third employ an advertising agency.

Builders seeking a large, selective audience use newspapers. Real prospects for a house, they find, naturally turn to the real estate section. Once there, adman Mark Wiseman told the class, size of the display ad makes little difference because genuine house hunters study every ad, from a full page down to about an eighth page, according to readership surveys.

TV and radio, on the other hand, provide more of a shotgun approach. They’re non-selective, but builders find you can’t beat these two media for getting the word around fast, thereby creating public awareness of your presence.

Road signs and billboards “pick up” prospects on the road, preferably busy roads where motorists can see them easily—in fact, where they can’t miss them. The local constabulary often frowns on the use of directional signs but builders have found ingenious substitutes. For example, says Jack Zimmerman, Traverse City, Mich.: “We use collapsible signs. When the police complain we fold them up and move them elsewhere.”

In Dayton, Ohio, David J. Sprout uses a bus with a sign reading, “Follow Me.” Also, boys in clown suits capering along the road and pointing the way.

Brochures are the workhorses of builder advertising. They must tell all. Whatever there is to say about the house or tract, the brochure must say it. Reason No. 1: people are sold by different things. Reason No. 2: newspaper ads may tease, salesmen may sell the sizzle, but brochures must get down to brass tacks and give prospects something permanent they can refer to for the details, the specifications, and all the essential facts.

That doesn’t mean a brochure has to be dull. Rather it should reflect the character of the house and be as personalized as possible. Smart builders design their brochures to keep selling even after the prospect has left the
model house. And since builders sell the only product not delivered to the customer, they include a map (as simplified as possible) and a floor plan (not a blueprint).

One Eastern builder has his salesmen carry a brochure while showing prospects through. As they come to each bedroom, for example, he writes in the actual names of the family's children. The brochure he hands the couple as they leave is as personalized as he can make it.

Some merchandising-minded builders get manufacturers to pay for their brochure by giving them space in it. And some, if they're lucky (and foresighted), get good-looking, economical brochures in the form of reprints of magazine stories they helped to provide to the editor.

Sales promotion is a many-splendored thing

A lot of builders believe that financing is the key in low-price housing. But all agree that when you get up into the higher brackets today, merchandising is more important than any other factor in selling.

Herbert C. Degenhardt of Pittsburgh, Pa. is typical. Says he: "We were in the $11,800-18,000 class. Now that we're moving into the $20-30,000 category we need to learn more about promotion techniques. There's too little profit in home building; we really have to learn to stretch our promotion dollars."

Many builders are going all-out on such devices as trade-ins, models with a lived-in look, built-ins.

Trade-ins are getting more and more popular. They now account for some 35 percent of all sales, according to Joseph Meyerhoff & Co. Sales Manager Gordon Butz. Big builder Jack Worthman, whose outfit, John R. Worthman of Fort Wayne, Ind., sells more than a million dollars worth of homes a year from $15,000 to $75,000, explained why:

"There simply are more prospects for new homes among home owners (now 56 percent of families, says NAHB) than among non-owners."

It's still a new idea to most customers, but a home is a natural thing to trade, like cars and appliances, and ads offering a trade-in deal draw floods of response.

Builders like the trade-in idea for several reasons, all revolving around a single premise: Primarily it's a device to sell more houses; it's not a money-making scheme in itself.

Specifically, trade-ins:

- permit earlier contact with the buyer
- eliminate buyer "shopping"
- avoid delays in closing the sale
- provide two sales, two profits
- increase sales, create buyers.

Builders were warned, however, not to go in over their heads with (1) too high appraisals or (2) too many trades.

Model homes properly took a large share of the stage. Faculty member Joel R. Streich of Gerholz Community Homes Inc. put it bluntly: "There is no such thing as a model house that looks too good."

Offstage, in small discussion groups, builders themselves revealed individual philosophies regarding this major sales-promotion tool:

"We're convinced," said Stuart Fonde, Knoxville, Tenn., "that you've got to make the customer feel he's in a big house when he's in a small one. Prefab manufacturers are outstripping builders in this respect."

"Regardless," Kurt Bartlett of Westchester, Ill., insisted, "timing is vital.

"We saw one outfit move into Chicago last year with models. They took deposits, told prospects to come back the following
Winter building is expensive...

... but come Spring, it's more
Cold Weather Can Put The Freeze On Your Profits; But If You Close

Up Until Spring, You May Find Yourself Out In The Cold For Good.

Below, Builders Tell Why Higher Winter Costs Are Worth It:

- Unless he lives in a climate of year-round sunshine like Florida or Southern California, the builder will inevitably find that his Winter building costs are higher than during the rest of the year. In a recent series of get-togethers with builders in cold weather areas, American Builder asked them how much, why, and what can be done about it? Here are some of the answers.

Labor takes the biggest bite

- "... our cost, not the sale price is about 5 per cent higher in winter." This is about $800 on a $16,000 house, and most of the builders seemed to feel it was about right. Most of it is labor costs, some of it is in equipment and higher overhead.

Everything slows down

- "Anyone on an hourly payroll is more costly in winter building." This statement pretty well sums up the cold weather labor situation. Outside work is slower as men wear bulkier clothing and awkward gloves. And during spells of really cold weather, men have to go inside to warm up. Masonry needs extra care and the adding of anti-freeses. Storms can drive crews inside when there's not enough inside work to keep them busy.

Overhead climbs too

- "I spend $75 to $100 per house to keep crews comfortable. I don't want them to waste an hour building a fire." This means heaters and fuel.
- "Insurance and interest on your money all go up in the winter." If it takes 25 per cent longer to finish a house, fixed cost items like these, and supervision, all will rise proportionately.

Hibernating all winter may cost more than keeping going

- "We build in winter not because we want to, but because we have to." During the lush years right after the war, it didn't really matter whether or not a builder kept working all winter. He could sell anything he built in any season; if he was any good at all as a builder, he made enough money so that non-invested capital didn't cut down his income appreciably; and there was plenty of first class labor available. But not now.

It's a seasonal market

- "... you have to be ready for the rat race in Spring..." There just aren't as many ready-to-buy customers wandering loose as there used to be. Those that are left will be like flies the first warm day of the year. If your models aren't ready and waiting, they'll buy from the builder down the street. Also, National Home Week and its Fall parades means houses that must be delivered during Winter.

Good labor is getting scarcer

- "You want to keep your good men—the ones you've spent time training—working. You can't afford to lose them." Good mechanics are getting harder to find every day. A builder who loses his crew every Fall is going to find that the men he picks up next Spring won't make as much money for him.

Idle money costs money

- "I don't want any idle capital lying around not working." The same thing applies to the builder himself. He represents earning-power going to waste if he closes up for the winter.

expensive if you're not ready
WINTER BUILDING IS EXPENSIVE (continued)

How to thaw out

Advice for medium-to-big builders:

There'll always be bad weather

- "... you've got to organize for thaws and freezes, good and bad weather ..."

One thing you can be sure of is that there will be a certain amount of winter weather that will make outside work impossible. This will vary with the climate, but a good estimate would be something between 30 and 40 days. If frost is going to prevent digging all through January and February, footings and foundations must be done in December. If snow and cold keep crews from working outside, there must be enough inside work waiting to absorb them until they can get out again. And make sure that these men can be shifted to alternate jobs with a minimum of delay; if they have to stand around waiting for orders because no one thought ahead, it's your cash that's sitting around and disappearing.

Pay subs by the unit

- "Output per bricklayer? We don't care. We let the job on a piecework basis and pay the same whether the temperature is zero or a hundred degrees."

Most builders today hire their subcontractors on a per-unit contract basis. With this system, they are not directly affected by cold weather slowdowns; while masonry work can give trouble, electricians, plumbers and heating contractors work indoors, and their efficiency should be almost the same as in warm weather.

In other words, while subbing out work is not a sure cure for the ills of cold weather, it does cut down on extra payroll costs for the builder.

Hot weather costs money too

- "We keep track of extra winter costs, but not of extra summer costs. . . ."

Figures can be deceptive if they aren't complete. It is natural to think of winter as a difficult time to build, and to try and arrange as litthe work then as possible. But when the thermometer hits a hundred, costs also go up as labor slows down and concrete cooks too fast. Winter costs will probably be higher, but maybe not as much as you think.

Supervision? Do it yourself

One builder supplied the last word on the problem of supervisory overhead.

- "I can't fish in winter, so my own time isn't worth much to me, and I supervise."

Advice for smaller builders:

Oddly enough, the builder who is doing five houses a year can find winter weather harder to deal with than does the man with a two hundred house tract under way. The big builder is able to have several houses closed in and waiting for crews that are forced inside by weather. The smaller builder, on the other hand, may have just one house going up when the snow storm hits, and if he can't work on that, he has to go home.

Generally, the small builder can take some steps to help himself, such as putting in an additional foundation so frost can't hurt him. But putting one or two houses under roof in preparation for winter usually will call for a capital investment he just can't make. It is in this area that component parts and prefabs can really help. A large part of the shell of such houses is completed when it leaves the factory. An experienced crew should be able to get the roof on in two days, or perhaps three on some of the larger and more complex models, and it is an unusual winter when this many days can't be squeezed into the average working week. With the roof on, only additional heat is necessary to keep work going at an almost normal rate.

Late Winter and Spring pose another problem: mud. The big, well heeled builder usually can afford to put down enough road to keep his trucks rolling; the little guy again may find himself in over his head. He must move in enough material early enough so that his operation doesn't come to a muddy standstill. After that, all he can do is pray for a dry spell.
some of the extra cost

EVEN IN THE WORST CLIMATES and the worst seasons, there aren't many days when you can't work at all.

ONCE THE SHELL IS UP, winter building can proceed almost normally. Here, pouring of the slab is left until the house is closed in. Partitions are stacked above floor.

COMPONENT SECTIONS enable the builder to erect walls and roof quickly. Tricky work like measuring and cutting, hard in awkward mittens, is done in the shop.
How soon will you be using this

**IT'S A MATTER OF ARITHMETIC AND COMMON SENSE**

- **You'll build faster.** A crew of four to six men should be able to have the average component house tight to the weather in two days. Add to this the increased speed of interior finishing made possible by prebuilt closets and partitions, and you have a building system that can cut as much as 50 per cent off normal building time. The builder is much less liable to get hurt by bad weather, he can build more houses per year, and his capital is tied up only half as long per house.

- **You'll build more economically.** For the big, efficient project builder, there will usually be little or no saving in a components system such as this. The smaller custom builder, however, whose prices are often $15 a square foot and higher, should be able to effect appreciable economies with components. Besides the savings from high plant efficiency vs. low field efficiency, his men will have little chance to make costly mistakes that have to be ripped out and redone at his expense.

- **You'll build with less skilled labor.** The shortage of first class carpenters has become one of the major headaches of the building industry; and custom building, needing a higher percentage of skilled mechanics, has been especially hard hit. The basic simplicity of nailing together large components means scarce skilled labor can be used in supervisory positions, while less skilled (and cheaper) labor does most of the work.
2 COMPLETE SHELL arrives on site in one truckload. If truck can be spared, ideal arrangement is to park it, erect parts as they're unloaded.

3 LARGE SECTIONS are set into place quickly. Header at right is set in above arrangement is to park it, erect window panels, and a single 2 x 4 plate then ties whole wall together.

1-2-3 way to custom-build?

- You'll build with a smaller crew. When a custom builder is up to his ears in work, whether or not to take on another job is always a problem. If he does, he'll have to hire more men, add overhead and headaches; to turn it down hits where it hurts—his wallet. If he's using standard components his crews are small, do the job fast, and he may be able to stretch present manpower. If not, the added men will be few in number.

- You'll build with less financial risk. Even the best estimator has his bad days, and one of these days added to a tight bid can cost a builder a lot of money. By using components purchased at a fixed cost the builder can reduce the percentage of his own work done in the field, the place where money is lost. And when the occasional belt tightening days turn up, he can submit a close bid and still sleep nights.

- You'll build with less overhead. Since the component builder is able to build more units with the same manpower, all non-productive supervisory or office help is going to be spread over more houses, thus cost less. And since estimating is much easier and faster, the builder himself may get some free evenings, or maybe even a weekend.

- You'll build from simpler plans. All component systems are modular in design, most of them use a four foot module. The builder who does his own board work will find designing on modular grid paper surprisingly simple. By the same token, reading from the plan in the field is easier, less liable to error. It's easy to set a four inch stud on the wrong side of a pencil mark, pretty hard to do the same with a four foot panel.

OCTOBER 1956

HERE'S HOW TO MAKE A COMPONENT PLAN
The ultimate goal of a components system is to let the builder order the parts he needs from a catalogue, nail them together, and walk away from the job. No such system exists yet, but Fabricators, Inc., has taken the first step towards it by marketing the standard components shown below. A builder may purchase a complete package for one of several standard houses, or he may select his own design and buy such components as he needs.

In designing a component house it is best to start from scratch and design directly to the module being used. However, until the idea of modular design is more firmly established it will frequently be necessary to adapt existing plans. Such an adaptation is shown here. Note how closely its dimensions conform to those of the original; this was made possible by using half a dozen special two-foot panels in the outside walls.

The types of components marketed by Fabricators, Inc., and their prices, are shown below.
WITH COMPONENTS? continued

to a components system

... to the modular plan is a simple step

WINDOW FRAME PANEL is tilted into place. This one has one operating sash, one fixed pane, costs $63.75.
PREFAB CLOSETS are supplied knocked down in 2' to 4' widths. Cost is $70 to $150, depending on size.
Here's a typical Bertch remodeling job...

BEFORE
BERTCH MAGIC converted this small kitchen and laundry room into an open, serviceable area. Common wall jammed up traffic, kept room dark. Change gave new look to house owned by Mr. & Mrs. Westbrook.

AFTER
BUILT-IN oven, cabinets and stove replaced old utilities. Wiring and plumbing were converted, additional service installed to handle equipment. Other changes: sink, dishwasher and disposer, recessed lighting.
advice from remodeler George Bertch...

"Your role as a record keeper is constantly on the increase. This part of the operation is just as important as driving nails. Problems encountered in the remodeling business are unique in the building industry. If the remodeler is to expand and service his customers efficiently, attention to detail is vital. Write it—don't say it!"

Here's how Bertch keeps records on it . . .

There's more than one way to skin an expensive cat: remodeler George Bertch of South Pasadena, Calif., knows how.

The easiest way to lose money in the remodeling business, Bertch claims, is to do a lot of work or furnish miscellaneous materials for which no charge is made, because records are not kept properly.

Most of the company's work is based on a fixed price for each job—still, extra costs frequently crop up which were not included in original estimates.

To help buck these extras, Bertch devised a set of cost and work forms which are the foundation of his organization. (Bertch runs the firm for his father under the name Henry Bertch Building Contractor. Henry Bertch now concentrates on the home building end of the business.)

Bertch uses these forms for all contract work. He finds they are an invaluable aid in estimating, and also the basis of his bookkeeping system.

Usually he waits for owners to contact him. When no one is at the office, a telephone answering and recording device takes messages. This costs $16 per month rental. Bertch says he would sooner part with his right arm than this device.

Telephone calls recorded

When someone calls a voice says, "This is the recorded voice of George Bertch. After you hear the tone signal you may leave any message of not more than 28 seconds duration. Your call will be returned promptly."

A Prospect Form is used to record the messages from the telephone calls. Space for potential customer’s name, address, phone number and other vital information is listed on the form. This is kept in a current file until the job is landed or dropped.

Step 2. How Bertch estimates a job

A General Estimate Sheet and a form headed Miscellaneous serve to remind Bertch of all items which must be noted in making an estimate. This listing includes everything from excavation to painting and plastering.

Bertch gives the owner a rough estimate of the cost on his first call. If the estimate is in line with what the owner expects, detailed drawings, specifi-
Here's how remodeler Bertch keeps records (cont)...

Bertch finds that most owners regard this charge as a reasonable procedure, if they are seriously interested in having the work done.

When the drawing is finished Bertch mails it to the customer asking him to study it and determine if it completely meets his expectations. A price is not given at this time. In a few days the owner is contacted. If there are no changes or suggestions an appointment is made to finalize the matter. Before going to keep this appointment a letter form contract is drawn, ready for signing. This, of course, includes the final price for the work.

Because some owners are afraid of the small print on a contract form, Bertch prefers to use a letter outlining the work to be done.

In order to facilitate the writing of these letters, and to be sure the language is legally correct, he worked up 24 form paragraphs.

These paragraphs are kept in a file on 3 x 5 index cards. When the time comes to write the letter, Bertch pulls out the cards that relate to the particular job on hand. An office worker then transfers them to the firm's stationery. Prices and job details are included in the letter. This file saves Bertch many work hours.

In his selling work, Bertch liberally uses “before” and “after” photographs. Through the years, he has built an extensive file of these pictures. Whenever he takes a new contract where this type photo will add something new to his already large collection, he has a photographer take a “before” and later one or more “afters.”

This is costly. A set runs about $25 to $30. But Bertch finds these pictures a tremendous aid in showing prospects what can be done for them.

Step 4. Estimates for sub-contract work

Through long experience Bertch is able to figure plumbing, electrical work and plastering, all of which are done by sub-contractors. Only on large or complicated jobs does he first get prices from the subs before making his own firm commitment.

For this purpose an estimate form is sent to the subs. Space for the quotation and special remarks is included in the form. Bids are usually telephoned in, followed by written confirmation.

When Bertch finally is ready to order sub-contract work he sends an order form which lists type of job, date and time work. There is always a clear understanding between him and the contractor.

Step 5. Company shop saves time and money

Bertch has a shop to get the quality and speed which the organization needs. Using his own shop saves time and money over buying items on the outside.

In the shop, moulding, cabinets and window frames are made. As much precutting as possible is done here too. This does not include framing lumber which the men cut on the job with portable tools.

Each day the shopman gets instructions from Shop Order Sheets filled in by Bertch. Little time is lost because the shopman knows exactly what has to be made for a particular job and when it must be ready.

Step 6. The guess work is gone...

Bertch likes to know how his money is spent. A Labor Recapitulation Sheet filled in from the crew’s time cards tells him the story.

The purpose is to see the time spent, and total wages earned by his men on each job.

Step 7. Daily records give job status

To see at a glance the status of each job, a day-by-day record is kept. The crew is responsible for filling in the form. Work accomplished, materials delivered, equipment rented are some of the things Bertch likes to know about.

Step 8. Bills broken down for customer

Bills are sent to customers when jobs are completed. Bertch has two kinds of bills: one for fixed price work, and one for cost-plus work. Both break down charges for the customer and show
customer-allowances. Bertch does not like to leave his clients in doubt about any charge he gives for a job.

**How Cost-Plus Jobs Are Billed**

On cost-plus bills, charges are gotten from the Job-Cost Records. (These show company's expense.) Some of the items paid for in this type work are labor and insurance, stock materials, shop time, services and sub-contractors.

Equipment rental (usually an extra charge in cost-plus work) is billed separately. The customer is charged rental for type of machinery used and length of time.

**Step 9. Aids for bookkeeping**

To help him in his accounting, Bertch has an Allowance Sheet which is used for two purposes: first, to record the cost of extra materials; second, to show a debit or credit allowance made for fixtures, hardware or other materials.

For example, if Bertch allows $100 for hardware and his customer selects hardware worth $125 he is charged for the difference. If he uses $75 worth, he is given a $25 credit.

**Here's how Bertch coordinates his crew ...**

Bertch relies heavily on records kept by his crew.

The many details of each job and the vast number of jobs going at one time, make it impossible for him to check each one individually.

The organization consists of three full-time carpentry foremen who work on the jobs; one man who handles all the shop work; one man who does general work; and part time office help.

To keep his operation running smoothly, Bertch depends on his crew to hand in work reports—not only on his work, but that of sub-contractors.

Because these records are used in office accounting procedures, the crew is trained to promptly fill in the reports and return them to the office. Tardiness means an item may be missed on an outgoing bill.

The men keep records on sub-contract work, condition of tools and equipment and material stocks.

**Step 1. Crew's work record kept on time sheet**

Each workman keeps his own time sheet. It is filled in at the end of the day, or when changing from one job to another. Contract jobs are recorded on these sheets but labeled as extra. The back of the card is used to describe the extra work.

By having his crew record time on contract jobs separately, Bertch has a complete breakdown on how his men's time is spent.

**Step 10. Bertch keeps track of his crew**

To know where his men are at all times, Bertch uses a Personal Routing Sheet which gives him each man's assignment. This is helpful for last minute instructions or job changes.

**Step 11. Kitchen planning check list**

The major share of the work is kitchen and bathroom remodeling and additions of rooms. When work is in the planning stage, most owners welcome suggestions. As an aid Bertch worked up a Kitchen Check List.

Many of the items (cabinets and type, cabinet features, floors and types, kitchen equipment, accessories, electrical equipment) can be installed at a nominal cost.

This list benefits the owner by giving suggestions, and benefits Bertch by building up contract work.

Most of these forms are similar (although used for different purposes). They facilitate billing, bookkeeping records, and work assignments. Without them Bertch claims he could not run his organization.

Like to receive a set of these forms? There's no charge. Just write to:

Remodeling Editor
American Builder
30 Church Street
New York 7, New York
HOUSEPOWER:

One of the biggest complaints about today's houses is that they aren't being wired for today's expanding electrical needs. Many builders are still trying to get along with minimum wiring, although the cost of an adequate job actually raises the price very little.

From 75 to 90 per cent of the houses being built are wired on sub-standards. Surveys show that about one house in ten is wired to meet either present or future needs.

Consumers are buying electrical devices and equipment at a record clip. Builders, on the other hand, are not keeping up with the demand for better wiring. At least 60 different devices load up

Use this check-

Standards for wiring a house adequately are constantly changing, but the National Adequate Wiring Bureau (one of the powers behind the HOUSEPOWER program) has issued booklets from time to time on what constitutes good wiring. As you might expect, these have nothing to do with codes, many of which are outdated, especially in the matter of new equipment. But they do show you what a house ought to have in the way of wiring. If you follow them closely in the pre-planning stages of your house, you won't go wrong. Use them when you check with your electrical contractor.

□ LIVING ROOMS

- At least one ceiling light—more if room is very long and narrow. Valance, cove, wall lighting or portable lamps may be used in lieu of ceiling light. Outlets for lamps should be wall-switch controlled wherever possible.
- At least one duplex outlet for every six feet of usable wall space, two of which should be wall-switch controlled. Television to have 120-volt, 20-amp outlet separate from other appliances.
- One special purpose outlet for room air conditioner, unless central air-conditioning system is planned.
how it can help cut complaints

the wiring of a house, and there are no signs that this stream of new power-consuming equipment is going to abate. It's getting bigger instead of smaller.

What can the builder do? First of all, he should increase his efforts to merchandize the extra value that adequate wiring gives. He should never let his customer overlook the fact that for an extra $50 or so he's getting enough wiring to take care of $2,000 worth of appliances. Point out to him also that an adequate wiring job now will save him four to six times its cost in the future. The consumer has come a long way, but he needs to be led still further. It's a sales job, pure and simple.

What the VA, FHA and conventional appraisers do in regard to raising house evaluations concerns the whole industry. One thing is certain: the more pressure you put on them the better.

Manufacturers are looking for ways to cut costs and are coming up with new wiring devices. But in the last analysis it's the builder who has to take (or reject) the low wiring bid, find ways to absorb the extra cost in other phases of his business and put HOUSEPOWER on a paying basis.

How to do this? By simply pre-planning for the future. Make sure your house has those spare circuits in that oversized entrance panel, those extra outlets—indoors and out. Otherwise you'll be getting calls of complaint over the telephone.

list to be sure you're safe

□ DINING AREAS
- At least one lighting outlet, wall-switch controlled, above or near table space. Valance or cove lighting may supplement ceiling light.
- Duplex convenience outlet for every six feet of usable wall space.
- At least one 3-wire, 115/230-volt, 20-amp circuit with split-wired receptacle for appliances.

□ BEDROOMS
- Ceiling fixture or valance, cove or cornice lighting. Outlets to be wall-switch controlled.
- Master switch control for selected interior and exterior lights is suggested.
- At least one convenience outlet for every six feet of usable wall space.
- Triplex convenience outlet for bedside radios, clocks, etc. recommended.
- Special purpose outlet for room air-conditioner is recommended.

□ KITCHEN
- One centrally located ceiling light, with wall-controlled switch.
- Individual lights for countertops, range, sink, table. Undercabinet lighting recommended.
- Convenience outlet for refrigerator. One outlet for every four feet of work-surface frontage, to be located about 44 inches above floor. All outlets, except for refrigerator, to be of split receptacle type.
- One special purpose outlet each for range and fan. Separate outlets for dishwasher and disposer.

□ LAUNDRY AREAS
- Lighting to be provided over work areas—laundry tubs, washers, dryers and ironers. At least one outlet in room to be wall-switch controlled. For basement laundry, ceiling light is recommended.
- At least one convenience outlet of split receptacle type.
- One special purpose outlet for each: washer, hand iron or ironer, dryer. Fan outlet desirable.

OCTOBER 1956

MORE ON HOUSEPOWER
HOUSEPOWER (continued)

**UTILITY ROOM**
- Lighting outlets for furnace area and work bench, if planned.
- One convenience outlet near furnace or workshop.
- One special purpose outlet for furnace if needed.

**BATHROOMS AND LAVATORIES**
- Ceiling outlet to be located in line with wash basin to provide general illumination—wall-switch controlled.
- Wall lighting for mirror to illuminate both sides of face.
- Switch-controlled night light recommended.
- Waterproof luminaire for shower stall.
- Convenience outlet near mirror, 3-5 feet above the floor.
- Special purpose outlet for space heater desirable.

**HALLS**
- At least one lighting outlet, wall-switch controlled—more if area is irregularly shaped.
- Night light recommended in hall leading to one or more bedrooms.
- At least one convenience outlet for each 15 feet of hallway. Entrance halls and foyers should have outlets spaced 10 feet apart.

**CLOSETS**
- At least one outlet for each closet, wall-switch controlled. Where shelving interferes, outlets should be provided in adjoining space.

**STAIRWAYS**
- At least one wall or ceiling outlet at head of each flight of stairs. Outlets to have multiple-switch control at both head and foot of stairs.
- Convenience outlet recommended at intermediate landings for night light, vacuum cleaner.

**ACCESSIBLE ATTIC**
- One outlet for general illumination, wall-switch controlled, at foot of stairs. For folding stairs, pull chain may be installed.

(Continued on page 275)
ideas to up your HOUSEPOWER rating

MODERN STEP-SAVING convenience, the plug-in telephone, is becoming a must with those who like outdoor living. Outlet has weatherproof covering, is installed about 18 inches above floor. Plug-in phone makes time you spend on terrace or patio more relaxing—you don’t have to listen for house phone. Especially needed by custom builder.

SIX-VOLT remote control system by Remcon (Pyramid Instrument Corp.) uses standard outlet box and miniature relays. Because of low voltage, small bell wire can be used. Installation of low voltage relay system in Oceanside, Long Island, homes of builders Ballin, Glicksman and Langfur was big but economical sales feature.

ELECTRONIC AIR CLEANER by Trion, Inc., can be installed with any warm air or air conditioning system. R. A. Gall features this automatic housecleaner in his $18,000 Cleveland homes. Cleaner removes dust, soot, smoke and pollen. It consists of an ionizing-collecting cell, high voltage power pack and features a water wash-spray system.

TAKING RISK out of replacing burned out fuses, especially in darkness, are these Sightmaster fuses, which have tiny built-in neon light that glows in dark. Fuses need not be removed; you simply turn them, dial-like, to next click. No need to worry about matching amperages. Fuses have six lives, are made in 15 to 30 amp sizes.

NEW PLASTIC OUTLET box by Porcelain Products, Inc., of Findlay, Ohio, is reinforced with molded glass fiber, has unusual resistance to moisture, fire and heavy impacts. It is non-corrosive and does not attract condensation, making it ideal for basement installation. Box is available with standard round knock-outs.

SINGLE BUTTON TOUCHEtte by Rodale replaces familiar toggle switch, fits standard wall plate or outlet box. It operates on full line voltage without relays or transformers and requires no special wiring. Basic moving parts consist of nylon cam and ratchet. Operates either fluorescent or incandescent lighting systems.

HOUSEPOWER into today’s ranch house

SERVICE DROP of typical ranch house installation may have 36-inch mast to support it. Power entrance is usually at corner of house in this type.

ANCHORING SERVICE drop to roof rafter is also used. Three-wire lead-ins are cable-clamped to service and looped down under projecting eaves as shown.

WHERE ROOF EAVES are flush, three-wire connection from service drop is made directly to sidewall. Cable is then brought down sidewall to entrance panel.
"WHEN YOU BUILD apartments as a personal investment, do everything you can to reduce upkeep," says Detroit builder Al Couvreur. His units are brick and all-electric. Rentals range from $80 to $100 per month.

ST. CLAIR SHORES units have Electrovector baseboard heating. Unit costs average $90 to $95 for heating alone. Ceilings have blown insulation, while sidewalls have full-thick blankets. Tenants like the evenness of electric heat.

How to hedge the bet with

With commercial building running to a record high this year, you can hedge the bet on residential work by getting into the apartment field. That's what Detroit builder Al Couvreur did with the rental unit shown here—and they now gross him $17,000 annually. His investment was $92,000, about one-sixth of which went for land.

A young ranch-house builder of some four years standing, Couvreur wanted an investment that would bring him a yearly income. He built the eighteen units shown here at $4,300 apiece, using much the same planning and construction techniques (trusses) used for his ranch houses.

Couvreur considered various types of heat but chose electric baseboard radiators. It was a wise choice, as heating bills have run $90-$95 a month.

FULLY EQUIPPED LAUNDRY houses washers, dryers, water heaters. It's one of many reasons why owner-builder Couvreur still has the same set of tenants he opened up with. Above laundry is master TV antenna, two amplifiers. Westinghouse appliances.

EFFICIENCY KITCHEN, also Westinghouse, includes range, refrigerator, Nutone exhaust fan. Bathrooms have American-Standard fixtures, built-in vanities. Each unit has a 52-gal. water tank.
a small apartment building

PLAN AND SECTION of typical St. Clair Shores unit. Builder stuck to ranch house construction, used standard W-truss for asphalt shingle roof. For soundproofing he went to staggered studs with mineral wool blankets. Floor is asphalt tile.
Are custom and project building always miles apart? No, says this builder in Haddonfield, N. J., and he's got a booming business to prove it.

How they customize to kill that "development look"

As every builder knows, Mr. Average American Homebuyer is a guy who usually asks the impossible. Yes, he likes the houses in your project, except he'd like his house to be quite different from all the rest—in everything but cost. In other words, he wants a custom job with a development price tag.

Impossible, of course. But in Haddonfield, N. J., a young builder named Bob Scarborough is doing very well on the theory that the closer you come to the impossible, the happier your buyers will be. His present operation includes three models, two splits and a ranch, and he's getting ready to add two more splits. Each model can be varied in several ways: materials, colors and elevations; and a drive through Barclay Farms, his latest development, is like a drive through a custom-built community.

The custom look is no accident. Before he turned to project building Scarborough was a highly successful custom builder, and this background comes through not only in the way his houses look, but in the way they are built. Quality materials and workmanship are evident throughout.

American Builder has selected his "Cambridge" model as its Blueprint House because its one floor plan and generous size (1500 square feet of living space) are most typical of the custom market. And at a price of $18,900 with all appliances, it's a whale of a good buy, as you will see for yourself on the next three pages.
... and here's how Scarborough

sold development houses

to a custom market

One of the chief reasons for Bob Scarborough's success is that he is doing the type of building he knows best in an area he knows well. Haddonfield is one of the few "high grade" suburban areas left in the Philadelphia sphere.

When Scarborough started there, after the war, he built what the locale seemed to call for—custom houses. By the time his business had grown to the point where he was building about 150 such houses a year, he decided there was room for some top quality project housing in Haddonfield, and gradually changed his operation. When he started the 250-house Barclay Farms he had some 330 tract houses under his belt.

He knew the market

"If I tried to build beyond a radius of about ten miles from here," Scarborough admits, "I'd be lost. But I know this market." And his market knows him. When the first 62 houses of the Barclay Farms development were sold, 70 per cent of the buyers were local people, drawn by Scarborough's reputation as a custom builder. Proof that they trusted his work lies in the fact that many of them could easily have bought costlier non-project houses. Forty per cent took conventional mortgages; half of these made better than fifty per cent down payments, and ten houses were all-cash sales.

Products used: Upson primed siding and primed soffit; General Electric Air-Wall heating and cooling units; Minneapolis-Honeywell Moduflow heating control systems and Tap-Lite electric switches; Arcadia steel sliding doors and special windows; Atlas flush doors; Crane plumbing fixtures; Hotpoint dishwashers, garbage disposal units, wall ovens, counter ranges, clothes washers and dryers; U. S. Gypsum, National Gypsum and Ruberoid wall board; National Gypsum Gyproc sheathing; Baldwin Hill insulation; Ruberoid roof shingles; Kentile asphalt tile flooring; Visqueen polyethylene vapor barriers; Owens-Corning Fiberglas foundation insulation; Weyerhaeuser interior and exterior wood trim; Nutone and Progress kitchen exhaust fans; Progress electric fixtures; Arkland garage doors; Bruder interior paint, and Thompson, and Lucas exterior paints.

THE CUSTOM LOOK OUTSIDE. One of many combinations of materials and color, blueprint house is long, low, handsome.

THE CUSTOM LOOK INSIDE. Massive brick fireplace is focal point of living room. Note pass-through from kitchen.

A CUSTOM EXTRA. Folding door at left closes off study for TV use, children's playroom, or extra bedroom for guests.

OCTOBER 1956 AND SOME MORE QUALITY TOUCHES
FIRST THING A BUYER SEES at model house is the front door, and this one should make a good first impression. Recessed design provides good foul weather protection. Brick step is another neat custom touch.

QUALITY WORKMANSHIP, one of Scarborough's strongest selling points, is the sum of many little things. Note the high quality of work on cornice detail. Gutters and downspouts are often omitted on development houses.

FULLY EQUIPPED COLOR KITCHEN is top single "extra value" item in Scarborough's Barclay Farms. Included are Hotpoint wall ovens, counter range, dishwasher, garbage disposal unit, clothes washer, dryer. Complete line of appliances like this is good deal for both builder and buyer; it is a strong merchandising aid, and can be included in mortgages, making it easier for buyer to carry. Also, quantity buying means lower buyer price.
EFFECTIVE USE OF SIDING is seen with horizontal gable lines contrasting with battens below. Height of garage in relation to house can be shifted up and down to meet terrain changes, helps alter appearance of house.

OUTDOOR LIVING AREA is behind house, where sliding glass doors open onto concrete terrace. Board and batten siding is really plywood sheets with strips nailed over studs Scarborough borrowed it from his custom days.

BIGGEST OF SCARBOROUGH'S MODELS is the Wyndmoor, selling for $22,500. Lower level includes a recreation room, hobby and storage rooms, half a bath. In addition, there are two and a half baths upstairs.

LOWEST IN PRICE and highest in sales is this little split, the Warwick. It offers about 1450 sq. ft. of living space, one car garage, kitchen with oven, range, dishwasher and disposer; for $17,700, it is project's best buy.

OCTOBER 1956

SEE P. 282 FOR ESTIMATING GUIDE
For MAXIMUM
Sales Appeal, Scarborough
Customizes
His Homes with
Hotpoint
Customline
Appliances!

Bob Scarborough's homes in Haddonfield, New Jersey, are outstanding examples of intelligent architectural design and planning, implemented with sound construction, good materials, and first rate equipment. They sell from $17,700 to $22,500.

Every Scarborough home has its own unique appearance—based on Scarborough's appreciation of every family's desire to own a "one-of-a-kind" home.

Vital to the individuality and saleability of Scarborough homes are imaginative, varying arrangements of Hotpoint kitchen and laundry appliances in Hotpoint's 5 famous Colortones. Scarborough says, "Everyone knows you're giving them the BEST, when you give them Hotpoint!"

Like Bob Scarborough, let "Hotpoint Lead Your Homes To Market!" You'll find that only Hotpoint helps you CUSTOMIZE—and only Hotpoint offers builders ALL these advantages:

- The industry's greatest variety of built-in models, prices, features, Colortones, and finishes—
- Low-cost "builder-engineered" installation—
- Product superiority that's recognized throughout America—
- Prices that mean Profits to builders!

It's a fact—whether you build homes selling for $10,000 or $100,000— the Hotpoint Line offers you maximum profits! Contact your Hotpoint Distributor's BUILDER SPECIALIST today—he'll prove that you'll make greater profits with Hotpoint than any other appliance line!
**Exclusive Hotpoint Spot-Less Dishwashing**

**SELLS HOMES FASTER—**
Outmodes All Other Dishwashing Methods

---

- **Your prospects are PRE-SOLD on Hotpoint Spot-Less Dishwashing**
  —by consistent, hard-hitting NATIONAL ADVERTISING!
  The story of Hotpoint Spot-Less Dishwashing is being told in big, 4-color ads in the nation's leading consumer magazines. When women see the Hotpoint Dishwasher, they know they're getting fine equipment and a fine home.

- **Your prospects are PRE-SOLD by confidence-building IMPARTIAL RECOMMENDATIONS!**
  The Hotpoint Dishwasher is the ONLY Automatic Dishwasher recommended in the last 4 years by one of the nation's leading consumer research organizations! And it has been consistently featured in editorial articles appearing in leading consumer magazines.

- **Your prospects are PRE-SOLD by Hotpoint's unequalled PERFORMANCE and FEATURES!**
  Women want Hotpoint's wonderful work-saving features like pushbutton control and separate Roll-R-Racks. Consumer surveys prove conclusively that homemakers prefer Hotpoint's separate Roll-R-Racks 4 1/2 to 1 over loading procedures required with ordinary racks.

- **Hotpoint Dishwashers are easy to install**—Both drain and hot water connections can be made from the front, with gravity or pump-drain Dishwasher in place.
  Available in 5 Colortones, Coppertone, or Customline Stainless Steel. Capitalize on the terrific "home selling" appeal of Hotpoint Dishwashers! Contact your Hotpoint Distributor's BUILDER SPECIALIST for the story.

---

Look to Hotpoint for the finest...first!

---

Exclusive Spot-Less Dishwashing

Women are sold on this wonderful dishwashing method, Two 5-minute Spot-Less washes—with fresh detergent each time—scrub away every trace of food and film. Spot-Less second rinse eliminates spots on glass and silver! Super wetting agent is injected in second rinse—water spreads so smoothly, it can't form drops, can't dry as spots.

Your eyes tell you! Spotted glass (left) was rinsed in plain water. Sparkling glass (right) was rinsed the new Hotpoint Spot-Less way.
Only Hotpoint brings you Color Comes To The Kitchen with Customline Appliances. Make your choice from gleaming stainless finish, Coppertone and five new Colortones: Sunburst Yellow, Coral Pink, Meadow Green, Woodland Brown and Seafoam Blue.

LET HOTPOINT BUILT-INS REFLECT QUALITY IN YOUR HOME...

All built-ins aren’t alike! Compare Hotpoint Built-In Ranges with those of the other 3 leading appliance manufacturers and you’ll see that Hotpoint offers you more models to choose from... more features that help you sell your homes... more profits through faster turnover. And, Hotpoint offers you comparable superiority in built-in refrigerators-freezers and dishwashers as well.

The extra sales appeal of these superior appliances costs you no more, because Hotpoint wants the builder business and has the prices to get it! And, with Hotpoint Customline built-ins, you also enjoy all these additional advantages:

- Finest Quality
- Powerful national advertising
- Fast, low-cost installation
- Strong local merchandising
- High consumer acceptance
- Top appraisal value
- Exclusive kitchen design service

Whether you’re building $10,000 or $100,000 homes, you’ll find that Hotpoint variety—in models, prices and colors—is exactly right for your market. Hotpoint Customline built-ins will help you sell your homes faster, and at a greater profit! Contact your Hotpoint Distributor’s BUILDER SPECIALIST today!

HERE ARE THE FACTS...

<table>
<thead>
<tr>
<th></th>
<th>Hotpoint</th>
<th>Major Brand “A”</th>
<th>Major Brand “B”</th>
<th>Major Brand “C”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Models</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Double-oven model</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Rotisserie</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Pushbutton Controls</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Window in door</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

| Surface Units    |          |                |                 |                |
| Number of Models | 5        | 2              | 2               | 3              |
| Pushbutton Controls| Yes     | Yes            | No              | No             |
| Faster-than-gas unit | Yes | Yes           | No              | No             |
| Deep-well cocker | Yes      | No             | No              | No             |
| Plug-in French Fryer | Yes | No            | No              | No             |

Look to Hotpoint for the finest... first!
so many profit opportunities!

9 FEET OF GLEAMING
PUSHBUTTON LUXURY—

★ Deluxe Super Oven with Rota-Grill Rotisserie.
★ 4 Calrod® Surface Cooking Units, including raisable automatic unit under deep-well cooker.
★ Automatically-controlled Plug-in Griddle.
★ Deluxe pushbutton Dishwasher.
★ Disposall® Food Waste Disposer (optional)
★ Seamless, stainless steel countertop and sink with Wonderflo single control faucet.
★ Pushbutton controls and appliance outlets.
★ Roomy storage cabinets and drawers.

HOTPOINT MODULAR KITCHENS ARE COMPLETE... COMPACT!

Make your new homes the "talk of the town" with exciting new Hotpoint Modular Kitchens. Women prospects lose their hearts when they see the distinctive, compact beauty of colored, pushbutton appliances and the gleaming stainless steel countertop. Hotpoint Modular Kitchens are the newest development in kitchens...and the hottest sales feature to help you sell your homes.

Installation is fast and simple, with no fuss or muss—requires only normal skills and tools. There's no tricky hook-ups to cause expensive on-site slow-ups. These compact units save floor space, and give you complete freedom to plan kitchens that offer a new high in styling and convenience.

Hotpoint Modular Kitchens also offer an excellent profit opportunity! They can be included in FHA and VA mortgages for only a few dollars a month, and actually raise the mortgage evaluation of your homes. Available in 5 beautiful Colortones—Sunburst Yellow, Coral Pink, Meadow Green, Woodland Brown, and Seafoam Blue.

Be the first builder in your market to take advantage of this great new home selling feature. See your Hotpoint Distributor's BUILDER SPECIALIST today—he has the complete profit story on the new Hotpoint Modular Kitchens.

Choice of LEFT-HAND or RIGHT-HAND MODELS

Available with cooking center at left or right end of unit at no extra cost. Provides greater planning freedom, enables you to reverse floor plans.

New "Kitchens by Keck" 16 pages of kitchen sketches and floor plans by the distinguished architect George Fred Keck, showing the design possibilities afforded by Hotpoint Modular Kitchens. Send your name and address with 25¢ in coin to HOTPOINT CO., P. O. Box 1527, Chicago, Illinois.
Sequin® unique modern textured linoleum—attracts prospects, helps sell your houses faster.

"Sequin" adds charm to any style of home, any room in the house. Equally important, "Sequin" inlaid linoleum offers advantages far beyond surface beauty.

Its exclusive SuperFlex® backing eliminates the need for lining felt, saving installation time and money. And since SuperFlex absorbs the strain of normal floor board movement, Gold Seal inlaid linoleum is not subject to cracking, thus reducing customer complaints. Unexcelled for new construction, it is also one of the best coverings for old wood floors when homes are remodeled.

The "Sequin" pattern will be bright and clear after years of wear, for its colors are inlaid through to the backing. The colors are easy to decorate around. And of course this amazingly economical flooring fully meets FHA title I requirements.

Your Gold Seal Dealer is listed under "Linoleum" or "Floors" in the yellow pages of your phone book. Call him and see "Sequin" in 18 glowing modern shades.

Specifications: Standard gauge with exclusive SuperFlex backing for installation over wood, concrete, or ceramic tile, above grade floors; 18 colors in 6' widths by the yard. Also 7 colors in 1/4" gauge, burlap backing.

Abrasive Wheel Test proves "Sequin" Linoleum will "look like new" through long service life!

The circular "After Test" area is the result of applying the abrasive wheel to the "Sequin" sample. See how it has worn well through the linoleum—and yet the pattern is still there, as clear and sharp as ever! Compare it with the "Before Test" area. You can't tell the difference!
Robert Scarborough cuts costs... builds better homes in the $18,000 to $25,000 range with

UPSON

SIDING, SOFFITS, CARPORTS AND PORCH CEILINGS

Robert Scarborough prominent New Jersey builder, as he appeared on the job at Barclay Farms, near Haddonfield. Ninety homes, price-tagged between $18,000 and $25,000 have been sold in Barclay Farms and he expects to complete 150 more this year. At 33, Scarborough is president and sole owner of several construction firms.
Note straight and true edges with beautiful deep shadow lines. Front side and edges of each piece, uniformly primed at the factory with high efficiency resinous coating, developed by the Upson Chemical Corporation. One finish coat covers exceptionally well. Back primed for extra moisture protection. Each piece has superior water-resisting, wearing and painting qualities. And there's less waste. Cut to uniform size: 12" wide by 12' long. No shorts. Won't split, check, crack or splinter. Applied at site in easy, conventional manner. Yet Upson Primed Siding costs up to 35% less than regular wood siding. Wire or mail coupon.

**Upson primed All-Weather panels for porch and carport ceilings**

Upson will ship pre-primed panels in standard sizes for use on porch and carport ceilings. Apply and finish. What could be easier? Factory priming saves money, too. Custom-cut sizes can be furnished on quantity orders. Let us quote to your specifications. Wire or mail coupon.
Upson delivered Primed Soffits, precision cut to Robert Scarborough's specifications for use at Barclay Farms. Pre-cutting at the Upson factory costs less than cutting on the job. Soffits are complete, ready to apply. Can be supplied with vents, too. Just nail in place and apply finish paint. No waste. No prime paint to buy or apply. Upson Primed Soffits are of the highest quality—yet moderately priced. Meets and exceeds minimum F.H.A. and V.A. construction requirements. Wire or mail coupon.
Robert Scarborough cuts costs ... builds better homes in the $18,000 to $25,000 range with **UPSON**

SIDING, SOFFITS, CARPORTS AND PORCH CEILINGS

Robert Scarborough prominent New Jersey builder, as he appeared on the job at Barclay Farms, near Haddonfield. Ninety homes, price-tagged between $18,000 and $25,000 have been sold in Barclay Farms and he expects to complete 150 more this year. At 33, Scarborough is president and sole owner of several construction firms.
tools will keep you competitive

moving jobs step up tractor utility

TRENCH-HOG is Arps low cost tractor attachment to handle big yardage jobs. It is available in three boom lengths, with digging depths of 3½ to 7'; cutters available 6 to 20" wide. Circle No. 10002 on reply card, p. 134.

COMBINATION backhoe and loader by Ottawa is shown here on new International Harvester W-400, is also available for W-600, W-300. Common frame for both units is designed to cut strain on tractor frame. Circle No. 10003.

more materials faster and higher

PORTABLE BELT CONVEYOR by Mulkey has a vertical lift of 20' at 30°; 8' extensions available. Companion model elevators move blocks, roofing etc. Telescoping undercarriage balances and is easily towed. Circle No. 10005.

75 BLOCKS on one pallet with Sherman fork lift speeded Orlando, Fla., Colonial Shopping Center job by R. M. Thompson Co. Load went direct from delivery truck to mason's platform. Circle No. 1006 on reply card, p. 134.
Power tools are faster, safer, more powerful

POWER HAMMER, under 13 lb., drills holes up to 1½" diameter in toughest materials. Spring floated piston, neoprene mounted nozzle, induction hardened helical gears are featured in the Remington Rand HS4U. It delivers up to 2300 blows per minute. The crank assembly is counterbalanced. Switch is sealed against dirt. Circle No. 10007.

SAFETY RETURN device. De Walt Spir’Ator automatically returns carriage and cutting member of radial arm wood-working machines to rear idle position as soon as operator relaxes his forward pull on the motor carriage. The device, which is spring actuated, is made for De Walt by Hunter Spring Co., Lansdale, Pa. Circle No. 10008.

INSIDE CUT with Wen Model 505 sabre saw needs no starting hole. Air stream blows dust off guide line. Saw goes through wood or plaster, handles easily in overhead or vertical position. It is recommended for mounting attic and exhaust fans, radio speakers, and cabinet work. Circle No. 10010 on reply card, p. 134.

LEFT OR RIGHT hand saw table No. 777 by Maxaw for saw models 717, 737 or 747, permits all bevel, depth, miter and ripping adjustments. Saw is removed quickly. Capacity is 2½" at 90° and 1½" at 45°. The saw shoe fits flush with the table top, which is 24" wide, 20" deep; legs are 34" long. Circle No. 10011 on reply card.
and versatile

FOUR MINUTES to cut warm air duct opening (including 2x4 plate and direct cut into floor without starting hole) with B.C.S. Super Saw. Instant removal of saw from drill is made possible by a patented type of lug drive that provides a positive connection between the saw and the ¼" electric drill. Circle No. 10009 on reply card.

BEVEL CUTS on either side up to 45° is feature of Black & Decker jig saw No. 11. It has full one inch stroke; 2" depth at 90°, 1¾ at 45°. Shoe adjusts to any angle. The weight of the Heavy Duty jig saw is 6 lb. A metal-cutting blade and three high speed wood cutting blades are included. Circle No. 10012 on reply card.

CHALK LINE by Evans, also used as plumb bob, has flush rewind handle; brake locks reel. Chalk refills through cap at plumb tip. Circle No. 10013 on reply card.

MOLDING REMOVER, Red Devil's Li'l Jimmie, also loosens windows, pulls nails, etc.; is of ¼" thick carbon steel, 10" long. Circle No. 10014.

STRAIGHT SEAMS on drywall are promised by new Goldblatt "Speedy Sparker"; takes roll 2½" up to 250' long, is easily refilled. Circle No. 10015.

OCTOBER 1956
**OASIS IN DESERT** is the Oja. Located in Apple Valley about 120 miles from Los Angeles, it has huge tiled pool in rear for customers to cool off in. Timber structure was built by Bennington & Smith from designs by architects Robert H. Thomas, AIA, and Lee Stegner, AIA, his associate in the enterprise.

**This “motel of tomorrow” pulls**

This two-story, fifteen-unit deluxe motel has a circular lounge, balconied upper floor and heated swimming pool. Rooms will have individual air conditioning units (one-ton Vernado), are already equipped with Stewart-Warner gas heaters. For more on dressing-room units, see Detail Plate, page 280.

**TYPICAL ROOM UNITS** are asphalt-tiled downstairs, carpeted on upper floor. Sliding glass doors, (Arcadia) lead to private balconies. Building of insulated frame, wood paneling and plaster construction cost owner $112,000.
MAIN ENTRANCE TO MOTEL is at center, where walk leads past manager-owner’s office to heated pool in rear. Parking space is under balconied upper story. Louvers were installed for design purposes only; motel faces North. Stair treads of poured concrete have V-shaped metal pans.

FOR EXTRA $3,000 owner Robert Oja had 93 aluminum louvers installed. They create interesting pattern on face of building, especially when light shows through them.

big business today

CIRCULAR LOUNGE has huge circular fireplace. Late-driving tourist can see glow from fire for miles. Fireplace has glass fibre insulation under hood of copper.
Here's the basic house, designed for the $12,500 market

ORIGINAL PLAN provided three bedrooms, one and a half baths, 1,100 sq. ft. of living space. Note brick wall adjoining fireplace and separating living and dining rooms, a touch of elegance unusual in a house in this low price range.

How to make one plan

W ant to upgrade your houses for a changing market? Compare the two models above. Then look at the plans. Neat, eh?

Shows what an imaginative architect (R. Emory Holroyd & Associates) and a skilled builder (George S. Goodyear) can do with a good basic
And here's the way it's expanded for the $18,500 market

LARGER VERSION of same design includes a fourth bedroom, two full baths, and 1,600 sq. ft. of space. By orientation of house on lot, any number of front elevations can be obtained, with living room or kitchen in front or rear.

cater to your two biggest markets

plan to cover a broad and growing market.

Both houses are part of an 850-unit subdivision, Selwyn Park, in Charlotte, N.C. Built over a period of several years, it typifies the well planned communities for which Goodyear has earned a national reputation.

George Goodyear, who is first vice president of the National Association of Home Builders, builds and develops houses in several locations, with a wide range of price tags. He's also a mortgage banker. As an expert on mortgage financing, he's represented NAHB at Congressional hearings.
Progress has not neglected warm air heating. Like other methods of residential heating, this oldest and most popular system has kept pace with new ideas in house design and construction, air conditioning, filtering, sound control and insulation.

Furnace design is flexible. For attics and crawl spaces, horizontal units take little space. For slab construction, counterflow furnaces installed in closets or utility rooms send heated air through ducts imbedded in the concrete to the perimeter.

Two shortcomings of the warm air system are now being overcome by the “tight house” construction brought in by air conditioning and new techniques in insulation. The old leaky house required continual heating of new cold air from outside; and this dry cold air brought inside humidity way down.

“Use the same ductwork for air conditioning” is now one of the best arguments for warm air heating, but it can be a boomerang. A blower sized for warm air may not be adequate for cooling; and a balanced heating system may not match zoned cooling requirements. A well-planned year-round system with a/c built in from scratch is the ideal. Next best is a properly planned layout with room in the plenum for future add-on a/c.

The filtering action that has helped make the words air conditioning mean much more than cooling is now an integral part of warm air heating, especially in "tight" houses where return air keeps getting cleaner in its trips through the filter.

One of the oldest examples of warm air heating, the hypocaustic furnace and under-floor ducts in the baths of Caracalla in old Rome, is brought up to date by a floor panel system described by the National Concrete Masonry Association. The floor is constructed of hollow concrete block units of which the cores act as the ducts and lead to baseboard registers, thus giving the benefits of both radiant and convective heat. Downdrafts and the directional effects of cold walls are eliminated.

The ultimate in year-round conditioning is found in the Hathaway Manor subdivision begun last year by Vorhof-Duenke Inc., St. Louis. The $19,000-21,500 houses are cooled in summer with automatic dehumidification, heated with automatic moisture control, filtered constantly with electrostatic grids, and purified 24 hours a day with an electronic lamp. The entire system is linked into one automatic operation with switches and thermostats.

Thoroughly tested before being purchased for a total of 3,000 houses, the system developed by Harvey-Hill Inc. cost $207.60 for a full year's run, for heating, cooling and between-times filtered circulation, including water, current and gas.

**Flush Up** against the floor joists, the 2-ton a/c unit of the Harvey-Hill system uses nine gallons of water a day in a porous nylon jacket "soaker" coil helping cool the refrigerant in the evaporator. Circle No. 10016.

**Radiant Electric** baseboard has independent thermostat. Electriliving Quartzheat units in 1836 sq. ft. home of C. A. Wulf, Jr., Indianapolis, cost $175 to operate for a 5,650 degree day winter. Circle No. 10017 on p. 134.
heating: are you with it?

\[ \text{ but electric and hot water systems are moving up to expand sales in the quality heating market} \]

Electric heat and "wet" (hot water and steam) heat have this in common: they can make much of the advantages of radiant heating, as supplied by various types of panels or baseboards.

Hot water coils for radiant heat usually go into the slab floor, sometimes into the ceiling; electric resistance wire or blanket goes into the ceiling, covered by plaster or drywall. Thus the whole floor or ceiling acts as a single panel, radiating warmth directly upward or downward. In the process the windows and outside walls, main routes of heat loss, are warmed, without air movement.

Baseboards have both radiant and convective effect. Heat rays move directly out into the room from the horizontal resistance element or finned hot water tube; but also room air is drawn under the heating element and warmed as it passes upward into the room by convection.

Be cautioned about claims for radiation as the "sunshine" kind of heat. True, the sun warms by radiation, but the health-giving sun rays are different from the simple heat radiation in the home.

The main appeal of radiant heating is the overall and continuous effect of warmth. Radiation in home heating, whether baseboard or panel, electrical or hot water, warms an entire room simultaneously. It affects solid surfaces sooner than it warms the air, so that there cannot be a simultaneous feeling of stuffiness (from warm air) and of chill (from loss of body heat to still-cold surfaces). Also, radiation continues after the boiler or resistance coil is turned off.

Air conditioning raises some knotty problems. Electric resistance heating requires a separate cooling system. But the electricity-run heat pump can operate two ways: you can cool the interior by heating the outdoors, as with any refrigeration unit; but by reverse cycle, you can heat the interior by taking heat from outdoors, even when the weather is near freezing. The new GE room model year-round heat pump is fit into the Thinline design for in-wall installation, and is equipped with supplementary resistance heating that cuts in when outside temperature falls below 42°.

Some hot water heating systems use the same piping for chilled water in summer, with the addition of a condensate trough and drain and a central air circulator, as in the Vulcan plan. Other hot water systems use room convectors for warm and chilled water, but with independent thermostats and blowers. The experimental valance system developed by the John B. Pierce Foundation utilizes convection for heating and cooling, while Dr. Clarence Mills' trough near the ceiling carries hot and chilled water pipes and uses radiation from reflective surfaces only.

\[ \text{THREE PRECISION INSTRUMENTS control the system. Outside electronic thermostat raises or lowers settings of the inside thermostat, which signals control center in kitchen to adjust basement plant.} \]

\[ \text{BATHROOM PANEL with radiant glass element, by Continental, has two towel-lingerie bars; it may be surface-mounted or recessed and comes in various finishes. Note thermostat knob for controlled heat. Circle No. 10018.} \]

\[ \text{OCTOBER 1956} \]
Nat Siegel declared that “50% of my prospective buyers ask for hot water heat” in a talk at a conference of the Better Heating-Cooling Council, recently organized to promote “wet” systems. And 80% of Siegel’s prospects for his Fern Homes in Babylon, Long Island, are shopping for second homes, and know their minds.

To get hot water heat into a $14,290, eight room four-level, Siegel had to plan hard. He got installation time down to a single day for two men per house, putting in 99' of baseboard. Tight scheduling was the key. Sheetrock men would make partial installation of lower panels, then return when the baseboard men were through. The baseboard system of pre-cut heating elements and enclosures lends itself to continuous runs without multiple feed and return lines. High temperature water at 195° permits 40% less radiation, 10% lower cost. Domestic hot water works from the boiler.

Siegel has used both Vulcan and Slantfin baseboards. Young, Webster and Hydrotherm also offer well-known wet heat packages.
1. YOU PLAN HOUSE AND HEATING TOGETHER FOR STRAIGHT-LINE RUNS

PIPING PLAN (left) shows straight runs through rooms and relation of two circuits: one for lower levels and living room; the other for the upper level, with a combined return to boiler at bedroom No. 2.

2. YOU COORDINATE CARPENTRY, DRYWALL

CARPENTER helps by cutting away nailer for sheetrock, saving heating men a job. Riser will turn under nailer for a single long run through front bedroom partitions, from left to right of house. After drywall, the plumbing work, by Norfeld of Elmont, N.Y., brings in the hot water lines. Baseboards are mounted when lower course of drywall is installed, then drywall men can finish up at will. Framing plan can ignore heating work.

3. YOU COORDINATE CARPENTRY, DRYWALL AND PLUMBING SCHEDULES

FERN HOMES retain same heating system in three versions of same plan. Nine and ten room plans add dining room and patio or breakfast room. Siegel builds 150-200 houses a year, in $14-16,000 range.
A house is the sum of all its parts—not the least of which is the garage door. And since today's modern garage is integrated with the house design, it is an important part of the home in the buyer's mind.

That's why it's smart sales psychology to install Ro-Way doors on all your residential garages.

A Ro-Way door completes your quality picture. Its handsome appearance, distinctive features, and outstanding reputation tell a quality story your prospects can understand. And it goes a long way toward making them feel you've built quality into the entire house.

With buyers becoming more quality-conscious, Ro-Way garage doors are a "plus" that makes your sales job easier. See your Ro-Way distributor for full details, or write us direct for descriptive literature.

Ro-Way Quality Helps Sell the Home

- Outstanding designs—including a wide range of exclusive carved raised panels, flush sections, decorative molding and rossettes—for every style of architecture
- Mortise and tenon joints both glued and steel pinned
- Taper-Tite track and graduated Seal-A-Matic hinges for tight closing, easy opening
- Power-Metered springs individually balanced to the weight of each door
- All hardware Parkerized and painted for maximum rust prevention
- From start to finish, every door, including all millwork and hardware, completely fabricated by Rowe.
The Payoff
Departments

New Products and Catalogs

Builders' Supermarket for new products and equipment, and for manufacturers' literature, on tools and equipment, lighting, baths and kitchens, floors and walls, winter building, heating and ventilating. 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

All these ideas have been tested and found helpful by other builders and are now presented here for your own use. This month's items include a material-saving method for framing soffits, a way to neater fascia corners, a spray-gun nozzle cleaner, and leak-proof gutters.

Ask The Experts

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 proper placement of ventilating fans, methods of apartment-house bracing, insulating a crawl space, and tree flashing.

Convention Calendar

Here is American Builder's listing of all association meetings scheduled to take place in the near future. Check these listings for the meetings you want to attend... these are the places to learn what your fellow-builders are doing.

Keeping Up With The Law

American Builder's legal consultant, John F. McCarthy, offers valuable advice to builders on questions involving the law. This month, Mr. McCarthy discusses discrimination against the use of a particular building material.

Better Detail Plate

Here, in detailed drawings and text, is the plan for the dressing-rooms for a California motel (see pages 120-121). Save these pages; you'll be glad you did.

The Month Ahead

Things for alert builders to think about in November.
Builders throughout the country report

Carpet Sells Homes Faster

Builders throughout the country are moving homes faster by including carpet in the package price. By eliminating the cost of finished floors and installing wall-to-wall carpet directly over sub-flooring, builders can offer their prospects an opportunity they can't refuse.

Women want carpet. Surveys prove they prefer it 13-1. But when a family's buying, their cash and credit are tied up — they feel they can't afford the floor they want. But when you offer carpet to them in a new home, they buy the home faster.

Discuss this with your local carpet retailer. He can offer two extremely valuable services: 1. A broad selection of merchandise, with the showroom facilities and knowledge to service your buyers. 2. Skilled carpet layers to install wall-to-wall carpet.

Your local lending organizations will be able to work out, with you and your carpet retailer, the most satisfactory financing plans for you.

Find out how you, like hundreds of other successful builders, can use carpet as an effective selling tool. See your local carpet retailer today, or write the Carpet Institute, 350 Fifth Avenue, New York, N. Y.

Home means more with carpet on the floor — more comfort · quiet · safety · beauty · easier care

Buy carpets designed and made for the American way of life by these American manufacturers:

Artloom · Beattie · Bigelow · Cabin Crafts-Needlefelt · Downs · Firth · Gulistan · Hardwick & Magee · Hightstown · Holmes Karastan · Lees · Magee · Masland · Mohawk · Nye-Walt · Philadelphia Carpet · Roxbury · Sanford · Alexander Smith

CARPET INSTITUTE, INC., 350 Fifth Avenue, New York 1, N. Y.
Come Back Here!

Don't you dare leave for the NAHB Convention without the Product Show Issue coming in January.

It's a Preview. What's your guess? What will be the talk of the trade at the NAHB Convention? The business outlook?...credit?...FHA Standards?...built-ins?...split levels? Get the inside story...a run-down before the curtain goes up. In AMERICAN BUILDER's January Product Show Issue. Here it is...with no punches pulled. People and politics, plastics and prefabs. The works! What clinics, panels and demonstrations will you want to attend? Read the January issue.

A Product Show. Boy oh boy! You'll feel like a kid at the circus...you won't know what to look at first. New and improved products?...Over 400 strong. All pictured and described in this one issue. The very same products that will be exhibited at the Convention. There's sales and profit builders a'plenty here. But don't rush. Look them over one at a time. Read about them. Which can you use? Note the complete information...manufacturer's name and address...hotel and booth exhibit number. Want more information? A Reader Service postcard supplies it. It's that simple.

A Guide, A Checklist. What's Zilch Company exhibiting? Where? Don't miss a thing at the Convention. Check AB's Guide and Checklist. It's an alphabetical list of every participating manufacturer...the product...the hotel and booth number. Read over the complete list. Check those you want to see.

And More! Plus all the features and editorials that make AB such a profit-packed package...The Opportunity Page...National and Regional News...Dickerman's Column...Northrup's Column...How To Do It Better...The Month Ahead...and all those "What to build," "How to build it" features that pay off for you. All in the January issue. Coming soon!

January Product Show Issue

AMERICAN BUILDER

OCTOBER 1956 131
Residence in Barrington, Ill., Ralph Stoetzel, architect

See how windows can help boost home sales for you when you use Andersen WINDOWALLS. This low cost picture window installation combines versatile Andersen Flexivents below Andersen Flexiview Units. Like all Andersen WINDOWALLS they let in sunshine, fresh air, the view... yet they close tight assuring weathertight protection for year 'round comfort.

It's easy to get more data on the advantages of Andersen WINDOWALLS. See your lumber and millwork dealer, Sweet's Files, or write Andersen. WINDOWALLS are sold throughout the country including the Pacific Coast.

ANDERSEN CORPORATION • BAYPORT • MINNESOTA
Shown directly above is one of the homes erected by GRANT-HOLLADAY in Newcom Knolls, a suburb of Dayton, Ohio. These homes are prefabs with an option of 4 bedrooms or 3 bedrooms and a dining room. Lots average 60' x 125'. Full price is $10,750. This house is typical of the more than 1,100 which GRANT-HOLLADAY plans on erecting in Canton, Youngstown and Piqua, Ohio.

When you consider that GRANT-HOLLADAY saves $50.00 per home by using Revere Copper Water Tube and then multiply this saving by the 1,700 homes they have completed and plan to erect, you have a saving of $85,000! And that, Mr. Architect, Mr. Builder and Mr. Contractor, "ain't hay!"

If that kind of money can be saved in homes within this price range, think of the savings that can be realized when you get into the higher price brackets. That's why it will pay you to plan on copper in all your future homes for underground service lines, hot and cold water lines, radiant panel heating, air conditioning, drainage, waste and vent lines. See your Revere Distributor. And if there is anything involving the installation of Revere Copper Water Tube that's bothering you, he'll be glad to put you in touch with Revere's Technical Advisory Service.
PER HOUSE by using
REVERE COPPER WATER TUBE
in our plumbing and drainage lines"

"To enable us to construct these houses in Newcom North and Newcom Park and sell them at the low sale price of $10,750 and still make a profit, it has been necessary to incorporate any and all time-saving devices available. With this pre-cut and pre-assembled type of construction, the use of copper with its ease and speed of installation was dictated. It soon became apparent that the $50.00 saving per house effected through the use of Revere Copper Water Tube, coupled with the added sales appeal, made copper the logical choice."

Says, Wallace F. Holladay, President
GRANT-HOLLADAY CORPORATION
Dayton, Ohio

"This business of contractors saying that copper is expensive to install is being disproved every day. Our experience has proved just the opposite. Copper water tube not only does not cost more to install than rustable materials, it actually costs less ... in the case of these homes that GRANT-HOLLADAY built it was $50.00 less, per home! The reasons are obvious: solder fittings, fewer fittings, long lengths, ease of handling and bending, and the prefabrication of certain assemblies in the shop."

Says, Charles Claypool, President
CLAYPOOL PLUMBING & HEATING COMPANY
Kettering, Ohio

"We have furnished CLAYPOOL PLUMBING & HEATING COMPANY with approximately 160,000 pounds of Revere Copper Water Tube for the 1,700 homes that GRANT-HOLLADAY is building. Handling Revere Copper Water Tube is good for us, not only from a prestige standpoint, as contractors and builders know it is of the highest quality, but I've found that when Revere says they'll deliver on a certain date, they deliver ... and that's mighty important to a distributor."

Says, R. J. Makarius, President
ACME PLUMBING SUPPLY COMPANY
Dayton, Ohio
the fastest growing name in plumbing fixtures

...THE COLORS—choice of seven sparkling pastels or famous Richmond “Whiter-White.”

...THE STYLING—designs to fit every plumbing need—residential, commercial, industrial.

...THE ENGINEERING—quality-controlled manufacturing that gives lasting consumer satisfaction.

...THE BRAND ACCEPTANCE—building steadily through extensive national advertising.

TO BUILD YOUR REPUTATION FOR QUALITY AND BRING SALES YOUR WAY

RICHMOND PLUMBING FIXTURES

DIVISION OF RHEEM MANUFACTURING COMPANY
16 Pearl Street, Metuchen, New Jersey

WRITE FOR NEW ILLUSTRATED CATALOG
you can be sure of all these 3 premium qualities at no extra premium in cost ONLY with

PALCO® Architectural Quality Redwood

1 CERTIFIED DRY

All PALCO Architectural Quality Redwood is Certified Dry—permanent assurance of minimum shrinkage, swelling or distortion. Following proper air seasoning, it is cured in one of 25 modern kilns under rigid temperature and humidity controls. In an exclusive PALCO process, moisture content of each kiln charge is then equalized.

2 VERTICAL GRAIN ONLY IN ALL RESAWN SIDING

If flat grain blanks are resawn, every alternate piece faces the heart and tends to “shell out” after long exposure. Pacific resaws only vertical grain blanks—your assurance of virtually ageless appearance, resistance to weather, and permanently ideal surface for painting. Only PALCO Architectural Quality insures this value.

3 FLAT GRAIN PATTERNS RUN TO CONTROL “SHELL OUT”

Flat grain is often desirable for beauty and functional requirements. Pacific’s exclusive handling systems control every step of manufacture to see that the pattern is run on the proper face. It’s the bark side of flat grain that’s normally resistant to “shell out” after long exposure. Only PALCO assures this premium.

Specify the best in Redwood

THE PACIFIC LUMBER COMPANY
Since 1869 • Mills at Scotia, California

THE PACIFIC LUMBER COMPANY
100 Bush St., San Francisco 4, Calif.—Dept. AB

Please send me without obligation:

- Reprint of Architectural File Bulletin outlining specification data, PALCO Redwood patterns, sizes, grades, grains, etc.
- “From Out of the Redwoods”—colorful booklet showing how PALCO Redwood and Redwood Products are produced.

NAME________________________
TITLE________________________
COMPANY_______________________
ADDRESS_______________________
CITY___________________________ ZONE____ STATE_________
Ready for immediate installation

Packaged Heatmaster heating unit is easily the best way to winterize a home!

C-E has designed this small gas fired home heating unit for use with any type of hot water radiation. It is shipped as a completely assembled boiler—absolutely no on-the-job assembly is required! Occupies only four square feet of space. Can be installed almost anywhere in the house. Approved for use on combustible flooring too!

Pre-engineered and packaged

Simple gas and water connections to boiler are made external to the unit. No assembly or connections necessary to be made within the cabinet. All operating parts are in place for easy installation. Every C-E Home Heating unit is equipped with
these standard furnishings: Circulator, expansion tank, gas regulator, gas automatic pilot and safety valve, gas flue diverter (draft hood), control relay, gas control valve (solenoid), tube brush, temperature, pressure and altitude gauge, drain valve, manual air vent and complete internal wiring and piping ready for system hookup.

**Patented features**

C-E’s patented aluminized steel burners are designed for use with all domestic gas fuels. The gas control arrangement, consisting of gas pressure regulator, automatic safety cut-off and solenoid is in place and is readily accessible for easy servicing.

The boiler heating surface consists of 92 feet of 1” steel tubing. Tubing is bent by C-E’s exclusive process and welded in accordance with ASME code.

Small radius bends and compact tube arrangement make for maximum transfer of heat to water. Small water volume of the C-E boiler (approximately 3 gallons) provides efficient utilization of fuel and practically instantaneous response to heating demands.

**Add air conditioning**

Homeowners desiring the comfort of air conditioning can add a chiller unit to the system at a later date. The boiler is specifically designed for this addition. If C-E room convectors are used and piping properly insulated with original heating installation, the summer air conditioning can be accomplished by simple interconnections between boiler and chiller units.

**About C-E**

The C-E domestic home heating unit is built by Combustion Engineering, one of the world’s largest manufacturers of steam generating equipment, with 70 years experience and “know how.” Combustion Engineering is currently designing a steam generator for the Philadelphia Electric Company power station which will be the most efficient station in the world. This C-E steam generating equipment is being designed for 6000 psi to produce steam at 1200°F. This will be the highest pressure and temperature ever projected for utility stations. This is an example of the kind of work that typifies the company behind the C-E home heating unit.

**Take advantage of the many benefits C-E Heatmaster Home Heating and Air Conditioning offers by sending for more information now.**

**HEATMASTER**

The easiest way to winterize a home

COMBUSTION ENGINEERING INC., Home Equipment Division, 911 West Main Street, Chattanooga 1, Tennessee

OCTOBER 1956
Donley Steel Mortar Boxes

*Fast mixing and cleaning are assured . . . steel interior will not "dig up" or splinter . . . is free of rivets and other obstructions. *Leakproof construction provides accurate mix every time. *One piece (14 or 16 gauge) steel body with welded joints provides long service life. Entire top edge is angle-iron reinforced for rigidity and easy grip. Corners are rounded for safety. *Donley Mortar Boxes nest for storage . . . serve as weather-tight roof when turned upside down over perishable materials.

**DONLEY BRICK CLAMP**
reduces handling time . . . quickly adjusts to carry from 8 to 15 bricks. It is strong and lightweight . . . picks up and releases load instantly.

**DONLEY MORTAR TUB**
is all steel . . . ideal for plastering, tile setting or small-job masonry. Easy to handle and to step across when used on the scaffold. It is leakproof, cleans quickly and can be used to mix small batches.

**SIZES, DIMENSIONS AND WEIGHTS**
Note: Number of box indicates approximate cubic foot capacity.

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Width Inches</th>
<th>Length Inches</th>
<th>Depth Inches</th>
<th>Shipping Weight Lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>42</td>
<td>110</td>
<td>12</td>
<td>190</td>
</tr>
<tr>
<td>22</td>
<td>42</td>
<td>86</td>
<td>12</td>
<td>135</td>
</tr>
<tr>
<td>14</td>
<td>36</td>
<td>68</td>
<td>12</td>
<td>124</td>
</tr>
<tr>
<td>9</td>
<td>28</td>
<td>70</td>
<td>10</td>
<td>79</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>53</td>
<td>9</td>
<td>52</td>
</tr>
<tr>
<td>Donley Mortar Tub</td>
<td>23</td>
<td>30</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

**Write today for literature.**

**THE Donley BROTHERS COMPANY**
13910 Miles Avenue, Cleveland 5, Ohio
IT'S EASY . . . IT'S SPEEDY

Simply slip the halves together in the opening and nail it to the wall.

- Can be installed in 20 minutes.
- Fully adjustable for wall thicknesses from 4½ inches to 5½ inches.
- Looks identical to conventional door frames when installed.
- Fasteners on mitre joints in the trim keep mitres tight indefinitely.
- Does not require special framing of the rough opening.
- Made left and right in all standard sizes for inside doors.
- May be installed by the average home mechanic.
- Furnished in a variety of door and trim styles. Any combination of trims and door styles can be had by special order.
- Saves money and elapsed building time.
- Crated* for delivery with joints square and tight.

A door and frame packaged unit complete with the door hung and locked and the frame trimmed both sides, ready to install in any rough opening in 20 MINUTES.

CALL YOUR
READY HUNG DOORS
MADE BY THESE LEADING WHOLESALERS
LUMBER DEALER

ALBANY, N. Y.
Iroquois Millwork Corp.

BOSTON, MASS.
A. W. Hastings & Co., 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
Lumber moulds, Inc.

GRAND RAPIDS, MICH.
Porter-Harley Company

HUNTINGTON, WEST VA.
Iroquois Door Co.

HUNTINGTON, WEST VA.
Iroquois Door Co.

INDIANAPOLIS, IND.
Midland Building Industries, Inc.

LOS ANGELES, CALIF.
Ready Hung Door Mfg. Co.

MARION, INDIANA
General Millwork Corp.

NEW YORK, N. Y.
Bailey-Whalen Co.

BUFFALO, N. Y.
Iroquois Door Co.

ROCHESTER, N. Y.
The Whitmer-Jackson Co., Inc.

ST. PAUL, MINNESOTA
Minnesota Wood Specialties, Inc.

ST. LOUIS, MISSOURI
Imes-Schilling Sash & Door Co.

ST. PAUL, MINNESOTA
Minnesota Wood Specialties, Inc.

SOUTH AMERICAN, PITTsburg, PENN.
Iroquois Door Co.

TOLEDO, OHIO
Allen A. Smith Co.

TRENTON, CANADA
C. Lloyd & Son Limited

WASH, TEXAS
Ready Hung Door Corp.

MINNEAPOLIS, MINN.
Iroquois Door Co.

FORT WORTH, TEXAS
Ready Hung Door Corp.

ALBANY, N. Y.
Iroquois Millwork Corp.

BOSTON, MASS.
A. W. Hastings & Co., 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
Lumber moulds, Inc.

GRAND RAPIDS, MICH.
Porter-Harley Company

HUNTINGTON, WEST VA.
Iroquois Door Co.

HUNTINGTON, WEST VA.
Iroquois Door Co.

INDIANAPOLIS, IND.
Midland Building Industries, Inc.

LOS ANGELES, CALIF.
Ready Hung Door Mfg. Co.

MARION, INDIANA
General Millwork Corp.

NEW YORK, N. Y.
Bailey-Whalen Co.

BUFFALO, N. Y.
Iroquois Door Co.

ROCHESTER, N. Y.
The Whitmer-Jackson Co., Inc.

ST. PAUL, MINNESOTA
Minnesota Wood Specialties, Inc.

ST. LOUIS, MISSOURI
Imes-Schilling Sash & Door Co.

ST. PAUL, MINNESOTA
Minnesota Wood Specialties, Inc.

SOUTH AMERICAN, PITTsburg, PENN.
Iroquois Door Co.

TOLEDO, OHIO
Allen A. Smith Co.

TRENTON, CANADA
C. Lloyd & Son Limited

WASH, TEXAS
Ready Hung Door Corp.

MINNEAPOLIS, MINN.
Iroquois Door Co.

FORT WORTH, TEXAS
Ready Hung Door Corp.
It's prepainted... it goes up fast

Insulite has the right tile for every modernization job

Choose from Acoustilite (regular or random drilled), Durolite (slightly textured), or Fiberlite (a travertine-type textured surface). For low cost and tough, scrubbable finish, we especially recommend Durolite. Insulite lines offer a variety of sizes, thicknesses, finishes, in flanged T&G or precision-cut butt edge types. Apply T&G tiles with staples or nails; butt edge types with adhesive.
Want to develop some nice business in Operation Home Improvement?

For new additions, remodeling, recreation rooms, attic rooms, or modernizing and repair of older homes, the results you get with Insulite ceiling tiles are spectacular. The job goes lightning fast. Even men with little experience can do beautiful work.

It's a sparkling-clean, prepainted ceiling. And where quieter rooms are desired, Fiberlite and Acoustilite tileboard smother noise with remarkable effectiveness.

Here, then, is your key to more and better home improvement contracts. For selling help, see your lumber dealer or write Insulite, Minneapolis 2, Minn.
EASY TO USE. Just unroll it on the wall to the length required. Lays flat on the block. Short pieces may be used without waste by lapping ends. Easy to fit around pipes, conduits, and ducts.

KEY-WALL rolls are 150 ft. long. It is made for 4", 6", 8", 10" and 12" wall thicknesses. It’s galvanized to prevent rust; always gives maximum bond.

KEY-WALL is lapped at corners without adding thickness to the joint; without special cutting and fitting. It’s easy to build up Key-Wall reinforced corners.
GALVANIZED MASONRY REINFORCEMENT

The new masonry reinforcement that gives greater value at lower cost

That's right. One man easily carries 300 ft. of KEY-WALL. Galvanized, it needs no protection from weather on the job. It requires little space on the scaffold. It is easy to cut. Material cost is low. Labor cost is low.

Yet it gives superior reinforcement to masonry. For full details on reinforcement, write for the summary of tests by the Research Foundation, University of Toledo.

FREE—SAMPLE AND TEST REPORT

Keystone Steel & Wire Company
Peoria 7, Illinois

Please send me sample and test report on KEY-WALL.

Name___________________________

Firm___________________________

Street___________________________

City___________________________ State_____

MORTAR FLOWS READILY around KEY-WALL to give full embedment, as well as maximum reinforcement value. Tests show an exceptional bond.

MASONS LIKE the way mortar flows over Key-Wall; the way it aids full embedment; the way blocks settle in place without interference.
Home buyers are sold on the beauty ... quality ... easy care of Guaranteed Plastic Wall Tile made of Styron

It's the look of luxury that sells homes these days. And you can give your homes this big selling feature easily with guaranteed plastic wall tile made of Styron®.

Designs are unlimited with regular and king-size squares and modern brick shapes ... with colors that run the gamut from softest pastels to rich, deep tones. Trust Styron plastic wall tile to bring your plans to life with permanent beauty.

There's profit for you, too, with Styron plastic wall tile. It goes on quickly and easily ... eliminates the need for costly, time-consuming pre-preparation. Your Styron plastic wall tile supplier will give you the guarantee of quality that has sold America on the luxury look. See him today! THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics Sales Department PL 419M.
For the kitchen the luxury look is also the most practical. Smooth, lustrous Styron plastic wall tile is a homemaker's dream to keep sparkling clean. Colors won't chip or peel or wash away ... spots and splashes wipe away in a jiffy. Today, the kitchen sells the home ... and Styron plastic wall tile sells the kitchen!

Wherever beauty must be practical ... from smart, modern dining areas to hallways, recreation rooms, utility rooms, powder rooms ... Styron plastic wall tile is your answer. Here is wall beauty that sets the pace for casual, colorful living ... beauty with the quality guarantee. And remember, there are shapes and colors in Styron plastic wall tile to accent your every plan.

THESE ARE YOUR GUIDES

The emblem (left) identifies the certified dealer who will give you a written guarantee (center) covering plastic wall tile, mastic and installation which conform to quality standards established with the U. S. Dept. of Commerce, Bureau of Standards—CS 168-50. The Styron label (right) is added assurance of the best in polystyrene plastic.
Here is the most wanted, most trouble-free water closet you can offer. It’s the famous CASE Non-Overflow One-Piece* that hushes rushing water down to a WHISPERING FLUSH. Every time you install a CASE Non-Overflow One-Piece, you’ll build your profits and your reputation because it’s the finest water closet available.

Look at these sure-fire sales features. Non-overflow bowl; safeguarding antisyphon ballcock; healthful seat height; streamlined, up-to-the-minute design, time tested, with the whispering flush that’s already known throughout the industry.

FOR EXTRA PROFITS, SELL COLOR! REMEMBER, ONLY CASE MANUFACTURES COLORED FIXTURES WHICH CORRESPOND IN COLOR TO THE COLORED FIXTURES PRODUCED BY LEADING COMPLETE-LINE MANUFACTURERS, PLUS SPARKLING BLACK AND WHITE. ASK YOUR CASE WHOLESALER OR WRITE:

CASE MANUFACTURING CORPORATION
33 MAIN STREET, BUFFALO 3, NEW YORK
W. G. BEST HOMES CO.
PRESENTS THE FIRST HOME
ESPECIALLY DESIGNED FOR
THE FAMILIES OF
Mid-America

DISPLAYED AND
SALUTED
AT THE
MID AMERICA
JUBILEE
SEPTEMBER 1956
RIVERFRONT · ST. LOUIS

BEST

THE BEST COMMUNITIES OF TOMORROW ARE BUILT WITH BEST TODAY!
The hundreds of thousands of visitors to the great St. Louis Mid-America Jubilee in September are already back home—talking about the wonders they saw. You can bet they’re talking about the BEST MID-AMERICAN! At last they saw a home especially designed for Mid-American living by Mid-American families! The Best MID-AMERICAN can create the same sensation in your area—as your display home for 1957. This home has every feature that has built Best sales... it not only sells itself but with it you can sell any of the Best '57 homes.

Also, Best helps you choose, acquire and plan the land you want to develop... Best helps you arrange financing, interim or long-term... Best helps you advertise, publicize and promote Best Homes as the best buy in your area. This help extends to making out and following up VA and FHA applications... laying out subdivisions... supplying you with hand-out literature, newspaper ads, radio and TV commercials.

Get all the facts on the big Best year ahead! Send a letter or card, or telephone Effingham, Ill. 1600 collect.
Never underestimate the importance of a woman's kitchen! Best offers whatever she wants—up to completely built-in range, oven, freezer, refrigerator, washer, dryer, dishwasher, sink, cabinets and garbage disposal.

Mid-American families want modern bath facilities. Best Homes offer 1, 1½, 2 or 2½ baths... featuring vanity lavatory, glassed-in tiled shower, colored fixtures.
GIVE HOME BUYERS WHAT THEY WANT...
INCLUDING WHAT THEY WANT MOST...
THE PRICE THEY
CAN AFFORD!

While the Best MID-AMERICAN gives families luxuries they've always wanted, other Best models—such as the CLIPPER, above—are available for more cost-conscious customers... and still let you offer modern Best styling, three bedrooms, ample closet and storage space.

A Best dealer service representative is ready to give you details of the entire Best '57 line—including choices of roofs, exteriors and floor plans. Write or phone—at no obligation.

Another pleasantly-priced Best Home certain to be a 1957 success is the Model 9601B, shown above, with three bedrooms, storage room, carport and large living-dining area.

W. G. BEST HOMES CO. EFFINGHAM, ILL.
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 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 . . .

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
30 Church St.
New York 7, N. Y.
CIRCLE items below

... and mail this postcard today

A HANDY NEW PRODUCTS INFORMATION SERVICE

FREE INFORMATION - ON PRODUCTS and EQUIPMENT

<table>
<thead>
<tr>
<th>NEW PRODUCTS</th>
<th>10023</th>
<th>10038</th>
<th>10053</th>
</tr>
</thead>
<tbody>
<tr>
<td>10001</td>
<td>10024</td>
<td>10039</td>
<td>10054</td>
</tr>
<tr>
<td>10002</td>
<td>10025</td>
<td>10040</td>
<td>10055</td>
</tr>
<tr>
<td>10003</td>
<td>10026</td>
<td>10041</td>
<td>10056</td>
</tr>
<tr>
<td>10004</td>
<td>10027</td>
<td>10042</td>
<td>10057</td>
</tr>
<tr>
<td>10005</td>
<td>10028</td>
<td>10043</td>
<td>10058</td>
</tr>
<tr>
<td>10006</td>
<td>10029</td>
<td>10044</td>
<td>10059</td>
</tr>
<tr>
<td>10007</td>
<td>10030</td>
<td>10045</td>
<td>10060</td>
</tr>
<tr>
<td>10008</td>
<td>10031</td>
<td>10046</td>
<td>10061</td>
</tr>
<tr>
<td>10009</td>
<td>10032</td>
<td>10047</td>
<td>10062</td>
</tr>
<tr>
<td>10010</td>
<td>10033</td>
<td>10048</td>
<td>10063</td>
</tr>
<tr>
<td>10011</td>
<td>10034</td>
<td>10049</td>
<td>10064</td>
</tr>
<tr>
<td>10012</td>
<td>10035</td>
<td>10050</td>
<td>10065</td>
</tr>
<tr>
<td>10013</td>
<td>10036</td>
<td>10051</td>
<td>10066</td>
</tr>
<tr>
<td>10014</td>
<td>10037</td>
<td>10052</td>
<td>10067</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATALOGS</th>
<th>10068</th>
</tr>
</thead>
<tbody>
<tr>
<td>10069</td>
<td></td>
</tr>
<tr>
<td>10070</td>
<td></td>
</tr>
<tr>
<td>10071</td>
<td></td>
</tr>
<tr>
<td>10072</td>
<td></td>
</tr>
<tr>
<td>10073</td>
<td></td>
</tr>
<tr>
<td>10074</td>
<td></td>
</tr>
<tr>
<td>10075</td>
<td></td>
</tr>
<tr>
<td>10076</td>
<td></td>
</tr>
<tr>
<td>10077</td>
<td></td>
</tr>
<tr>
<td>10078</td>
<td></td>
</tr>
<tr>
<td>10079</td>
<td></td>
</tr>
<tr>
<td>10080</td>
<td></td>
</tr>
<tr>
<td>10081</td>
<td></td>
</tr>
<tr>
<td>10082</td>
<td></td>
</tr>
<tr>
<td>10083</td>
<td></td>
</tr>
</tbody>
</table>

MAIL THIS CARD TODAY — WE PAY THE POSTAGE

PLEASE PRINT NAME

NAME ................................

KIND OF BUSINESS

TITLE ............................

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

CITY .................................

ZONE .................................

STATE .................................

OCTOBER, 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 tools and equipment. This buying guide begins "up front" on page 116. Complete information on all products illustrated is yours for the asking by using the reply card on facing page.

TILTING ARBOR SAW offers big capacity at low cost according to its makers, Delta. The 10-inch circular saw is designed to provide builders with an economical, large-capacity, portable second saw. The bench model cuts stock up to 3 1/4", weighs slightly over 200 lbs., is operated by a one-horsepower motor. Can also be used with Delta's six-inch long bed jointer. Price: $149.50 less motor. From Delta Div., Rockwell Manufacturing Co., Attn. G. Sliga, Dept. AB, 400 N. Lexington Ave., Pittsburgh 8, Pa. (Circle No. 10019 on reply card, page 154).

Big job asset: the right new tools

SHAPERS FOR LEFT OR RIGHT now offered by Boice-Crane. Instead of reversing spindle rotation for working with unusual grains of wood, a left-hand shaper as well as a right-handed one is suggested. $199.50 ea. less motors. Boice-Crane Co., M. H. Buehrer, Dept. AB, 966 W. Central Ave., Toledo 8, Ohio. No. 10020 on page 154).

TAKE A GOOD LOOK AT THESE TOOLS ... THEY CAN SAVE

BAYONET SAW featuring orbital motion is recommended for economical and fast cutting of Formica, plastics, ferrous and non-ferrous metals, woods. Model 148’s blade teeth contact material only on the cutting stroke. Lists at $99.50. Porter-Cable, Attn. M. Nodar, Dept. AB, 1714 N. Salina St, Syracuse 8, N.Y. (No. 10022, page 154).

WET OR DRY cutting with this masonry saw designed for blade capacity up to 14½ in. Can be used on all kinds of masonry and ceramics. Has self-priming pump. Diamond lock and water system. Retail at $425 net with ½ hp motor. From Diamond Tool Associates, Attn. J. Martyr, Dept. AB, P.O. Box 85, Hawthorne, Calif. (Circle No. 10023 on page 154).


THE RIGHT “EARTH MOVERS” CAN SOLVE YOUR FOUNDATION

HYDRAULICALLY CONTROLLED BULLDOZER (No. 8U) now offered by Caterpillar for use with its D8 tractor. New bulldozer can be mounted on either torque converter or direct drive D8 tractors. It is operated by a No. 46 Hydraulic Control. Possibility of hydraulic or cable control gives usefulness to bulldozer which provides a rapid and efficient method for earth-moving work. List: $3,020 without hydraulic unit. From Caterpillar Tractor Co., Attn. Don Penwell, Dept. AB, Peoria, Ill (No. 10025, page 154).

BACKHOE DIGS A DEEP 14 FEET according to its makers. Shawnee Mfg. Co. Model No. D90, the “Chief”, actually reaches 15 ft. below the ground, has exceptional push-pull-power by synchronizing action of push cylinder at one end of the bucket boom with another pull cylinder midway between axis and bucket. Boom works in three 120° quadrants. Backhoe price: $3,100 to 3,300. Shawnee Manufacturing Co., Attn. E. W. Avery, Dept. AB, Topeka, Kans. (Circle No. 10026 on card, page 154).
YOU MAN HOURS, GIVE YOU A BETTER JOB

HEAVY PUMPING of mud, muck, sand easily handled by this diaphragm pump. Model 20DP3. With capacity of 5,000 gal. per hr., pump is easy to move, weighs only 120 lbs., will run six hours. full capacity, on one gallon of fuel. $395 fob Port Chester, N.Y. Homelite Co., Attn. L. Lyman, Dept. AB, P.O. Box 134, Port Chester, N.Y. (No. 10027 on reply card, page 154).


OSCILLATING SANDER is designed for course, medium or fine sanding. Also finishes, polishes and rubs metal, plastics, wood, composition materials. Model 280 is a "i" sander with powerful Universal motor giving 3,500 orbit per min. Price: $24.95 from Portable Electric Tools, Dept. AB, 320 W. 83rd. St., Chicago 20, Ill. (Circle No. 10029 on card, page 154).

OR LANDSCAPE PROBLEMS QUICKLY, ECONOMICALLY

180 DEGREE BOOM SWING is one of the features of the new TerraTrac backhoe. Designed for heavy-duty use with TerraTrac crawler tractors, the 180° swing is done with hydraulic foot pedal control, enabling operator to maneuver bucket and dipper stick while swinging. Unit digs 12½ ft. deep, has 18 ft. reach and 13 ft. dump height. Easily detached when using front-mounted loader or dozer. From American Tractor Corp., Dept. AB, Churubusco (Ft. Wayne) Ind. (Circle No. 10030 on page 154).

HYDRAULICALLY ACTUATED OUTRIGGERS are now built-in to this Hopto digger, Model 190 SPC-55. Operator can control each stabilizer individually for leveling machine on uneven terrain. Model has enclosed type boom and five-inch I.D. cylinders on hoist, crowd and bucket-actuating equipment. Digging depth of 11½ ft. and 190° swing; powered by Continental F226 engine. Badger Machine Co., Attn. Urban Shugart, Dept. AB, 1124 W. Fifth St., Winona, Minn. (Circle No. 10031 on page 154).
**Luxury touch: the right light**


**CLUSTER FIXTURE** called “Cornette Casual” by Moe has three basic fixture units (7” in diameter, 12” in length). Equipped with four ft. cords to permit maximum suspension of 42” from ceiling to bottom of unit. Introductory price: $29.95. Thomas Industries, Attn. R. Minett, Dept. AB, 410 S. Third St., Louisville, Ky. (No. 10033, page 154).


**NOISE REDUCTION PANELS** of translucent lighting for luminous ceilings are said to give maximum light diffusion and sound dissipation. Perforated isonic panels combined with non-perforated clear plastic iso-lyte panels. Both of vinyl plastic. From Iso Industries Inc., Dept. AB, 1654 Lincoln Blvd., Santa Monica, Calif. (No. 10035 on page 154).


**LOUVER-DIFFUSER** reducing lighting glare, called “CurtiCell.” Plastic diffuser has molded cellular louver bottom and flat top diffusing panel. Light passes through four or more thicknesses of plastic. Less than $1.00 per sq. ft. Curtis Lighting Inc., Dept. AB, 6135 W. 65th St., Chicago 38, Ill. (No. 10037, page 154).
Get better mortar—get better masonry!

A GOOD DESIGN deserves good materials. Atlas Mortar Cement helps assure better mortar because of its consistent high quality and because it has all the properties most desired by masons.

BUILDERS RELY on Atlas Mortar's smooth plasticity, its water retention and workability retention, and its uniform color. The air-entraining properties of Atlas Mortar Cement make joints more resistant to the destructive action of freezing-thawing weather.

BRICK, BLOCK AND STONE all look their best in a setting of Atlas Mortar. So for lasting good-looks on your next project, specify Atlas Mortar Cement. Complies with ASTM and Federal Specifications for masonry cement, which now include requirements for soundness (low expansion) in autoclave.

UNIVERSAL ATLAS CEMENT COMPANY
UNITED STATES STEEL CORPORATION SUBSIDIARY
100 PARK AVENUE, NEW YORK 17, N. Y.

FOR BETTER MORTAR • FOR BETTER MASONRY
Today's Way of Living Calls For Electric Heat

ELECTROMODE offers you a complete line of all-electric heaters designed for comfort in any room or every room throughout the house. Take the bathroom, for example. Many times it's the deciding factor. Electromode heaters add eye-catching beauty and a promise of comfort and convenience that prospective home buyers can't resist. These heaters are available in a choice of gleaming chrome or white enamel finish.

EASY - TO - INSTALL COMPLETE SAFETY

Only Electromode heaters are equipped with a sealed-in, CAST-ALUMINUM HEATING ELEMENT. Absolutely no glowing elements or exposed open coils. Tops in safety, efficiency and economy.

Included In Electromode Line Are:
- Wall and Portable Heaters
- Baseboard Heaters
- Radiant Cable Heat
- All With Automatic Room Temperature Control

"Leaders in Electric Heating Since 1929"

Mail The Coupon TODAY Get All The Facts

Electromode Division, Commercial Controls Corporation
Dept. AB-106, 45 Crouch St., Rochester 3, N. Y.
Please send me your FREE brochure on the complete Electromode line of electric heaters for homes.

GATES HAS THE SYSTEM FOR SAVINGS ON EVERY JOB!

Each GATES FORMING SYSTEM has been job-tested for speedier construction, increased efficiency, lower overall costs.

GATES 2x4 PANEL SYSTEM
A high wall forming method that minimizes waterlining and bracing. Creates lightweight, strong form.

GATES HORIZONTAL ROD HIGH WALL SYSTEM
Eliminates sheathing. Excluding ties, ONLY investment is 2x8 x 3/4" plywood sheet, rods, hinging hardware.

GATES SHEATHING SYSTEM
One of the most economical methods using Gates 2' x 4 Form Ties. No hardware required.

GATES VERTICAL ROD LOW WALL SYSTEM
ONLY hardware used are hinge straps and bolts.

GATES LOW WALL STRAP TIE SYSTEM
For faster, more efficient low wall forming. Gates Strap Tie has built-in spreader, pre-punched nail holes.

GATES FORM TIES
A type for EVERY concrete construction need!

Any problems? Ask our Engineering Division of Gates & Sons, Inc., about special forming problems on YOUR particular job.

GATES & SONS, INC.
DENVER • SPOKANE
Kenflex vinyl asbestos tile floors help clinch home sales!

Kenflex vinyl costs only $4.80 more per room!

Yes, an average 8' x 10' kitchen in KenFlex Standard Gauge (1/16") costs about $4.80 more than Asphalt Tile (Group C Color)...yet it helps you sell homes faster!

BECAUSE IT'S VINYL, it's moistureproof, greaseproof, easier to clean, long wearing. Colors are clearer, brighter. KenFlex added value helps convince homebuyers and sales are easier to close.

BECAUSE IT COMES IN 3 WANTED STYLES...
Corktone KenFlex, Carnival KenFlex, Marbleized KenFlex...you can feature KenFlex in every type of home, in every room. Ideal for slab-construction developments, perfect for kitchens, playrooms in your finest custom-builds, KenFlex Vinyl Asbestos Tile Floors give you new selling advantages that really pay dividends. Call your Kentile, Inc., Flooring Contractor and learn all the facts about KenFlex NOW!
Approximately 300 of these homes are heated with B&G Hydro-Flo Systems

Builders: Ehler and Wenborg, Prospect Heights, Illinois
Architect and Engineer: Jack Wenborg, Prospect Heights, Illinois
Heating Contractors: Reliable Heating Company, Park Ridge, Illinois
Plumbing Contractors: Corra Plumbing Company, Des Plaines, Illinois

HEATING
Radiant, draftless warmth, controlled to match the weather, produced at low cost.

COOLING
Separately engineered to more accurately answer the differing problems of heating and cooling.

SNOW MELTING
Water in pipes is the only practical method to convey the heat needed to keep sidewalks and drives clear of snow and ice.

Three hundred of these B&G Hydro-Flo heated homes were sold over one week-end.

Owner: The Winston Park Corporation, Oak Park, Illinois
Architects: Erwin Gerber and A. Pancani, Newark, New Jersey
Engineer: Edwin Hancock, Chicago, Illinois
Consulting Engineers: Erwin Gerber and A. Pancani, Newark, New Jersey
Heating Contractor: W. L. Harmony Co., Yonkers, New York
General Contractor: Macon Inc., Oak Park, Illinois

Saves Space
A typical B&G Hydro-Flo System installation. Built-in domestic water heater eliminates a separately fired unit.
More and more builders are installing

B & G Hydro-Flo SYSTEMS

...because only water offers
the sales appeal of
ALL FIVE!

Builders have discovered that the B&G Hydro-Flo System offers exclusive extra values which turn prospects into buyers. 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 exclusive features and flexibility, offer the builder a proved selling lift.

Money can’t buy finer, yet the advantages of the B&G Hydro-Flo System are within the cost range of the modest home. This system of circulated water offers not only the best in heating, but an option of such additional benefits as summer cooling and snow melting. These features can be built in originally or added as the owner’s budget permits.

The basic Hydro-Flo Forced Hot Water System endows a home with radiant, sunny warmth warm floors...draftless rooms. Automatic modulation of the heat supply keeps indoor temperature constantly at the comfort level—prevents wasteful overheating. Besides all this, a limitless supply of hot faucet water, heated at low cost by the same boiler that heats the house.

For further information, call your local B&G Representative or write to the factory.

YEAR 'ROUND HOT WATER
The same boiler that heats the house can be used to heat an ample supply of summer-winter hot water for kitchen, laundry and bath.

ZONING
Easy to divide the piping system into zones for better temperature control and fuel economy.

The B&G BOOSTER...key unit of the B&G Hydro-Flo System
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 quiet, dependable and long-lived operation...that's why over 2,000,000 units have been installed to date!

Builder features hot water radiant heat
This modest home is heated with a B&G Hydro-Flo System, using baseboard panels as the heat distributors. Note the sign—the builder is capitalizing on the strong sales appeal of hot water radiant heat.

Bell & Gossett Company
Dept. EN 11, Morton Grove, Illinois

October 1956 163
THERE'S GOLD IN THEM THAR YELLOW PAGES...

FOR BUILDERS.

Advertising in the Yellow Pages of telephone directories has panned out for hundreds of successful builders across the country.

That's because the "Look-in-the Yellow Pages" habit sends nine out of ten people to their telephone directories. And that habit is continually encouraged by advertising in magazines, newspapers and on television.

Make sure you are represented in the Yellow Pages under CONCRETE CONTRACTORS, GARAGE BUILDERS and other profitable headings. Remember, the more you tell, the more you sell.

Prospects Find You Fast In The Yellow Pages

Find out more about this effective sales tool. Get in touch with the Classified Directory Representative at your local telephone business office.

American Builder New products

TOOLS & EQUIPMENT

New scaffold winch has safety roller guide

New all-metal safety winch complete with stirrup is marketed by Bil-Jax. Available in two sizes: with single line capacities of 500 and 1,000 lbs., the winch has a roller guide on top which prevents wear on the steel cable. Stirrup accommodates all metal swing stages up to width of 30". Heavy duty type furnished with 100 ft. of 1/4" cable; medium duty type with 75 ft. of 1/8" cable. Bil-Jax Inc. Attn. W. M. Wyse, Dept. AB, Box 38, Archbold, Ohio.

Circle No. 10038 on reply card, p. 154

Plastic nailing machine does heavy duty work

Plastic, heavy duty nailing machine capable of driving 1 1/2 in., 16 gauge staples into hardest woods is now on the market. Model B Spotnailer is lightweight, magazine-fed machine designed for longer, heavier fastening such as roofing and sidewall sheathing, roof trusses, hardwood panelling, etc. Write for complete information from Spotnails Inc., Dept. AB, 1527 Lyons St., Evanston, Ill.

Circle No. 10039 on reply card, p. 154
For top profits and top turnover

you can’t top BERMICO

Thousands of building materials wholesalers, dealers and builders themselves have discovered that Bermico boosts profits because it:

- **Comes in 8-foot lengths**
- **Is light in weight—\(\frac{3}{4}\) less**
- **Is easy handling on truck or job**
- **Is root-proof and corrosion-proof**

Truly the modern pipe for modern living, Bermico Pipe for house-to-sewer or septic tank, and Bermiseptic Perforated Pipe for septic tank disposal and drainage systems, are strong, impact-resistant, and stand up under temperature changes and soil settlement.

Made of tough cellulose fibre impregnated with pitch, Bermico Pipe comes in all sizes from 2” to 6” diameter. And only Bermico has a line of matching Tees, Wyes and Bends of the same material.

If you’re looking for bigger profits, faster turnover, look into Bermico. It's widely advertised in national magazines. It's widely preferred by quality-minded home owners. For more information on modern, profitable Bermico and Bermiseptic, write Dept. HB-10, Brown Company, 150 Causeway Street, Boston 14, Mass. (Mills: Berlin, Gorham, North Stratford, N. H.; Corvallis, Ore.)
Hard to believe, but true! For all the siding on this home, stain-resistant Maze Stormguard nails would have cost only about $1.00 more than ordinary tumbler process galvanized nails. A trifling amount to insure lasting nail satisfaction.

Rightfully upset, the owner of this new home will want to know why his expensive house is marred by ugly nail streaks. He will call his contractor and dealer for an explanation — to find that his troubles are caused by their careless selection of nails. The result is not only damage to the siding, but also to the reputations of the contractor and supplier.

Ordinary nails, which can start an endless chain of costly repair and maintenance problems, are as old-fashioned as the Model T Ford. Maze Stormguards are the modern, rust-resistant fastener for all exterior applications. Here’s why:

RUST RESISTANT — In a zinc coated nail, FHA requires "hot-dipped" — Stormguard nails are hot dipped twice in molten zinc to make them rust resistant. They require no counter-sinking or puttying.

DRIVE WELL, HOLD TIGHT — Sturdy steel core drives well without undue bending or breaking and reduces wastage; specially threaded shanks hold anchor-tight.

ECONOMICAL — Maze Stormguards cost ½ less than non-ferrous nails — only slightly more than ordinary galvanized nails.

PACKAGED — To provide for easy handling on any type job, Stormguards are clearly labeled and packed in both 5-lb and 50-lb cartons.

Ask for them by name — Maze Stormguards in the distinctive striped cartons.

WRITE FOR FREE HANDBOOK

Tells you how and where to use these new rust-resistant fasteners.

Also a complete line of other Maze nails for: flooring, underlayment, plywood, gypsum wallboard, metal roofing, pallets, etc.

W. H. MAZE COMPANY
PERU 3, ILLINOIS

American Builder
New products

TOOLS & EQUIPMENT

Fork truck can serve as mount for drill

The Clark 1,000-pound fork truck is described by its makers as capable of many different tasks. To illustrate, the fork truck shown above was used as a solid but mobile support for a pneumatic drill. In a job involving the moving of a 4,000 ton building, the Clark fork truck gave fast elevation for drilling grid holes and easy moving of rig along foundation lines. Information from Clark Equipment Co., Attn. Glenn Christians, Dept. AB, Industrial Truck Div., Battle Creek, Mich.

Circle No. 10040 on reply card, p. 154

Gun tackers take tough use without losing power

Arrow Fastener is now offering a gun tacker kit T-50 which includes its improved gun tacker. Heavy-duty valve wire used in car manufacture has been added to the tacker to insure spring mechanism in the machine. Wire also gives better penetration and holding power for staples. New carbon steel spring for staple pusher lock mechanism insures a firm lock hold. Improvements said to enable tacker to take tough use. Kit: $15.50. Arrow Fastener Co., Attn. M. Abrams, Dept. AB, 1 Junius St., Brooklyn, N. Y.

Circle No. 10041 on reply card, p. 154
With Admiral appliances you get more for your money. Which means you cut your costs, yet offer more to customers. You profit all around—in money, in friends, in boosters. But don’t take our word for Admiral value—write for Admiral prices and deals today.

Get Admiral Cost Cutting Details
MAIL COUPON TODAY...
Your Owner Deserves the Strongest SHEATHING!

Give him Maximum Strength, plus high insulation factors with...

ARKANSAS SOFT PINE Certified SHEATHING

Arkansas Soft Pine sheathing supplies superior material for three vitally important structural locations:

1) subfloors, (2) wall sheathing, (3) roof decking.

In all three, Arkansas Soft Pine sheathing, dry and correctly seasoned, with its great nail-holding power, provides maximum tensile strength and stiffness to the structure. It is tongue-and-groove material nailed on diagonally for extra bracing, and encloses the entire frame with a completely integrated “skin”. It is easily stronger than synthetic, blotter-like composition board sheathing. It insulates effectively, being immune to heat, cold and dampness. Seasoned to specified moisture content in automatically controlled dry kilns, Arkansas Soft Pine sheathing of standard thickness keeps out as much heat or cold as 5” of common brick, 9” of face brick, 12” of stone, and 13½” of concrete.

As subflooring, it is free from shrinking or swelling, provides a stabilized base over which the finish floor stays uniformly smooth. By the same token, it stays put as roof decking under all types of outside covering.

Certified by official SPIB grade-mark, as required for FHA and VA financing, and identified by registered trade-mark, Arkansas Soft Pine sheathing supplies every home builder the ultimate in enduring value.

Arkansas Soft Pine Certified sheathing comes in 4”, 6” and 8” widths, center-and-end matched, or plain end. It is sold by local lumber dealers east of the Rockies. For data, illustrated grades and specifications, send for FREE Handbook.

American Builder New products

TOOLS & EQUIPMENT

Hand-powered stud driver easy to operate

Robot, a new hand-powered stud and nail driver, is described as a safe and economical tool for driving studs into cement, brick or soft iron. No cartridge or spring parts in tool, just a cylinder or housing with base seating plate, two jaws and two springs. Uses three interchangeable driving pins for ½” studs, 5/8” studs and nails. Excellent holding power in all materials. Scientifically designed tool for building contractors, roofers, electricians, maintenance, plumbers and many other building uses.

Robot, complete with two driving pins: $18.75. Information from John K. Gieling, Dept. AB, 300 Fourth Ave., New York 10, N.Y.

Circle No. 10042 on reply card, p. 154

Surform is a newly-developed tool for forming and finishing all types of wood surfaces. Said to work ten times faster than rasps or files on wood. Surform has Sheffield steel cutting unit with more than 450 separate blades. Each cutting edge has 35° angle and semi-circular throat through which chips pass. Available in two models: one used like hand plane, the other like a rasp. Priced at $3.69 and $2.69 respectively. From Stanley Tools, Attn. F. Benfield, Dept. AB, 111 Elm St., New Britain, Conn.

Circle No. 10043 on reply card, p. 154

Arkansas Soft Pine Bureau
955 Boyle Building, Little Rock, Arkansas

168 AMERICAN BUILDER
Authorities say:

"The BEST insulation is the MOST insulation!"

—and Johns-Manville SPINTEX® meets their 6-4-2 specification*!

New 6" Thick Spintex Batts provide maximum insulation for ceilings. A "must" for air-conditioned and electrically heated houses.

2" Spintex Batts or Blankets recommended over unexcavated crawl spaces. J-M also offers blankets in other thicknesses.

*In the Austin Village (Texas) air-conditioning tests, the importance of thickness of insulation was demonstrated by the fact that houses producing best economy records had 6" of mineral wool in ceilings, 4" in walls, 2" in exposed floor areas.

PLUS

Aluminum-wrapped Spintex Blankets provide "plus" summer benefits. Available in 3" and 2" thicknesses.

Ful-Thik Spintex Batts the only batts which completely fill the depth of 2" x 4" stud spaces (actually 3 5/8").

New, improved Johns-Manville Spintex is the only type of home insulation that effectively stops heat all three ways—by conduction, convection and radiation!

Learn how you can cash in on this important new development in home insulation! Write Johns-Manville, Box 111, New York 16, N.Y.
NOW...A REALLY ADVANCED LOW-COST LOCK!
WITH GLAMOROUS NEW STYLING

the all-new beautiful MAYFAIR design—richly custom-styled with one-piece seamless knob.

GUARANTEED STRONGER, SMOOTHER ACTION

...THE IMPROVED Guardian
Here’s the low-cost residential lock that’s years ahead — both in styling and performance! The improved Guardian now offers a choice of 2 handsome lockset designs, 7 sparkling new rose designs, a smart new auxiliary handle — plus design improvements in practically every detail of operation. The improved Guardian is 4 times stronger — actually outlasts higher-priced locks in breakdown tests! Put this beauty on display. Let your customers get the feel of its smooth, solid action. It’s available in the 5 most-wanted functions—today's leading low-cost lock.

P & F CORBIN Division
The American Hardware Corporation
New Britain, Connecticut
Reduce costs with CreZen plywood siding...here's how!

You save money all along the line when you use CreZen plywood siding.

SAVE ON MATERIAL. You need fewer square feet per job and there's practically no trim loss. CreZen siding has a waste factor from trim loss of only 1% compared with the accepted waste figure of 20%. And, FHA accepts CreZen siding with or without sheathing depending on local conditions.

SAVE ON LABOR. You run fewer courses with CreZen because it's wider — 12", 16" and 24". (Most wood siding comes in 8" or 10" widths). CreZen also butts precisely, nails easily without drilling...requires fewer man-hours.

CreZen siding is available through these leading plywood manufacturers and their distributors. Write for further information.


SAVE ON PAINTING. The "perma-paintable" CreZen surface has a special affinity for paint that saves paint and painting time. Two coats do the job of three. CreZen siding holds paint years longer than non-overlaid wood. And CreZen can't check or blister.

Try CreZen on your next home or commercial construction job and see for yourself.

CREZON PLYWOOD AVAILABLE IN PANEL SIDING, TOO. Available in all standard thicknesses and widths. Needs no special tools or construction techniques.

CREZON IDEAL FOR WEATHERPROOF GABLE ENDS, SOFFITS. U. S. Steel Homes use CreZen plywood for low-cost, weather-proof protection.

The permanent protective overlay for plywood.

© CZ-321-A

A PRODUCT OF CROWN ZELLERBACH - San Francisco 19, California

Pin-grip masonry anchors speed fastening time

For faster, more convenient fastening, Star Expansion suggests the Pin-Grip, a one-piece masonry anchor. By driving pin protruding from head flush with the head, a permanent, tight fastening job results. Pin-grip is inserted into masonry hole, then stainless steel pin driven in, nestled in bored aluminum body of Pin-Grip, it forces out expanding prongs which grip wall within the masonry hole. Wide range of sizes available. Star Expansion, Dept. AB, 142 Liberty St., New York 6, N. Y.

Circle No. 10044 on reply card, p. 154

Lock assembly permits many different designs

The new cross-bore "SentryLock" is engineered to provide a wide variety of custom designs for the builder. The lock's basic components—knobs, roses, latches and aligning tubes—can be separately stocked and assembled to meet individual requirements. About 75 set designs. Prices from $4.80 to $19.40 depending upon design. From Sargent & Co., Attn. Samuel Wilder, Dept. AB, New Haven, Conn.

Circle No. 10045 on reply card, p. 154

A PRODUCT OF CROWN ZELLERBACH - San Francisco 19, California

© CZ-321-A

AMERICAN BUILDER
Proved by 529,879 bangs
This pendulum banged a 35-pound weight against a Curtis New Londoner hollow-core door 38 times per minute. After 529,879 bangs, door was good as new.

Proved in chamber of horrors
Subjected to 166 cycles of temperatures ranging from 110° to 0° F., a Curtis New Londoner door showed no peeling of face panels or changes in dimensional stability.

Proved by 642,934 slams
Slammed 72 times per minute—the equivalent of a lifetime of slamming—the Curtis New Londoner door came through this tough test unscarred—unmarred.

Proved in pea soup fog
After undergoing more than 3 months of humidity changes from highs of 90%-95% to lows of 20%-30%, the New Londoner doors were still flat and aligned.

Complete data yours on request!

Curtis Companies Service Bureau
200 Curtis Building, Clinton, Iowa

Please send information on Curtis New Londoner Doors.

Name: ........................................
Address: ....................................
City: ........................................... State: ................................
alike as peas in a pod...

HANG 1000 USF METAL DOORS AND FRAMES
they’re all alike!

USF Metal Doors and Frames are engineered to the most exacting standards in the industry and are produced on precision tools and fixtures to absolute uniformity. Hang one or a thousand—they all go in the same easy way. You benefit from production-line economies plus a profitable saving in costly manhours on your job site.

fit each other
fit modern building materials
fit finest surroundings

write: for complete bulletin of details, sizes and fire ratings.

USF UNITED STEEL FABRICATORS, INC.
WOOSTER, OHIO

AMERICA'S FIRST MANUFACTURERS OF STANDARDIZED METAL DOORS AND FRAMES
This Snow-Removal Team Doesn’t Wait for Winter!

FORD TRACTOR-LOADER works every day of the year

With a Ford Tractor and new “Step-On” Loader, you have equipment that can handle many kinds of work, all year around. It’s an excellent unit for fast, efficient removal of snow. It is also excellent for maintaining roads and streets, parks and roadsides.

The advanced design of the new Ford “Step-On” Loader allows fast, easy loading, lifting and dumping. Ford Tractors give you greater ease of handling... extra power for jobs like loading, dozing and sweeping. They can be equipped to handle a wide range of other jobs, too.

For an investment that will keep paying dividends every day in the year, invest in a Ford Tractor and “Step-On” Loader. See your Ford Tractor and Equipment Dealer right away!

CLEAR LARGE AREAS QUICKLY—Ford Tractor with blade provides ample power to handle heaviest snowfalls. Attach broom to sweep streets and parking areas as the snow falls.

LOAD A YARD A MINUTE—Ford’s new “Step-On” Loader provides capacity for a wide range of jobs. Compare it with any loader in its class for ease of handling and safety.
One reason 85 per cent of all home owners prefer oak floors, is oak's unique adaptability to favored decorative schemes. This versatility is strikingly evident in modern motifs which employ liberal expanses of bare floors set off by accent rugs. For these exposed surfaces, Royal Oak Flooring provides the paramount essential -- original fine texture, retained and protected by skilful seasoning that assures complete affinity for penetrating finishes so important in bringing out the full beauty, flower and dignity of oak.

With these qualities matched by refinements in design and manufacture that assure mirror smoothness, Royal Oak Flooring affords you dependable, premium quality for every specification. Endorsed by Crossett's registered Trade-Mark and clearly labeled for grade, Royal Oak Flooring supplies you with the best for the best. For further information, address:

CROSSETT LUMBER COMPANY
A Division of The Crossett Company
CROSSETT, ARKANSAS

THERMO-RITE MFG. CO., Dept. AB-1056 Akron 9, Ohio
CANADIAN PLANT—134 HARTZEL ST., ST. CATHARINES, ONT.

MIDGET LOUVER COMPANY
6 WALL STREET • NORWALK, CONNECTICUT,
TOOLS & EQUIPMENT

Flushing gun cleans all plumbing up to 100 feet

An all-purpose flushing gun combining water impact and air pressure is offered now by the Miller Sewer Rod Co. The gun, which cleans all lines up to 100 ft., is easy to operate and will clean clogged water closets, sinks and floor drains of paper, grease, rags, sand and other debris. May be used on any ½" to six-inch waste pipe. Only one or two shots from gun necessary to melt obstacles away. Offered on 30-day free trial basis. Information from Miller Sewer Rod Company, Dept. AB, 4642 N. Central Ave., Chicago 30, Ill.

Circle No. 10046 on reply card, p. 154

More on tools and equipment . . . see page 116

WINTER BUILDING

Compound melts ice and snow for workmen

Melt, an ice and snow melting compound that can be easily handled and spread without danger of caking or solidifying within its container, is now being marketed by Chem Industrial. Reported to have ten times greater thawing capacity than flake calcium chloride, Melt is particularly active at low temperatures, dissolves ice and snow without leaving a residue or harming asphalt or concrete. Prices: $3.75 for 25 lb. pail; $11.50 for 100 lb. drum. From Chem Industrial Co., Attn. Edward White, Dept. AB, 3784 Ridge Rd., Brooklyn 9, Ohio.

Circle No. 10047 on reply card, p. 154

OCTOBER 1956

4 heavy duty builders saws

6" to 8" . . . . . . $59.95 to $79.95

Every one of these fine heavy duty saws has ball bearings throughout, the new "Free-Start" Guard for maximum blade coverage and the exclusive "Motor-Saver" Drive that protects the Stanley-made motor against shock of impact against foreign objects like nails.

Perfect performance at fair prices

6" H65 cuts 2" at 90°, 1½" at 45° . . . . only $59.95
6½" H68 cuts 2½" at 90°, 1½" at 45° . . . . only $64.95
7" H70 cuts 2¾" at 90°, 1¾" at 45° . . . . only $69.95
8" H85 cuts 2½" at 90°, 2½" at 45° . . . . only $79.95

And a kit for every saw

Kits include saw, extra blade, ripping gauge, lubricant and wrenches in sturdy metal carrying case with special compartment for storing accessories.

H665 with 6" H65 . . . . . . . . . . . . only $75.95
H668 with 6½" H68 . . . . . . . . . . . . only $80.95
H770 with 7" H70 . . . . . . . . . . . . only $85.95
H885 with 8" H85 . . . . . . . . . . . . only $97.50

See Stanley builders saws and other models at the Stanley Electric Tool distributor near you. For complete power tool Catalog No. 56, write Stanley Electric Tools, 100 Myrtle Street, New Britain, Connecticut.
Greatest new tool in years for maintenance and production

a high quality, low cost

REVERSIBLE
SPEED REDUCER

Fits all portable drills... reduces speed, increases torque seven times. Ask your distributors to show you the...

**Supreme Versamatic**

PROFESSIONAL MODEL
No. 4000-P with Yankee-Type Bit Holder

COMPLETE 14-PIECE SET... ONLY $24.95

Engineered and manufactured by the makers of

**Supreme Chucks**

The line that's UP FRONT on America's leading power tools

**WINTER BUILDING**

Calcium chloride is recommended for concreting

Use of calcium chloride to obtain higher strengths and satisfactory structural strengths within a short period of time is recommended as a standard procedure in cold weather construction work. Workmen in photo above are finishing concrete with outside temperatures at about 50°F. Columbia-Southern suggests use of calcium chloride to make up for lag in strength gain when temperatures drop below 70°F. More information may be obtained by writing Columbia-Southern Chemical Corp., Attn. T. D. Williams, Dept. AB, One Gateway Center, Pittsburgh 22, Pa.

Circle No. 10048 on reply card, p. 154

Portable heater can go up and down scaffolds

Master's B-100 portable heater weighs only 78 lbs., is light and small enough to use on scaffolds as shown in the picture above. Can also be carried upstairs, through doors and almost any place a man can go. Heater puts out 100,000 btus of circulated, forced air heat every hour, burns low cost kerosene or fuel oil. One B-100 will heat an area equal to the average five-room house through the coldest days. More information from Master Vibrator Co., Dept. AB, Stanley Ave., Dayton 1, Ohio.

Circle No. 10049 on reply card, p. 154
Mrs. A. Oliver Ward, Paddock Hills, St. Louis, is another example of home buyers everywhere who fall in love with the “house-selling” American Kitchen.

“When we walked into the kitchen of the Paddock Hills house,” Mrs. Ward reports she said, “Oh, Ollie, this is it. This kitchen has everything I’ve ever wanted.”

Like Mrs. Ward, new home buyers across the nation choose the house with American Kitchens “Pioneer”—the stunning new combination of natural birch and antique copper on steel frame. They go for American Kitchens wonderful work-savers... the Roto-Tray Dishwasher, Built-In Ovens and Set-In Ranges.

Mayer, Raisher, Mayer, well known developers of Paddock Hills northwest of St. Louis, say “American Kitchens are a vital-factor in selling our houses.”

If you haven’t already discovered the “house-selling” power of the “Pioneer” wood, copper and steel kitchen and other American Kitchens products, mail the coupon below. Let us show you how American Kitchens will sell your homes faster.

American Kitchens Division, Dept. AB-106
Connersville, Indiana

I’d like to have “no obligation” quotation on my next kitchens.
Please send your new Architects’ and Builders’ file.

NAME

ADDRESS

CITY ZONE STATE
Concrete pouring guarded by winter heaters

Concrete heaters which will fit any concrete mixer regardless of size are offered by Littleford. Described as giving all necessary protection for perfect concrete pouring in winter weather, the units can be attached to mixer by an attachment which requires no drilling of holes or threading of pipe. Attachment holds heat deflector into mouth of drum at any desired angle. Concrete heaters with torch-type burners can be used on mixers from 3 to 28 cu. ft. From Littleford Bros., Attn. Wm. Bramlage, Dept. AB, 408 E. Pearl St., Cincinnati 2, Ohio.

Material dryer easily transported to job

A mobile, fast and economical aggregate and material dryer, "Flash Flame" is offered to builders, painting and concrete contractors by Tarrant Mfg. Co. Light enough to be transported in a pick-up truck, the dryer is mounted on pneumatic tired wheels for easily handling, is about 14 ft. long by 4 ft. 3 in. high. Dryer is quick to operate, takes less than ten minutes to turn out dry materials. Prices from $800 to $1,340. From Tarrant Manufacturing Co., Attn. V. W. Conlee, Dept. AB, Saratoga Springs, N. Y.

SPECIFY FIR PLYWOOD FOR SOFFITS, GABLE ENDS, PATIO FENCING and EXTERIOR TRIM. Choose standard panels for smooth, flat, unbroken effect...Texture One-Eleven® ("grooved") plywood for striking pattern and texture. Either kind simplifies cutting and fitting...creates handsome contrast with masonry or other materials. Plywood accents offer ideal solution for quick and easy exterior "face lifting" on remodeling jobs, too.
meet EVERY window need
Perfectly with
EV-RI-WAY
All-Purpose, Weatherstripped
WINDOW UNITS

Unlimited combinations are available in EV-RI-WAY Units—AWNING • HOPPER • STACKED or CASEMENT—from singles to commanding WALL GROUPINGS.

Sound design combines with painstaking craftsmanship in producing these super value PONDEROSA PINE EV-RI-WAY Units—all preservative treated with water repellent.

Write Us TODAY—for descriptive brochure that gives you sizes, arrangements and details.

Since 1884

EV-RI-WAY All-Purpose Window Units are in the famous Roach & Musser quality tradition—clean, sharp, sound and attractive.

See your Dealer or Write for Literature

ROACH & MUSSER CO.
8803 Grandview
Muscatine, Iowa

“Berger 12” Dumpy Level pays for itself on just 3 houses!”
says Richard A. Krueger,
Krueger Bros., Needham, Mass.

“Here’s how: we figure a clear saving of $60 per house on labor, gravel and cement by getting ‘on-the-button’ accuracy in measuring excavation depths, establishing foundation heights and grades for drainage and streets. Focusing our Berger Dumpy Level is quick and easy; optics are clear as crystal—which cuts time in setting up batter boards, leveling off first floors within 1/16th inch and installing the first course of siding.”

The Berger Dumpy Level is designed to fit the builder’s needs—priced to fit his budget. It is constructed of bronze, brass, steel and iron castings and forgings, which have been adapted from the most precise engineers’ instruments. Centers are same type construction and material as used on the most expensive Berger levels. Horizontal circle is enclosed to assure dust protection. Leveling screws are of nickel silver and are dust protected. Like all Bergers, it takes the bumps in the field and stays on the job without time lost for repair.

Why the Berger Dumpy Level is your best buy... Compare!

CAST BRONZE AND FORGED BRASS CONSTRUCTION

TELESCOPE: One piece hard bronze, 12” internal focusing; erect image, 24-power; 36mm. diameter objective lens.

OPTICS: Coated—brilliant clear image.

LEVELING HEAD FORGED STEEL AND IRON WITH PRECISION FITTED AND MATCHED TAPERS.

LEVELING BASE: 4 screws; nickel silver leveling screws with cold and heat resistant heads.

HORIZONTAL CIRCLE: With vernier reading to 5 minutes. Fully protected guard.

SHIFTING CENTER: Fully dust protected.

SPIRAL FOCUSING EYEPIECE: Leveling screws, tangent screws and clamp screws.

DUST PROTECTED: Mahogany carrying case.

CASE: Straight grained, kiln dried white ash.

TRIPOD: Instruction manual for layout and instrument use.

Instrument, complete with mahogany carrying case, tripod, plumb bob, sunshade... $174.50.*

Write for literature on the Berger Dumpy Level, our Berger Convertible, Service Transit-Level and Duplex Level. And ask about our Engineers’ Transits and Levels.


BERGER
ENGINEERING AND SURVEYING INSTRUMENTS... SINCE 1871

THE BEST INSIGHT IS
SALES SECRET: TELL BUYERS IT'S

Tight for Life

Ruberoid Color Grained Siding is autoclaved . . . it won't shrink ever! High pressure, high temperature steam curing takes shrinkage out — at the factory! Result: No unsightly gaps. No open joints for weather to penetrate. It's an extra siding sales feature your new homes get with Color Grained Siding. Sell their long-lasting beauty, too . . . tell buyers about the exclusive Duroc® finish that seals in beauty, seals out dirt.

RUBEROID
COLOR GRAINED Autoclaved SIDING

ASPHALT AND ASBESTOS BUILDING MATERIALS
For more information, see your local Ruberoid building materials dealer.
With home buyer's increasing demands for major features, like ample storage space, and the design and cost problems of supplying them... architects and builders are doing some careful figuring.

Specifically, let's consider more, easy-to-use storage space, and how to create it with GLIDE-ALL Sliding Doors... easily, quickly and economically:

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... 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... and in special sizes for unusual jobs.

That's why we say: "you can build and sell more house at lower cost with GLIDE-ALL Sliding Doors." See Sweets or write for complete details, specifications and prices.
HAVE YOU SEEN

STARLITE

It's the new brighter-than-bright finish for stainless steel sink bowls exclusive with ELKAY. And what's more, it carries a new, lower than ever price. Here, too, is another arresting ELKAY consumer ad working for you.

Centerpiece Of Beauty
ads g.am ur to your kitchen

STAINLESS STEEL SINKS

All eyes turn immediately to the lustrous beauty of your ELKAY Lustertone Sink... you are deemed a hostess of charm as well as a practical homemaker. The bright cleanliness of this stainless steel sink tells all that your home is spic and span... lets you enjoy the luxury of living without tiresome scrubbing and bleaching. You can have all the benefits of a Lustertone sink for no more than the cost of an ordinary sink. And, because it's guaranteed for life, you have lifetime loveliness that softly reflects any change in kitchen color combinations. Write for literature and prices today!

ELKAY MANUFACTURING COMPANY
1874 SOUTH 54TH AVENUE, CHICAGO 50, ILLINOIS

The World's Oldest and Largest Manufacturer of Stainless Steel Sinks... Since 1920

American Builder New products

WINTER BUILDING

Polyethylene film aids in winter construction

Lightweight, pliable Visqueen polyethylene film helps take the sting out of winter building when used for temporary closures or for protecting on-the-job materials. translucent film does not cut out light and remains pliable even in coldest weather. Its light weight (20 lbs. per 1000 sq. ft.) allows its use easily and inexpensively. Price: 2 mil thickness, 3/4 cents per sq. ft.; 4 mil thickness, 1 1/2 cents per sq. ft. Visking Corp., Attn. J. F. Bernard, Dept. AB, P. O. Box 1410, Terre Haute, Ind.

Circle No. 10052 on reply card, p. 154

Portable heaters give recirculating heat

Recirculating heaters, the "Silent Glow" portables, are designed to furnish and maintain even temperatures throughout a room or area. Heaters can give from 120,000 btus to 300,000 btus of recirculating heat depending upon model. Three models vary in length from 36" to 44"; in height from 27" to 39" and in weight from 98 lbs. to 195 lbs. Prices from $198 to $330. From Silent Glow Oil Burner Corp., Attn. J. A. Woodburn, Dept. AB, 850 Windsor St., Hartford 1, Conn.

Circle No. 10053 on reply card, p. 154

AMERICAN BUILDER
Built-in refrigerator and freezer needs no supports

A new refrigerator-freezer unit has been introduced by Preway. Of one-piece construction, the unit requires no supports or braces since it has a supporting frame which automatically assures proper height and spacing for ventilation. Combination also features "shell type" condenser which eliminates danger of condensation and dripping water. Total capacity for both the freezer and refrigerator: nearly 13 cu. ft. Price: $797.95. From Preway Inc., Attn. H. Shea, Dept. AB, 1430 Second St. North, Wisconsin Rapids, Wisc.

Pacing the Cincinnati market for better homes, Raeburn Construction Co. specializes in low-slung, modern designs — low roofed and attic-less. Quality built throughout, Raeburn homes are insulated with Borg-Warner's Alfol Reflective Insulation.

"For the type of homes we build," writes owner Stuart L. Faber, "we wanted the best in winter insulation, along with a super-efficient summer insulation that cools quickly in the evening, won't give off heat all night. Reflective insulation was the only logical choice."

Efficiency the prime factor

"And in 10 years experience with various reflective makes, we have found that Alfol gives the neatest, most effective job... in the least man-hours of installation!"

Naturally, Mr. Faber also welcomes the initial savings provided by Alfol, and the handling ease made possible by its remarkable compactness. But the primary factor was efficiency: "Our Alfol choice has already been justified," writes Mr. Faber, "by the comments of our new owners."

Patented, the Alfol blanket consists of multiple aluminum foil sheets that space themselves automatically on application, reflect 95% of all radiant heat. A tough duplex and Kraft backing is built in to offer full application support, provide a positive vapor barrier.

Clean and non-irritating, Alfol takes the "itch" out of insulation. And its unique compactness (500 sq. ft. to the roll) minimizes handling and storage expense. That's why Alfol usually costs less. Your dollar buys less labor, less "overhead"... more and better insulation.


"Alfol gives the most effective job... in the least man-hours of installation!"
...and a Terne Roof Will Sell Your Homes!

Normally, your prospective home buyers may not ask about the roof. But a Terne roof has a distinctive quality those buyers can see—and a feature you can sell.

They will be impressed to know that a Terne roof will last as long as the house stands...a Terne roof is fireproof, weather-tight, windproof and can be painted any color, anytime, to harmonize with the house exterior. And if the house is air conditioned, a light-colored Terne roof will reflect more of the sun's heat than any other type of roof.

The beauty and serviceability of a Follansbee Terne roof is that added attraction that will help you sell your homes quickly.

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.

Follansbee Terne roofs are sold through roofing and sheet metal contractors everywhere.

FOLLANSBEE STEEL CORPORATION
FOLLANSBEE, WEST VIRGINIA
Terne Roofing * Cold Rolled Strip * Polished Blue Sheets and Coils
Sales Offices in Principal Cities

American Builder New products

SPECIALTIES

Anodized threshold to match brass hardware
To match brass hardware, a new extruded aluminum threshold with an anodized finish is now offered. The anodized Albras Thresholds will not tarnish or need polishing since the anodizing puts a coating on the surface of the aluminum almost as hard as steel. AP thresholds come in all standard lengths. List Prices: AP 3/4" at $1.95 per ft.; AP-118 at $2.25 per ft.; AP-156 at 95 cents per ft. From Macklanburg-Duncan Co., Dept. AB, Box 1197, Oklahoma City 1, Okla.

Polyethylene film comes packaged in rolls
Polyethylene film packaged in rolls containing 750 sq. ft. and 36 in. wide is now being marketed by E. L. Bruce. The 36 in. width is recommended as most practical for use in surface dampproofing concrete floor slabs. The strong, transparent film is available in two weights: two-mil film, Bruce Vapochek, for a permanent moisture barrier for concrete slab subfloors; and four-mil film, Bruce Vapochek Ground Cover, heavy duty film that prevents moisture from attacking joist subfloors and finish floors. From E. L. Bruce Co., Dept. AB, Memphis, Tenn.

Circle No. 10056 on reply card, p. 154
Circle No. 10057 on reply card, p. 154
Nailable steel stud partition system has many uses

Permalok, a new system for the low-cost erection of non-bearing partitions, is now being marketed by Penn Metal. System consists of nailable steel studs, track and bridging. Metal lath, gypsum lath or any type of panel can be secured to Permalok studs as simply as to wooden ones. Nailing device bites nail or screw with a grip designed to prevent any possibility of loosening. Scrubs come in two sizes: 2½" and 3½". Priced from $175 to $230 per 1000 lineal feet. Penn Metal Co., Attn. M. K. Brown, Dept. AB, 40 Central St., Boston 9, Mass.

Circle No. 10058 on reply card, p. 154

Tile clip designed to space and cover drain tile joints

A new idea for covering the joints of drain pipe is presented by Boco Industries. Boco Tile Clip will both space and cover the joints of drain pipe and may be used instead of tar paper and other usual methods. Recommended for septic tank joint fields, footing drains and farm drains, the clip is of polyethylene, molded to fit snugly against the outer tile surface. Flange on top serves as handle and guide to alignment while two lugs inside fit between adjoining tile and take guess work out of spacing. Lugs also make it impossible for clip to fall out of position during backfill operation. Prices: under 5,000 pieces, $60 per thousand; over 5,000 pieces, $45 per thousand. Information from Boco Industries Inc., Attn. Robert T. Coleman, Dept. AB, 19424 W. Eight Mile Rd., Detroit 19, Mich.

Circle No. 10059 on reply card, p. 154

Webster defines: tension as strain, intensity of striving

Durall takes the tension out of the job and puts it in the screens.

Durall Tension Screens are so easy to order and install. You get a perfect fit every time—top to bottom—side to side, and the Multi-Strand edge (in all sizes) makes certain a trap-tight fit. But that's only the beginning of the big advantages of Durall Screens. Here are some 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.

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."

DURALL PRODUCTS COMPANY
Sixth Ave., York, Penna.

Manufacturers of the Durall line of custom-made Screen-Porch Enclosures, Bermuda Screen Houses, Aluminum Combination and Screen Doors.
Dramatize your houses with the exciting

Kitchens such as this "Carefree Classic" catch a woman's eye—help sell your whole house. Convenient pass-through has wide G-E Waist-High Oven with drawers below, easy-cleaning Porcelain Enamel Sink with Food Disposal, top-loading Undercounter Dishwasher. Against oak paneling are G-E Base and Wall Cabinets, roomy Refrigerator-Freezer. Center snack bar has built-in Range Surface Units. Available in 5 Mix-or-Match colors and white at your G-E distributor's.

G.E. and only G.E. offers you so much help from blueprint to house sale!


2. Color Styling Assistance. A General Electric distributor builder specialist works with you on appliance deliveries and installation—even on decoration.


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

GENERAL ELECTRIC

SEND FOR THIS NOW!

*Installation and accessories additional. Price subject to local variation.
Color Selection Is One of the Most Exciting
and Important Parts of Home Planning

Before World War II, a large percentage of all home exteriors were painted white. Interiors, too—particularly the kitchen and bathroom—made only limited use of color decorating possibilities.

With the greatly accelerated home building activity following the war, color really came into its own. Today, there's practically no decorating or interior design problem that can't be solved by the right combination of colors. And color is one factor that can improve the appearance and salability of any home.

Now, Briggs Introduces a Comprehensive Plan to Help You Capitalize on Professionally Color-Styled Bathrooms

Through the services of Howard Ketcham, famous color engineer, Briggs brings you a comprehensive new book of professionally color-styled bathrooms, entitled "Color Guide to Bathroom Design and Decoration." This practical book not only gives you the color-by-color know-how you need to use for modern bathroom styling, but enables you to present planned color selection to your customers.

Handsomely prepared, the book contains beautiful and versatile color plans to bring a bright new look to the bathroom. It can help you put correct color's cheerful vitality into an important new place in your homes. It can make your bathrooms a center of attraction and interest—and actually increase the value of your homes!

For further information — consult your Briggs Representative or write to Briggs Manufacturing Company — 300 Buhl Building, Detroit 26, Michigan

BRIGGS Beautyware

"America's Smartest Plumbing Fixtures"
Brand New IDEA
A woman always looks at the kitchen first...

she'll look twice at these

WESTINGHOUSE BUILT-INS

Now with these brand new Westinghouse Built-Ins you can offer the most modern kitchens in America!

They're true built-ins with the color and style your prospects are looking for. They say right away that you've paid careful attention to every detail throughout the house. And they're today's most-advanced built-ins... assuring your prospects their house will stay new for years.

Westinghouse Built-Ins come in 5 Confection Colors—Sugar White, Lemon Yellow, Mint Aqua, Frosting Pink, Nougat Gray—all popular pastels that never go out of style. They pack your kitchen with maximum prospect appeal—to give you a real sales-closing story. And they're all available now!

See your Westinghouse Distributor or write:
Contract Sales Dept., Westinghouse Electric Corp.,
Major Appliance Division, Mansfield, Ohio.

WATCH WESTINGHOUSE
WHERE BIG THINGS ARE HAPPENING FOR YOU!

Big sales-making extra! New Westinghouse undercounter dishwasher installs easily with special Y-tail pipe that eliminates extra trap. "Custom" front panels come in 5 Confection Colors, Brushed Chrome, Antique Copper, prime-coated steel, matching wood front.

Women expect a disposer in a house that's really up-to-date. This Westinghouse Disposer installs easily, has special dishwasher drain line opening. And it ends forever the garbage nuisance—a real plus you can use to help clinch the sale!
What women want in a built-in refrigerator-freezer are all the convenience features the best free-standing refrigerator offers. And they’re all here in this 13 cu. ft. Westinghouse Horizontal Built-In. Special Meat, Butter and Egg Storage... a New Tilt-down Showcase Crisper... 120-lb. Zero-Degree Freezer—all at easy reach-in level.

Complete Home Laundry in 25 Inches! That’s the Westinghouse Space-Mates. Separate Laundromat and Dryer install vertically—both do a full 8-lb. load. There’s no need to add an extra laundry room—Space-Mates will install anywhere there’s 25"...

Most flexible built-in range line in the business. You can combine ovens and platforms anyway your prospect likes... it’s a personal touch that helps you sell. Shown: Giant 24" interior-width oven; separate 2-unit platforms with remote controls.

Or you can build-in the same units side by side—under a counter or even in a wall at waist level. Installation’s simple with easy-to-hook-up plumbing and venting connections. Available in 5 Confection Colors. It’s the builder’s answer to a low-cost complete home laundry!

The same deluxe features are in this Westinghouse Vertical Built-In. Less than a yard wide! New Stoop-Saver Design keeps foods used most often up top. 13 cu. ft.; 155-lb. zero-degree Freezer.

Another arrangement is 17" oven with 4-unit surface platform. Platform controls come flush-mounted... oven has clock and timer. Line offers choice of 5 Confection Colors, Antique Copper and Brushed Chrome. You can be sure... if it’s Westinghouse.
NEW TRESTLES WITH 9 HEIGHT ADJUSTMENTS

FOR FAST MASONRY CONSTRUCTION, mason contractor L. Hubbard of Euclid, Ohio, uses new “Trouble Saver” Putlog Trestles on a project for Joe Miller Homes Co. The new Putlog Trestles are 5-long and provide nine height adjustments, ranging from 4' to 6'. Masons set each Putlog on the top course, then brick is laid over them. Putlogs are pulled out of the wall and adjusted to new height as the job progresses. When a pin is removed, the new Putlog Trestle swings down flat for easy storage or shipping.

THE STEEL SCAFFOLDING COMPANY
Telephone EV ergreen 3-5510 Dept. AB 856 Humboldt Street, Brooklyn 22, New York

KOHLER Electric Plants
Take your own power wherever the job is done—save time, expense

MODEL 2.5M25, 2500 watts, 115 volt AC, Manual starting.

KOHLER OF KOHLER
PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS
AIR-COOLED ENGINES • PRECISION CONTROLS

Circle No. 10060 on reply card, p. 154

American Builder
New products

WINNERS AND DOORS

Garage doors come in California redwood

Garage doors to complement the architecture of the home are offered by Winfield Doors in solid California Redwood. Set on smooth running ball bearing rollers, doors raise at the touch of a finger, have weather tight joints, steel hardware. Prices: for 8 x 7 redwood door, $90; for unit illustrated, two doors and three fixed panels, $260. Information from Winfield Door Corp., Attn. G. D. Shemin, Dept. AB, P. O. Box 27, Lindenhurst, N. Y.

KOHLER Electric Plants
Take your own power wherever the job is done—save time, expense

Glass jalousie windows give controlled ventilation

Win-Daher glass jalousie windows are suggested for perfectly controlled ventilation in all climates. The windows, which come in a variety of styles and sizes to meet architectural demands, have extra wide louvers to provide rain protection without closure, heavy duty frames of heavy gauge aluminum extrusions, long-life vinyl weather-stripping, finger-tip control operating hardware. More information from Daher Products Corp., Dept. AB, 613 Salem Ave., S.W., Roanoke, Va.

Circle No. 10061 on reply card, p. 154

AMERICAN BUILDER
From a relatively small part in the building industry to a starring role... that’s the remarkable record of concrete block! Even more unusual is the brief period of time in which this progress was made.

It’s not so long ago that concrete block was considered suitable principally for basements. Then its use was extended to small buildings such as garages. Expansion into new applications was slow because block-making itself was a slow and painstaking process.

With the introduction of the Vibrapac automatic block machine, however, the situation changed dramatically. Almost overnight Vibrapac block caught the fancy of the building industry. Its availability and economy, combined with high quality, revolutionized old-time building concepts. The ease and speed with which Vibrapac block could be laid, the development of modular units, and its dependable uniformity attracted attention everywhere. Builders who wanted to build faster, better and more profitably swung over to concrete masonry in ever increasing numbers. Architects, seeing the almost unlimited versatility of Vibrapac block, specified block for churches, schools, theatres, commercial, government and industrial buildings as well as for housing.

To prospective owners of homes and other buildings, the new beauty and adaptability of concrete masonry were eye-opening. Because of the Vibrapac process, concrete block could be used effectively and economically in every phase of construction... for exterior walls, solid or veneer, interiors, partitions, floors, ceilings, corridors, entrances. In fact, the entire building from roof to basement could now be erected using one major material only... Vibrapac block. Furthermore, the appearance, strength and longevity would be as good or better as with any other kind of building material. Concrete block, with the aid of the Vibrapac automatic method of block production, had “arrived”!

When the “building boom” developed, the true worth of concrete masonry was again demonstrated. In new homes especially, concrete block became adaptable to a wide range of artistic and practical effects which added to the spaciousness and comfort of modern living... without adding to the cost. Today, concrete block is recognized generally as the truly universal and complete building material. For information write Besser Company, Box 183, Alpena, Michigan, U.S.A.
What's a "Fish Bowl" Got to do with Insulation?

Everyone agrees that an insulation, to be effective, should resist the transmission of moisture. Good insulations today provide vapor barriers as an integral part of the product—and Balsam-Wool does just that for you! The warm side liner of the blanket fully meets specifications for a vapor barrier.

You probably won’t equip each house you build with such a "fish bowl"...but you can merchandise the extra value of Balsam-Wool’s quality insulation features:

1. Vapor barrier protection (condensation problems minimized).
2. Low thermal conductivity (for important fuel savings and air conditioning economy).
3. Resistance to wind infiltration (special application flange makes for a better seal).
4. Bonding of insulating mat to liners (insulation stays put for a "house-time").

Balsam-Wool sealed insulation is sold by lumber dealers. It’s non-irritating, clean and easy to handle. Wood Conversion Company, Dept. 118-106, First National Bank Building, St. Paul 1, Minnesota.

BALSAM-WOOL®
Blanket Insulation
SEALED AND PROTECTED
FROM MOISTURE
500-Home Broyhill Park--
Built and Sold Out in 8 Months!

Here's a house that was sold before it was completed. It's one of 500 homes at Broyhill Park, a beautifully planned community in suburban Arlington, Va., just across the Potomac River from Washington.

Prices ranged from $13,100 for a wide selection of attractive ranch houses to $20,300 for the handsome two-level “Eastern Rambler” shown above. Included were such sales-catching features as complete electric kitchens (dishwasher, garbage disposal, range and refrigerator), oak flooring, ceramic tile baths and steel casement windows throughout. No wonder all 500 homes were sold out well before Broyhill Park was completed in December, 1954.

Steel windows always add a big plus value to homes like these. Look at the crisp, clean lines of the ranch windows in that Eastern Rambler. They promise floods of cheery sunlight, plenty of healthy fresh air, and a broad, sweeping view from within. And steel’s great strength, which permits those slim frames and muntins, also assures the home owner long, trouble-free service.

But steel windows do more than add sales appeal. They help you to keep your building costs down in two ways: (1) steel windows cost less than most other types, and (2) steel windows cost less to install because they come factory-assembled (with a steel casing, if desired) for fast installation.

You’ll find that a wide selection of steel windows in all standard types and sizes is available from your local building supply dealer. Or contact the nearby representative of any manufacturer of steel windows. See Sweet’s file 16b.

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

BUILD FASTER...SELL FASTER WITH
Steve Windows

Maximum Light and Air . . . Steel casements are always popular. See how slim the framing members are, allowing the most natural light and the best view. Ventilating lights swing out to catch every breeze. Storm windows and screens clip on easily, from the inside. Available in many stock types and sizes; Bonderized, prime painted and factory assembled. Many can be glazed with insulating glass.

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
Average home buyers **BUY**

a better-than-average home **FASTER**

offer them the dramatic beauty of real wood 
with low cost G-P Prefinished Hardwood Paneling

Your prospect is actually upgrading himself when he considers buying this house. He wonders if it will be pleasant to live in, and since he probably plans to move into an even better home within five years or so, he wonders if this house will resell easily. The greater value and distinctive appearance of G-P Hardwood Paneling give him quick assurance on both questions. Your choice of G-P V-grooved Hardwood Paneling helps him picture a scene of family happiness and good living surrounded by these hospitable rooms. This, plus the knowledge that the enduring quality and beauty of wood will bring the same picture to future owners, is what makes average home buyers buy faster.

**V-GROOVED CHERRY.**
About 72c a foot.

**V-GROOVED BLOND CATIVO.**
About 47c a foot.

**V-GROOVED WALNUT.**
About 72c a foot.

**V-GROOVED HONEYTONE OAK.**
About 52c a foot

**V-GROOVED RED GUM.**
About 48c a foot.

Look at the advantages G-P Hardwood Paneling offers for profitable installation:
- Completely prefinished and ready to install—no further finishing or waxing required.
- V-grooved on the veneer joints to simulate random planking.
- Edges of panels eased for continuous plank effect.
- Back sealed for stability.
- 4 ft. by 8 ft. and 4 ft. by 7 ft. sizes available in ¾-inch thickness.

GEORGIA-PACIFIC CORPORATION
Hardwood Plywood Paneling

**RIPPLEWOOD**
textured plywood panels...can be painted in lovely two-tone color effects. 12" x 8" wall—
as little as $24.00.

**G-P STRIATED PLYWOOD**...striking painted or stained...grooves help conceal joints. 12"x8" wall—as little as $27.00.

*Patent applied for.*
You can please every buyer with FULL LINE OF GAS, ELECTRIC

...all designed to fit standard cabinets and cut your costs!

You couldn't ask for better traffic-builders and greater sales appeal than you get with Tappan. The leader in quality range-making for 75 years, Tappan triumphs again with the revolutionary new electronic range, the latest in a long list of "firsts." Add this to a tremendous variety of Tappan gas and electric built-in ovens and surface units for use in all kinds of flexible combinations—and you can please every customer with units for every kitchen plan and price.

Show them Tappan's new ideas, new features, new styling—all in the world's only complete choice of gas, electric and electronic built-in ranges!

Show 'em the Miracle Range they're raving about everywhere THE AMAZING TAPPAN ELECTRONIC!

They've read about it, talked about it—now women everywhere want to use this sensational Tappan cold-oven range that cuts cooking time up to 90%! You can cash in on its unbelievable speed, new coolness for kitchens, remarkable new cleanliness. It's automatic, safe, economical...uses conventional wiring...operates on 220-volt current, three-wire circuit.

NOTHING COOKS LIKE A TAPPAN...
Still more sales excitement with TAPPAN GAS and ELECTRIC BUILT-INS...

Whatever they want—give it to 'em with Tappan! Incredibly fast electronic ovens team with a wide variety of gas or electric surface units. Gas or electric built-in ovens combine perfectly with Tappan surface units. All fit standard cabinets, all serviceable without removal from cabinet or wall. Installation's easy and inexpensive with every Tappan Built-In. And they're available with Visualite-window or solid doors, chrome or porcelain oven linings. Choice of gleaming Lusterloy stainless or Copperloy finish. Both gas and electric ovens with separate roll-out broilers.

that's why Tappan sells so well!

- LEADER IN BUILT-IN RANGES
- FIRST WITH ELECTRONIC COOKING FOR THE HOME
Remarkable how inexpensive it is to give drainage lines two-way extra
quality, with Chase copper drainage tube (DWV). Far longer service
life and greatly improved efficiency are assured.

Drainage lines of Chase copper tube resist corrosion—can't clog with
rust—stay efficient over the years! Their interior is smoother; flow is
unobstructed at joint connections—larger volumes of waste water can
pass through them because friction is reduced!

Chase copper drainage tube is 4 times lighter than ordinary drainage
pipe. Can be pre-assembled and installed with great savings in time!
It can be cut to length right on the job. Requires fewer joints because
it comes in 20 foot lengths. And rugged, leakproof solder joints fit
within standard partitions, eliminating expensive furring out!

Insist on Chase copper drainage tube (DWV). Add extra-value to
every home—with little or no extra cost!
Before modernization—a dull and unappetizing dining room. After remodeling—a cheery family activity room. Here is Light for Living at work! Multiple use of carefully selected fixtures; overhead in the once-drab dining room, a recessed spotlight—and cornice lighting that makes the room seem larger. In the kitchen, a luminous ceiling highlighted by three bullet-type fixtures. This completely remodeled home in Cleveland, Ohio, was featured in the August issue of LIVING For Young Homemakers—proving that home modernization can be a service to customers, a profitable field for builders.

Light for Living means extra profits on each remodeling job

Led by Operation Home Improvement, more and more builders are turning to home modernizing as a source of extra jobs and extra profits. And many have discovered how much easier it is to sell remodeling when “Light for Living” is featured. General Electric’s big new Builders’ Package helps you make the most of this expanding market with Light for Living.

This Builder’s Package contains complete lighting information, photos and practical plans for making any home more attractive and livable. It tells how to make rooms seem larger with valance or wall lighting, how to accent with downlights and spots, how to make outside areas more effective and usable. When you put this material to work, your customers get a complete remodeling job and you profit accordingly. What’s more, you add immeasurably to your own reputation as a progressive authority on home modernization.

Many builders have already bought this package and they’ve put it to work—profitably—making the modernizing field an excellent source of extra jobs, extra profits. Send for yours today!

The Whole Light For Living Story is in This New Builder’s Package—Yours For Only $1.00

- Builder’s Book of Lighting
- How To Decorate and Light Your Home
- Lighting Recipes
- Outdoor Lighting

- Lighting Fixture Guide
- Wall Lighting Guide
- Dimming Systems
- Selling Sentences

CLIP THIS COUPON AND MAIL IT WITH $1.00 TODAY!

General Electric Company, Large Lamp Dept. AB-10
Nela Park, Cleveland 12 Ohio

Please send me Builder’s kits at $1.00 each.

NAME___________________________

STREET_________________________

CITY__________ ZONE________ STATE

...And, remember, General Electric bulbs are the heart of Light for Living!
Marvin Myer's Western Ranch Home has the "Custom-Built" touch of a ceramic tile double lavanity.

Builder Marvin Myer, of Auburn Construction Company, Rockford, Illinois, designed this popular $16,000 house with many features normally found only in more costly homes: covered entry and hall foyer, and a family room.

Adhesive installation of the counter tops, walls and floor took less time—added vital customer appeal. The ceramic tile floor catches the feminine eye and translates quickly from "tile" to "easy cleaning and lasting beauty." This total effect is to help the builder close the sale faster.

P. William Nathan uses prefabrication and adhesive techniques to put more sales punch in his homes.

Builder Bill Nathan of South Norwalk, Connecticut, uses prefabrication and precutting plus a family-room plan to attract metropolitan New Yorkers to his homes in the suburbs. His $26,000 family-room homes are situated on wooded one acre sites.

The adhesive method was used to apply ceramic tile to the bathroom walls and in the inviting shower enclosure. Alert use of progressive new techniques like prefabrication and adhesive installations help to sell homes at a fast—and profitable—rate.
3 Big Reasons why Leading Builders Install Ceramic Tile

1. **CERAMIC TILE** sells more homes. Eagle-eyed 1956 home-buyers look for and expect ceramic tile. National advertising, word of mouth and traditional acceptance have presold it to millions.

2. **CERAMIC TILE** gives the home-buyer what he wants today—more for his money. Tile provides luxurious convenience and easy maintenance. It's durable, beautiful. Keeps the homeowner satisfied for a lifetime. Ceramic focal features like these bring the traffic in and nail the sale: floors, walls, drainboards, counter tops, window sills, foyers, halls, towel niches, rangebacks and splashbacks.

3. **CERAMIC TILE** installations cost the builder less with advanced new adhesive techniques. Tiles can be set faster and easier. That means you can offer more tile “showplace” areas at lower cost. The adhesive method gives you an additional tool for tapping today’s terrific remodelling market.

Be sure to ask your ceramic tile contractor about the savings made possible by adhesive installations.

Use only adhesives bearing this seal—signifying that they meet minimum performance standards set by U. S. Department of Commerce.
Now, after extensive research, Weyerhaeuser presents a new, improved siding with all the beauty and durability of natural wood—plus a water-repellent treatment which results in better performance, and longer paint life.

The new Weyerhaeuser 4-Square water-repellent Treated Siding is the same as traditional siding in appearance. But a special treating process fills the walls of the surface cells of the wood with a water-repellent chemical.

Most important to home builders is the fact that paint lasts longer on Treated Siding. Water-repellent treatment helps prevent water entering behind siding, thus providing longer paint life. Treated Siding also resists the damaging effects of casual exposure to water during construction and prior to painting. Water-repellent treating adds stability to siding as it retards moisture changes. The treatment also deposits chemicals which resist the development of mold and fungi.

Paint not only lasts longer, it is easier to apply on Treated Siding. The oils in the paint are absorbed slowly. The paint gives added protection because more of its oils are kept on the surface, where they are most valuable for resisting the damaging effects of weather.

Treated Western Red Cedar and West Coast Hemlock Bevel Sidings are now available in the standard widths and thicknesses.

Weyerhaeuser 4-Square water-repellent Treated Siding offers distinct advantages to builders and owners. For complete details about these fine products it will pay you to talk to your Weyerhaeuser 4-Square Lumber Dealer—or write to the St. Paul office for full information.
Entirely New and Wonderful Way to Enclose Bathtubs

A Sliding, Folding Tub-Shower Door!

New Folding Tub-Master slides smoothly, quietly for luxurious showering. Translucent doors let in plenty of light, keep out drafts. The bar that fastens enclosure forms a handy towel rack.

Tub-Master is made with high-impact Dylene plastic. Can't shatter or splinter... has no sharp corners to cut or scratch. Panels fit snugly into polished aluminum frame; won't warp or deteriorate.

Cleaner than a shower curtain - Safer than glass - Lovelier than either!

Now—a really exciting innovation to increase the saleability of your houses—the most convenient bathtub enclosure ever made! Modernfold's new Tub-Master has every desirable feature that home-buyers want in a custom-made bathtub enclosure; eliminates everything they don't want. (These photos just start the list!) And there's absolutely nothing else like it for glamorizing your bathrooms!

Tub-Master comes in beautiful decorator colors that go clear through—won't fade, mildew, chip, flake or peel. It increases the value of the homes you build...helps merchandise them. Call a Modernfold Distributor, he is listed under "Doors" in the classified directory. Or send coupon for complete information.

New Castle Products, Inc.
Dept. K21T, New Castle, Indiana

Please send complete information on new Modernfold Tub-Master.

CAN BE INSTALLED QUICKLY
Tub-Master comes complete in one package... is easy to lift and handle.

(C)1956, NEW CASTLE PRODUCTS, INC.


New Castle Products, Inc., New Castle, Indiana - Manufacturers of Modernfold Doors

October 1956 207
"We've built up our Ford Fleet to 31 money makers in just 7 years"
says California Housing Development Contractor

"Last year we installed plumbing in 4,000 homes in new housing developments," says Mr. Larry Gluck, The Gluck Company, Van Nuys, California. "This means tough driving over unpaved development tracts. Our Ford fleet, ranging from F-100's to C-700's, takes the job in stride and saves us money, too. Low running costs, less maintenance and repairs . . . are why we're aiming for an all-Ford fleet."

Ford trucks cost less . . . last longer. The men who buy trucks every year must take everything into consideration: low initial price, modern engine design for low oil and gas consumption (no other manufacturer can match the economy of Ford's Short Stroke engines), rugged chassis for longer life (insurance experts prove Ford trucks last longer), and high resale value.

So—from pickups to 65,000-lb. GCW Big Jobs, the big fleets are going Ford. See your Ford Dealer today! Buy with confidence, drive with confidence, and save with confidence.
F-500 loading in Gluck Company’s yard.

“Fords last longer off-the-road, too!”

Ford’s rugged chassis and Short Stroke engine design mean longer life. Because piston travel has been reduced, there is less friction—resulting in longer engine life. New 8-foot box on Ford’s F-100 pickup offers more cubic capacity than any other half-tonner . . . more load-space for your money.

Big fleet owners buy more Ford Trucks than any other make

OCTOBER 1956
Do You Pay For Kindling When You Sheathe A House?

You can waste up to 25% of your sheathing dollars when you use wood sidewall sheathing. With Gold Bond Gypsum Sheathing the waste usually runs less than 3%!

Here are the FACTS ON SHEATHING WASTE as found in the Building Estimator's Reference Book, published by Frank R. Walker Co.:

In order to cover 100 sq. ft. of sidewall with 1" x 6"
D & M wood sheathing applied to square or rectangular buildings of regular construction:

**Horizontal Application**... You need to buy 120 ft. b. m. ... **20% Waste**!
**Diagonal Application**... You need to buy 125 ft. b. m. ... **25% Waste**!

You keep waste at a low 3% with Gold Bond Gypsum Sheathing because you use virtually all of it! No random lengths... no lap loss... no kindling!

You save labor costs, too! These large-size panels go up quickly and easily — in half the man hours required for wood sheathing! You need only half as many nails — one man can do the average small home in one day!

Gold Bond Gypsum Sheathing costs half as much as T & G lumber — and you need no building paper*!

Check these Gold Bond extras: It resists fire... helps insulate... repels water... makes wind-tight joints... and adds structural strength under any exterior finish.

For more information, write National Gypsum Company, Dept. AB-106, Buffalo 2, N. Y.

*Except where required by building regulations over all types of sheathing.
ADD SALES APPEAL
with Pella wood folding doors

The exciting beauty of PELLA WOOD FOLDING DOORS makes a good impression on homeseekers! Richly veneered in oak, birch, pine or Philippine mahogany...the natural wood grain of PELLA DOORS blends perfectly with woodwork and furniture.

Prospects are impressed by the extra convenience of PELLA DOORS, too. They nest compactly inside doorways...so every square inch of wall and floor space can be used. Use them to give greater access to closets and storage walls. And, used as room dividers, PELLA DOORS make living space much more flexible.

PELLA DOORS operate smoothly, too. Exclusive concealed spring connectors assure uniform folding...easy opening and closing...quiet operation. Doors stack compactly. Sturdily constructed of solid wood laminated cores.

Get PELLA DOORS in stock or custom sizes, finished or unfinished, factory assembled, complete with all hardware and concealing track mould. No costly fitting on the job. Mail coupon below today for more information. Or see our catalog in Sweet's Light Construction File. Representatives throughout U. S. and Canada.

WOODBOND 1G

Gentlemen: Please send FREE literature on PELLA WOOD FOLDING DOORS and name of nearest PELLA dealer.

NAME__________________________

ADDRESS__________________________

CITY_________ZONExSTATE_________

ROLLSCREEN COMPANY, Dept. H.90
Pella, Iowa

OCTOBER 1956
The Calculator that Prints proves its business versatility with builders, too. The framework of this business continually expands and contracts as it takes on jobs; allows no room for bulky and expensive office machines... but a single compact "99" Calculator can handle every operation, whether checking material invoices, preparing estimates, figuring costs, even doing payroll computations... and printed tape gives a permanent record for check-back on every operation.

Your business faces many of the same needs for a Calculator, so may we suggest the very useful "99" as the most economical way of solving your business figuring problems.

Remington Rand
DIVISION OF SPERRY RAND CORPORATION
Weldwood 2-4-1 plywood will be installed on this 48" o.c. "grid system." Once it's nailed in place, you're ready to lay finish flooring.

**NEW 2-4-1 FLOORING SYSTEM SAVES UP TO $500 PER HOUSE**

Builder praises Stay-Strate as "most trouble-free door made"

The Stay-Strate flush door is "one of the finest doors we have ever used," says George Goldman, of the Manilow Construction Co., Inc., builders of the famous Highland Park Highlands, near Chicago. "It is true," Mr. Goldman continues, "that it has cost us a few dollars more per house as an original cost, but the savings in time and labor on subsequent complaints has more than made up for it." In fact, Weldwood guarantees the Stay-Strate door will not warp or twist or it will be replaced—including all costs of hanging involved. See coupon.

Entrance way to one of Manilow's Highland Park Highlands homes shows Stay-Strate door, painted white, and attractive Weldwood Texture 1-11 paneling.
complete new Edwards promotional package

HELPS SELL YOUR HOUSES!

Now Edwards helps you sell houses with a powerful selling tool and a complete plan to merchandise it! Edwards' Home Fire Alarm is an exciting sales feature, and it's backed up with a valuable, new, high-powered promotional plan to help you make the most of it.

Look at what you get! First, there's the Home Fire Alarm itself, the most important low-cost sales feature you can put in a house. It's a complete, permanent fire warning system. Yet it can be completely installed for approximately $30, depending upon local conditions. And if the house is planned to include it, Edwards' Home Fire Alarm may be covered in the FHA mortgage.

To help you merchandise this important feature, Edwards supplies you with an entire promotional kit! There's identification material to place outside your model home, eye-catching signs for the interior, and handsome, colorful, free folders. You get a display demonstrator for impressive on-the-spot demonstrations. And Edwards gives you a whole package of publicity to get you extra public attention, including a home safety speech, newspaper releases, and radio and TV scripts.

Install the Edwards Home Fire Alarm system in your homes now. It's a strong competitive selling tool everywhere it's used! For the full story on the Home Fire Alarm, contact your electrical contractor or write Dept. AB-10, Edwards Company, Inc., Norwalk, Connecticut. (In Canada: Edwards of Canada, Ltd., Owen Sound, Ontario)

And remember the Edwards Zonalarm for larger homes... warns when fire occurs, tells its exact location.

EDWARDS Specialists in Signaling since 1872

DESIGN • DEVELOPMENT • MANUFACTURE
SAVE CONSTRUCTION COSTS by using...

utility grade LUMBER

for these and other uses

utility ROOF BOARDS
utility FLAT ROOF JOISTS
utility PLATES
utility FIRE STOPS
utility STUDS
utility SHEATHING
utility SUB-FLOOR
utility FLOOR JOISTS
utility BRIDGING

Webster defines utility as: Quality or state of being useful. And that completely describes "Utility" grade West Coast lumber, strong, sturdy AND economical. It fills the bill in scores of construction job details where strength and dependability are required. The use of "Utility" lumber saves money.

WEST COAST LUMBER

Douglas Fir • West Coast Hemlock
Western Red Cedar • Sitka Spruce
When plumbing needs attention

will your homes be selling you?

they will — if you've built for the future with Milcor Steel Access Doors

Your good reputation depends on careful, complete planning for the home owner's present and future needs.

Milcor Steel Access Doors cost very little, but they pay big dividends in good will when concealed plumbing or other walled-in utilities require maintenance.

Milcor Steel Access Doors actually cost less than doors of wood made on the job. They come framed, primed — need no cutting, fitting, sanding or filling. They can't warp, crack, shrink or rot. Installed flush with the wall — you paint or paper right over them.

Order Milcor Access Doors from your building supply dealer. Bulletin sent on request.

Milcor Access Doors come in many sizes, for use with any type of construction.
Here is the built-in Refrigerator-Freezer that brings to any kitchen that “look of tomorrow,” that captures a woman’s heart with its enlarged capacity and functional performance.

For the builder it completely eliminates the most expensive steps in built-in construction. This all-in-one unit just slides in place. A formed steel frame is self-supporting from the floor up, requires no building of cross members to support the freezer-refrigerator. The compressor is self-contained in this frame — no need to build a separate compartment.

This new PREWAY combination unit adds extra sales appeal to your kitchen — and saves you money. Write today for full information.

PREWAY, INC.
8106 Second Street North
Wisconsin Rapids, Wisconsin

One source, one responsibility for gas and electric Bilt-in ranges, range hoods, Bilt-in refrigerators, freezer, oil and gas heaters, wall and floor furnaces, electric heaters.
where
mixed car shipments
are **BORN**...

The majestic, thunderous descent of giant pine, fir, cedar, hemlock — not to mention the hardwoods — is the beginning of your mixed car shipment. Felled in Long-Bell’s tens of thousands of acres, single trees such as these may yield many items of lumber in sizes and grades that make up a mixed car.

But the thunder dies. The dust clears. Now comes the processing of the tree for the trade . . . the skill in sawing and manufacture . . . the care in handling . . . developed from years of experience in all of the Long-Bell 27 plants.

Here are complete, well-balanced stocks that are available to fill your needs. For the best service on your mixed car orders, you can count on Long-Bell.
FRESH approach to faster sales!

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

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!"

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!

WATCH WESTINGHOUSE
WHERE BIG THINGS ARE HAPPENING FOR YOU!

OCTOBER 1956
THE BUSINESS LAW OF REAL ESTATE.

This book is primarily a guide to assist builders and businessmen in transactions relating to the ownership and management of land. Every conceivable aspect of real estate is approached from a practical business viewpoint.

Current problems of acquisition, of land for off-street parking, slum clearance, redevelopment, turnpikes and toll roads are effectively treated. It also includes many neglected subjects of practical value to businessmen and realtors, such as Trespass and Nuisance.

This book will not eliminate the need for legal counsel—but it will suggest precautions that may be taken so that legal counsel, when employed in time, has a more intelligent client. Matters of Nature and Classification of Property; Land and Estates Therein; Acquisition and Transfer of Title or Interest; Public and Private Restrictions on the Use of Land; Rights and Duties of Owners and Occupiers of Land; and Real Estate Brokers are carefully discussed.

The authors' 20 years of experience in the field contribute to the effective way in which the book is written. Gerald O. Dykstra is Professor of Business Law at the University of Michigan. Lillian G. Dykstra formerly taught business law at Ohio University.


Primarily a working tool, this practical manual is full of short cuts for solving structural design problems. Every piece of data in the book has been tested. Tables, design methods and formulae, and sketches, help standardize office practice and simplify the designer's work.

NEW REVIEWS
THE BUSINESS LAW OF REAL ESTATE.

GENERAL REFERENCE
Simplified Carpentry Estimating

Clear explanations of how to take off from a set of blueprints and specifications a bill of materials for the construction of a frame house. Arithmetical methods of accurately estimating and cross-checking against mistakes. Suitable for use of small contractors and lumber dealers. Widely adopted as a textbook for students. 5th edition. Pocket size. 304 pages. 123 illus. 60 tables. (2105) $3.75

Time-Saver Standards
by the Editors of Architectural Record
Of great utility to the architect and builder and many other technicians. A standard reference work kept up-to-date since its inception. Large page format. Shows charts and illustrations in high legibility, along with text descriptive of every detail of building practice from site planning and functional elements to the latch on the door for all types of structures. May be inspected on our approval plan. 284 pages. (2101) $12.50

Richey's Reference Handbooks
by H. G. Richey
A working reference for builders, contractors, architects, building materials dealers, carpenters, and building construction foremen. Conveniently arranged for easy use. Among its complete coverage of topics are waterproofing, building stonework, fireproofing, paper hanger's, plumbing, heating, and ventilation, electric wiring, and hydraulics. Has glossary of engineering, architectural, and trade terms. 1,640 pages, 544 illus. (103) $9.95

Legal Cases for Contractors, Architects and Engineers
by I. Vernon Werbin
Points out rights and liabilities and the more common trouble spots in construction, engineering, and architectural contracts and in general how to protect your interests when entering into a contract and how to avoid legal difficulties. 5½ x 8, 553 pages. (107) $6.00

Contractor's Material List and Labor Cost Estimate Forms for Home Building
A 15-sheet set of take-off forms for complete listing of material and labor costs involved in the construction of a house. (108) $1.00

The Business Law of Real Estate
by Gerald O. and Lillian G. Dykstra
For those engaged in any business or profession involving realty, including builders, homeowners, storekeepers, this is the ideal book for answering innumerable questions. 852 pages. 1956. (2149) $10.00

Specifications Kit for Home Building
Simplified specification forms, which when properly filled out describe all materials, construction details, and quality of workmanship to be used in the erection of a home. Set of 14 different sheets. (2109) 50c

Handbook of Building Terms and Definitions
by Herbert R. Waugh and Nelson L. Burbank
A dictionary which includes also architectural symbols, plumbing symbols, pipe fittings, geometric figures, and an illustration of the 100 principal parts of a house. 421 pages. Illus. (210) $5.00

Building Estimators' Reference Book
by Frank R. Walker
Latest estimating and cost data on everything that goes into a house, apartment, or institutional, commercial, or industrial project. Fully indexed. 12th ed. 1,774 pages. Vest pocket-size Estimator, 220 pages, free with Reference Book. (104) $12.00

Hogg's Wage Tables for Building Contractors
A complete set of wage tables worked out by quarter hours for any length of time from 1 to 60% hours, and every wage rate from 75¢, increasing 25¢ per hour to $6.00 per hour. It also includes all odd rates in cents and quarter cents. Pocket size. flexible leaf bound. (102) $6.00

CARPENTRY
House Construction Details
by Nelson L. Burbank
Drawings and photographs explain each detail step by step from foundation to finish. Tells how to alter stock plans and remodel as well as build new construction. 80 additional full-page drawings of house details. Conforms to national building regulations. 8½ x 11, 395 pages. 2,100 illus. (112) $4.95

House Carpentry and Joinery
by Nelson L. Burbank
5th edition. Latest accepted building methods for all phases of carpentry in and around the house. Contains clear details on house plans, excavations, foundations, roofing, stairs, hardware, built-in equipment, finishing, etc. Used by many schools as a textbook. 8½ x 11, 225 pages. (111) $4.75

For better planning...
Fundamentals of Carpentry
by W. E. Durban
Volume I—Tools, Materials, Practice (with glossary of Carpentry Terms), 374 pages. New 1956 ed. (#113) $3.95
Volume II—Practical Construction, 512 pages. New 1956 ed. (#114) $4.95
Complete house carpentry in two volumes. An outstanding value. 5½ x 8½. The 2 volumes $8.50

Remodeling Guide for Home Interiors
by J. Ralph Dalzell
How to improve the interior appearance of the home and make better use of space. 9 x 6¼, 339 pages. 6 blueprints. Index. Illus. 1956. (No150) $4.95

Steel Square
by Gilbert Townsend
Fundamentals plus step-by-step house construction problems as solved by proper use of the steel square. 5½ x 8½, 172 pages. (#117) $2.50

Stair Building
by Gilbert Townsend
Fully illustrated guide to design and construction of stairs. (No116) $2.95

CABINETMAKING

How to Build Cabinets for the Modern Kitchen
by R. P. Stevenson
Over 70 fine detailed working drawings with materials lists and building details. A professional book for the builder or renovator. 7½ x 10¼, 246 pages. (#119) $4.95

How to Make Built-In Furniture
by Mario Dal Fabbro
Instructions for constructing over a hundred contemporary built-ins. Pieces are included for living rooms, kitchens, playrooms, attics, and cellars. Sequence plans and illustrations. 7¼ x 9½, 286 pages. 1955. (#123) $6.95

How to Make Your Own Furniture
by Henry Lionel Williams
Furniture building, including chapters on setting up shop, choosing tools and equipment, selecting the correct wood, finishing, and designing of furniture. Detailed drawings, instructions, and lists of materials with dimensions for a wide variety of pieces. 179 pages, 240 illus. (#120) $3.95

MASONRY

Masonry Simplified
by Dalzell and Townsend
Volume I—Tools, Materials, Practice. Information on materials, mixes, tools and their use and care; clay tile, brick, sidewalks, drives, floors, steps, waterproofing, beams, lintels, columns, chimneys, fireplaces, walls, septic tanks, 805 p. 257 illus. (#122) $3.25

Art of Bricklaying
by J. E. Ray
Basic bricklaying job instruction. Many illustrations, glossary, special scaffolding and cement block chapters. 5½ x 8½, 240 pages. (#130) $4.50

Bricklaying Skill and Practice
by Dalzell and Townsend
Technique and facts of bricklaying for the mason, the student mason, and the builder. 2nd revised ed. 1954, 5½ x 8½, 195 pages. Illustrated. (#125) $3.50

Concrete Block Construction for Home and Farm
by J. Ralph Dalzell and Gilbert Townsend
Planning and building the economical concrete block structure. 5½ x 8¼, 216 pages. 151 illus. (#124) $3.25

The Art of Tile Setting
by Erwin W. Carls and Lyle G. Wines
Procedures in setting tile, with background of materials and tools necessary. Covers development in new tiles such as aluminum with baked enamel finish, steel, cement with terra cotta surface, plastics, and ceramic tile, with simplified methods of installing every kind. 224 pages, 129 illus. (#127) $3.95

PAINTING; FINISHING

Painting and Decorating Craftsman's Manual and Textbook
Sponsored by the Painting and Decorating Contractors of America
Handbook for journeyman painters and apprentices. Includes also chapters on wallpaper and fabric wall coverings and glossary of trade terms. Pocket size, 430 pages. (#128) $2.00

Practical Estimating for Painters and Decorators
by William P. Crannell
A textbook in two parts: (1) arithme-
tical processes; (2) estimating. Problems arranged in order of difficulty, beginning with simple floor areas, followed by walls, ceilings, baseboard, openings, etc. Pocket size, 168 pages. 1938 ed. ($126) $2.00

Complete Book of Wood Finishing
by Robert Scharff
Latest methods, both brushing and spraying, for finishing every kind of wood. Fully illustrated. 290 pages. 1956. ($152) $4.50

PLASTERING

Painting and Finishing
by V. T. Manus
Illustrative interpretation of the National Pluming Code. Of interest to builders, master and journeyman plumbers, and others allied. 188 pages. 200 illus. 1956 ed. ($131) $4.00

How to Design and Install Plumbing
by A. J. Matthies Jr. and E. Smith Sr.
Study of plumbing design. Analysis of systems, including water supply, fixture installation, drainage, sewage, and special specifications of systems in an actual house. 5¾ x 8½, 444 pages. 406 illus. and tables. Blueprints. 3rd ed. ($133) $4.25

ELECTRIC WIRING

Westinghouse Home Wiring Handbook
by A. C. Brehl
Guide for planning the wiring of moderate-priced homes, with emphasis on safety, effectiveness, and efficiency. Pocket size, 142 pages. 4th ed. 1955. ($132) $1.00

Interior Electric Wiring and Estimating—Residential
by Uhl, Dunlap, and Flynn
Text and workbook on house wiring and estimating. 5¾ x 8¼, 326 pages. Fully illustrated. ($135) $4.25

TURN PAGE FOR MORE BOOKS AND COUPON FOR ORDERING

OCTOBER 1956
For better planning . . . buying . . . building . . . selling

(Continued from preceding page)

> ACOUSTICS

Acoustic Principles—Practical Application
by D. J. W. Cullum
A key to acoustic problems. Important conceptual features are selected for analysis, with common acoustical faults pointed out as well as those features which have given satisfaction. Treating noise reduction, isolation, amplification, reverberation, vibration, insulation; floors, ceilings, walls, partitions, doors, windows; machinery isolation. 200 p. Edition of 1955. (139) Only $2.00

> COMMERCIAL STRUCTURES

Motels
by Geoffrey Baker and Bruno Funaro
An up-to-date book for everyone concerned with the fast-growing motel field. Hundreds of photos and plans credited to 112 architects, designers, and other sources make this a stimulating book. Such factors as lighting, heating, air conditioning, sound-proofing, site planning, parking, pools and play areas, furnishings, laundries, restaurants, also included. 9 x 12. 264 pages. 1955. (141) $4.50

> DRAWING

Architectural Drawing for the Building Trades
by Kenney and McGrail
Practical drawing instruction for builders, contractors, draftsmen, and students, demonstrated by drawings, explanations, and instructions. 8½ x 12. 120 pages. (146) $4.50

> BLUEPRINT READING

Blueprint Reading for the Building Trades
by J. E. Kenney
A basic book that explains what blueprints are, how they are drawn, how used. Drawings designed for use in building technology courses, with question-and-answer approach. 9 x 12. 160 pages. 2nd Edition, 1955. (140) $4.75

> LANDSCAPING

A Guide To Home Landscaping
by Donald J. Bushey
Guide to landscaping property for maximum use and enjoyment, including site and house location, drainage, drives and sidewalks, lawns and other plantings. 288 p. 6 x 9. Illustrated. 1956. (151) $4.95

> TEMPERATURE CONTROL

Home Air Conditioning
by G. J. Stout
A 1956 book recommended to professional builders, conditioning dealers, owners, and technicians. A readable and instructive coverage of the subject. Chapters such as Planning for Air Conditioning in New Homes, Installing in Homes Already Built, Combining Heating and Cooling Systems, Humidity and Condensation Problems. Central Air Conditioning Systems, Secondary Benefits From Air Conditioning. 6 x 9. 276 pages. (135) $5.95

> ARCHITECTURAL

Climate and Architecture
by Jeffrey Ellis Aronin
All the elements of climate are described in full, acquainting the reader with the limitations that are imposed on buildings by climate—sun, temperature, wind, precipitation, lightning, humidity—and their control through orientation and planning. A well-planned and beautifully printed book including 55 tables and 300 illustrations presenting problems and solutions clearly and logically. 9 x 12. 304 pages. (144) $12.50

An American Architecture
by Frank Lloyd Wright; edited by Edgar Kaufmann
A beautiful volume that will be highly prized by all who enjoy the works of this famous architect, teacher, and personality. 9½ x 12½. 269 pages. 250 illus. (145) $10.00

> HOUSE PLANS

American Builder Blueprint Houses
Blueprints of working drawings of "Blueprint Houses" as illustrated and described in American Builder magazine from month to month. (147) Shipped by first-class mail
Per set of 1 house $15.00
2 sets $25.00
Each additional set over 2 $5.00

Homes for Living—House Plans
by Samuel Paul
Architect's sketches and detailed floor plans of over 75 ranch, contemporary, Cape Cod, split-level, and colonial styles. Houses are grouped into 3 price categories according to the family income. Plans and specifications for these houses are available from the architect. 8½ x 11. (143) $3.95

AMERICAN BUILDER BOOK SERVICE, 30 Church St., New York 7, N. Y.
Send books indicated by circled numerals. 1 envelope $1.00

101 102 103 104 105 106 107 108 109 110 111 112 113
114 115 116 117 118 119 120 121 122 123 124 125 126
127 128 129 130 131 132 133 134 135 136 137 138 139
140 141 142 143 144 145 146 147 148 149 150 151 152

(138) $3.00

(146) $3.00

Western Ranch Houses
Pictorial descriptions and ground floor and site drawings. (146) $3.00

AMERICAN BUILDER
Carefree!

Reinforced plastics provide long-lasting beauty with minimum care for exterior design!

OUT-OF-DOORS LIVING, an increasingly important consideration in home design, finds the architect with a willing tool in reinforced plastic panels. For this recent development in building materials can contribute a rare combination of translucency and structural strength to many exterior applications. Prominent among these are awnings, canopies, patios, and carports.

REINFORCED PLASTIC PANELS are amazingly strong, rigid and damage resistant. They actually compare favorably with steel — yet are wonderfully light in weight. Laminates of glass fibers and polyester resins, they are impervious to corrosion and resistant to temperature or weather extremes. Reinforced plastic panels, corrugated or flat, handle as easily as wood or other building materials. Their translucency filters out harsh sunlight — allowing only soft and diffused light to pass through. Available in attractive, built-in colors that need no painting or finishing.

PLASTICS IN CONSTRUCTION is the subject of study for the Monsanto Structural Plastic Engineering Group. Check with this group about the usefulness of reinforced plastics in your planning.

A NEW REPORT, “Plastics in Housing,” has recently been published by the Department of Architecture of The Massachusetts Institute of Technology. The M.I.T. study was made possible by a Monsanto grant-in-aid. Copies are available at $2.00 each. Address Monsanto Chemical Company, Plastics Division, Room 1303, Springfield 2, Mass.

Monsanto does not manufacture polyester reinforced panels. Monsanto does, however, supply the basic ingredients, styrene monomer, phthalic anhydride and maleic anhydride for the polyester resins used in molding reinforced plastic panels.
features

**Solid Panels:** The solid panel construction of this Grant door is a revolutionary development in a folding door at moderate price. The *Grant Folding Door* has crisp, clean lines, blocks sound, hangs rigid without billows or rustle. Knock on it. It sounds and feels like a door.

**Space Saving:** Frees an average of 14 square feet of floor space (19 square feet of wall space) for living space, better arrangement of furnishings.

**Durable — Easy to Maintain:** Vinyl surface can be wiped with a damp cloth—scrubbed if necessary. Tough and long-wearing, resists scuffing, color is permanent.

**Easy Installation:** Only a screwdriver is needed to install the *Grant Folding Door* in standard door openings in minutes. Readily adaptable to non-standard openings.

**Decorative Flexibility:** Color styled to harmonize with modern or traditional furnishings. Attractive design of handles, track and other details, also specially styled by famous Paul McCobb.

Ask for your copy of fully descriptive specifications booklet, the swatch book showing the attractive colors available and texture of the non-scuffing vinyl finish.
The "all-weather window"—already in its frame

...the first pre-framed glass-louvered jalousie!

Nova again leads the field with its top-quality Nova Jalousie, already installed in a wood window frame, ready to place in the opening. In new construction or in the replacement of old-fashioned windows, this means important savings in installation costs.

Here, for the first time, jalousies fit standard window openings. You get a complete package—including the jalousie, glass, screen and wooden frame—all contained in a special crushproof carton for safe delivery. The #1 White Pine frame has filler pieces on the inside. If the jalousie is used with dry-wall construction, simply pull the four filler strips off—if with plaster, leave them on.

Nova Jalousies dignify and beautify the low-cost house and are naturally "at home" in any residence. With Nova you get top quality. Jalousies generally are made to meet price competition—which necessarily causes some sacrifices in quality. Nova Jalousies, whether pre-framed or KD (knocked-down), are made as well as modern engineering techniques and materials can make them. They are priced slightly higher, but you have the satisfaction of getting the best and—in the long run—the most economical.

The new 68-page Nova Handbook gives the know-how on every type of jalousie. Details of construction are fully illustrated. There are instructions on how to figure sizes of individual windows, as well as on how to build complete porch enclosures—with the new levellers that automatically take care of out-of-level porch floors. The Handbook tells how to eliminate wood bulkheads and plumb up walls—and describes Nova Wood Jalousie Doors and the All-Aluminum combination screen and storm doors.

Send for your copy of the new Nova Handbook today. In this building manual you also get complete information on how to waterproof basements or treat brick and masonry surfaces—on Novafold Plastic Folding Doors—on Nova Shakes—and on the new 4' Novapanel, for quick application of cedar shakes. There is no cost or obligation. Kindly address your inquiry to Department K-10.
NOW! this fall
alone—more than $110,000
FRY ROOFING!

Beautiful! Powerful!
FULL COLOR
FULL PAGES IN
ADVERTISED IN
LIFE
TOTAL READERSHIP 25,450,000
see our advertising in
Better Homes
and Gardens
TOTAL READERSHIP 15,500,000

- Now FRY becomes the
BIG BRAND NAME in home roofing
beginning this month with the
most aggressive, best rounded roofing
advertising campaign you’ve
ever seen. A revolutionary
new sales-theme... BONDED
20 YEARS... dramatically
advertising in mass circulation magazines
... a wealth of spectacular tie-in materials, FREE to FRY
"bonded" dealers... all the ingredients for the most sensational sales success ever
known in the roofing trade! Get on the bandwagon—get YOUR supply of colorful,
giant-size reproductions of the LIFE ad for your windows; beautiful miniatures for envelope stuffers;
ad mats, etc.—and, above all don’t be “caught with your Fry Roofing stocks down”!

Phone, wire or write your distributor—or contact Fry direct—TODAY!

LLOYD A. FRY ROOFING COMPANY
World’s largest manufacturer of asphalt roofing and allied products
5818 ARCHER ROAD - SUMMIT, ILLINOIS (P.O. Argo, Illinois)
It takes little extra...to give a lot more:
LUXTROL...for the perfect lighting on every occasion!

Yes, now you can give your customers something more...for considerably less than you'd probably figure!

Be the first in your community to feature LUXTROL Light Control. The kind of lighting that makes customers out of prospects. Fast!

By the turn of a LUXTROL dial, you...or prospective home-owners...can dim or brighten a room to any imaginable level of light. From dark to full bright. From bright to dark.

With LUXTROL at their finger tips, prospects can picture themselves entertaining more graciously. Enjoying soft, romantic light for dining. Full light for cards. Subdued light for TV.

LUXTROL does away with noisy, old-fashioned on-off switches. Controls both incandescent and fluorescent lighting. It is not a rheostat...but a cool, efficient, safe auto-transformer. Made with precision. Approved by Underwriters' Laboratories! And the price is agreeably low.

Consult your electrical contractor for facts about this new concept of lighting. We'll send you literature if you wish. Mail the coupon.

THE SUPERIOR ELECTRIC COMPANY
3106 Demers Ave., Dept. HPB
Bristol, Connecticut
Please send me full design data on new LUXTROL Light Control...and the names of electrical contractors in my area.

Name ______________________________________________

Street ____________________________________________

City ___________________________ Zone ______ State ___
Here's exciting new variety
for the bathrooms you install!

New ELJER Cynthia can be installed in any counter... 16 inches or deeper

Eljer's graceful Cynthia lavatory meets every design need for countertop installations. Mount it back to the wall in a 16-inch-deep counter with side mounting strips. Or set it in a deeper countertop... and trim with a U-shaped rim.

The Cynthia is made of vitreous china. It is noncorrosive and will resist the effects of all ordinary acids. It is available in white or six lovely pastel shades... and color-matched to other fixtures in the popular Eljer line. Features concealed front overflow and integral soap dishes.

See your plumbing contractor for full information. Or write: Eljer Division of The Murray Corporation of America, Three Gateway Center, Pittsburgh 22, Pa.
Material-saving method for framing soffits

This method of framing for a soffit should prove valuable where great rigidity is desired, or where the soffit itself is not sufficiently strong to hang without some sort of framing. Chief advantage is its use of low cost material, and very little of that.

First, lengths of 1 x 8 sheathing board are ripped down the middle; the resulting 1 x 4 will be the material used.

The longer lengths of board are marked off to correspond with the on-center measurement of the rafters. These will form the furring strips, shown in the drawing. The rest of the 1 x 4 is then made into outlookers, a little short of the rafter ends so they won't interfere with the fascia.

The strips and the outlookers are then laid out on the ground, with the outlookers at right angles to the furring strips and at the marks which are made previously. The outlookers are then end-nailed through the furring strips as shown, making what looks like a giant wooden comb. A line is snapped, the comb nailed up, and the outlookers nailed to the rafter ends, forming the soffit frame.

R. Bried, Fairfield, Conn.

Spray gun nozzle cleaner

An ordinary mechanical lead pencil with the lead removed, and an old sewing machine needle can be made into a handy cleaner

(Continued on p. 231)
Remodel with Marlite...

Multi-billion dollar residential remodeling market offers bigger-than-ever opportunities to builders and architects. Marlite paneling helps you cash in on these opportunities. Marlite is ready-made for alterations, additions, and structural improvement jobs...cuts installation time...reduces "in place" costs...provides more customer satisfaction.

Especially designed for every room in the home, Marlite plastic-finished paneling can solve your dry wall construction problems by providing economies all along the line, and by offering your customers beautiful, maintenance-free interiors. Planks, Blocks, large Panels, new hollow-core Korelock in distinctive Loewy colors, wood and marble patterns give you the widest possible flexibility of design. This winter and in 1957, make the most of Marlite for profitable residential remodeling. Consult your building materials dealer, refer to Sweet's File, or write Marlite Division of Masonite Corp., Dept.1003, Dover, Ohio.

that's the beauty of Marlite® plastic-finished paneling

MARLITE IS ANOTHER QUALITY PRODUCT OF MASONITE® RESEARCH
How to do it better...
(Continued from page 229)

paint spray nozzles. The needle is broken off short and inserted in place of the lead in the pencil. It is stronger and sharper than wire, and will not bend.
Ernest Miller, Lansing, Mich.

**Leak insurance for gutters**
Wherever two pieces of wooden gutter are butted or mitred together, there is a strong probability that a leak will develop during the life of the house. Here is a way of joining that should minimize this chance. While galvanized steel would work, copper or aluminum, being rust-proof, will last longer.
J. O. Baker, McKeesport, Pa.

Gentlemen:

Your August, 1956 issue of American Builder carried a letter... suggesting an abrasive cutting wheel should be notched around the edges when it became glazed. Supposedly, this operation would allow the blade to “retain its original speed.”

The publishing of the letter in American Builder gives the impression that all abrasive blades when used on cinder blocks or masonry glaze over. Actually, the problem is one of using a blade too hard for the material. The solution is not only costly, but dangerous.

In our 20 years of experience, as the manufacturer who created and developed masonry cutting, we have learned that direct assistance to the users of abrasive blades, with up to the minute blade recommendations, is the best method to enable these users to get the right blade for the job...

Sincerely,
Don Lowery, Advertising Mgr.,
Clipper Manufacturing Co.

With Arco Shadow Texture checking doesn’t bother

General Homes...

ANY BUILDER CAN TAKE ADVANTAGE OF PRACTICAL PLYWOOD INTERIOR CONSTRUCTION

FREE

THE ARCO COMPANY
7001 S.E. Seventh Ave., Cleveland 13, Ohio

Gentlemen:
Please send information on:
[ ] Shadow Texturing Trowel [ ] Ripple Texture Tool
[ ] Clipper Spraying Kit

NAME ____________________________
COMPANY ____________________________
ADDRESS ____________________________
CITY ___________________  STATE ___________________
**Attic fan: where does it operate efficiently?**

**QUESTION:** I have difficulty in convincing my clients on the idea that an attic fan works better in the kitchen than in the hall. For one thing, it exhausts the warm air from appliances. Also it confines odors to the kitchen. Do you concur with me? What reasons can I advance?

**ANSWER:** Fans are ordinarily placed in a central location such as the hall so that they will not have to pull air through the whole house. Your second plan is therefore more efficient than the first. More uniform air circulation is obtained by hall placement. Kitchen odors should be taken outdoors rather than into the attic. This is best done with an additional fan.

**J. W. Cauthen**
*Augusta, Ga.*

---

**Tree flashing**

**QUESTION:** We have a job where the customer wants a tree enclosed in a flat roof. We would like to know what material to use and what method of flashing is best.

**ANSWER:** We suggest you use zinc or copper flashing. Slit the bark of the tree and insert the flashing under the bark, using tar or roofing cement as an adhesive.

**Erwin E. Fabel**
*Wheaton, Minn.*

**Sway braces for apartment**

**QUESTION:** I have a 60 x 30 two-story apartment which sits on three rows of pilings that are twelve feet high. How can I prevent it from swaying in a strong wind?

**ANSWER:** Start by placing 1 x 6 diagonal braces at all four corners of the building. If this doesn't stop the movement, then brace the pilings in the same way. Use 2 x 6's in the latter case.

**J. Brown**
*Audubon, N. J.*

---

**Wet paint pops up again**

**QUESTION:** We take issue with your answer in the August "Ask the Experts" column in which you say there is no such thing as a wet paint. For your information, Koton and other paints have been established by scientific tests and approved by the American Hotel Association. The basic resin ingredients were developed 30 years ago on the continent and have proven durability.

**ANSWER:** Nuff said Lab and testing data available to those still skeptical.

**Embree Mfg. Co.**
*Elizabeth N. J.*

**Cardinal Bldg. Materials Co.**
*Evansville, Ind.*
**LONG-TERM LIFE INSURANCE FOR EVERY HOUSE YOU BUILD**

Houses that "breathe" well through every season are protected against the destructive work of condensation, dampness and heat-accumulation. Gold Bond Aluminum Louvers and Ventilators are available in a variety of sizes and styles, designed to help you solve any house-ventilation problem.

Gold Bond's Adjustable Louver fits 4-12 through 12-12 pitch—a greater range than any other adjustable louver. It's an integrated unit—that can't come apart. The Fixed Louver, with an exclusive design that gives permanent and rattle-free installation, is ideal for attic fans.

The Flush Flange Type is quickly installed in frame, brick or veneer walls. The Recessed Flange Type needs no wall framing—built for your new construction or residing jobs.

Use Gold Bond Roof Ventilators for shingled roofs of any pitch...and supplement ventilation in roof or attic wall with Wall and Under Eave Ventilators.

Foundation Ventilators are available with or without dampers—they can replace a standard concrete block or be attached to ends of wood-joists in poured concrete foundations.

For more details on how Gold Bond's full louver line means full dampness-protection for you, write National Gypsum Company, Dept. AB-106, Buffalo 2, N. Y.

---

**ADJUSTABLE LOUVERS** — 7 sizes up to 92" base, from 4 to 8 vanes.

**ROOF VENTILATORS** — 3 sizes. Fit shingled roofs of any pitch.

**WALL AND UNDER EAVE VENTILATORS** — For under eaves, cornices or soffits.

**FOUNDATION VENTILATORS** — Fit standard 16"x8" block opening.

---

ALL louvers and ventilators furnished with FHA-required 8-mesh aluminum screen and framed from .025" aluminum except Foundation Ventilators which are die-cast aluminum.

**ALUMINUM LOUVERS AND VENTILATORS**

**NATIONAL GYPSUM COMPANY**

---

OCTOBER 1956
“The Heatilator Fireplace will uphold your reputation as a dependable builder”

Home Owners Prefer It... 3 to 1!

The builder with a reputation to maintain won’t risk it on anything but proved materials. He knows that the Heatilator Fireplace has been thoroughly proved over 30 years in 3 out of 4 homes with heat-circulating fireplaces—more than can be claimed by all other units combined. Here’s why...

The Heatilator Fireplace Unit...
...has lived up to every sales claim made for it... there are more Heatilator Fireplaces in use to prove those claims than all other makes combined.

...has kept in step with progress over the years. It has been steadily improved for more efficient operation. It is the only unit specifically designed for today’s modern homes.

...is the only fireplace unit with a positive Pressure-seal Damper. By sealing off the chimney air-tight, it eliminates costly loss of heat in winter and of cooled air in summer.

...is sturdily constructed with fully welded seams throughout and a one-piece boiler plate firebox designed to last under even the severest usage.

Build with the Fireplace Unit That Builds Your Reputation
Heatilator Inc., 6210 E. Brighton Ave., Syracuse 5, N. Y.

Ask the Experts...
(Continued from p. 232)

Floor board insulation
QUESTION: Is there any benefit from installing some type of insulation under the floor boards of a crawl space? What type do you recommend?
W. Rulon Lee
corvallis, Ore.

ANSWER: Use either mineral wool or glass fiber insulation installed in the manner shown. Any tears in the vapor barrier should be repaired by adding an extra piece of barrier material. In place of chicken wire you can use building paper and wood strips to support insulation.

Foil on top of sheathing
QUESTION: I have seen aluminum siding being applied on homes around here. Does foil go over the sheathing first before the siding is applied? Or should I use a more vapor permeable building paper instead?
James Stockman
South Schodack, N. Y.

ANSWER: Foil is not absolutely necessary but it does add insulation and also acts as a good vapor barrier. It should be applied to the sheathing first, in the same manner as ordinary building paper.

Floor spray to stop shrinking
QUESTION: Since my flooring was laid directly on joists without building paper, it is subject to considerable shrinking and swelling. It is sealed and waxed on the top side; I feel that if I sprayed the underside with a sealer it would help. What do you suggest?
Frank A. Helstrom
Endicott, N. Y.

ANSWER: By spraying a sealer (or spar varnish) you may be able to stop some of the shrinkage. But wood absorbs moisture through the end grain principally, which you could reach only partially with a spray coating.
(Continued on p. 236)
The magnificence of real quarried Indiana Limestone Veneer is one of the best sales incentives you can build into any house. It not only adds that spark of glamor for which every prospect is looking, but it increases your profits as well. No other building material brings the builder greater return per dollar spent. No other building material gives the buyer greater value per dollar invested. And no other building material is able to add so much to your reputation now — and for the future.

Follow the lead of thousands of builders all over the country who have learned that Limestone adds Distinction to any design.

MAIL COUPON TODAY

INDIANA LIMESTONE INSTITUTE
Dept. AB-106, Bedford, Indiana

YES, send me the free colorful brochures now available:

☐ “INDIANA LIMESTONE — When You Build a Home”
☐ “INDIANA LIMESTONE — When You Build a Church”

Faster Service—Reduced Shipping Costs —Write today to one of the Warren Plants, strategically located across the country, for more information about Warren Folding Doors.

See Sweet’s Catalog

WARREN SHADE CO., INC.
Dept. 1A
2905 E. Hennepin— Minneapolis, Minn.
917 Bransten Road—San Carlos, Calif.
**Architectural Porcelain Enamel by National**

Whether for new construction or modernization, it’s hard to beat the versatility, beauty, permanence and economy of National Porcelain Enamel Panels. They’re weatherproof, can’t fade, require a minimum of upkeep, and are furnished in any color, size and style to meet individual specifications.

**National and Columbia Weatherstrip**

Here’s one way you can be sure your customers get the most for their building dollar—specify National weatherstrip products for all the windows and doors. National makes a complete line of metal weatherstripping, moldings and thresholds—all pre-machined, ready for simple, speedy installation.

**“Tripl-Tite” Aluminum Siding**

Furnished with or without insulation backing board, Tripl-Tite Aluminum Siding is light, easily handled, and simple to install. Unique 3-Point Interlock design eliminates time-consuming leveling and assures a firm, weathertight seal that won’t rattle. Available in six beautiful baked-on enamel colors.

**Write today for complete details!**

Executive Offices:
2 Gateway Center,
Pittsburgh, Pa.

Manufacturing Plants:
Canonsburg and
Carnegie, Pa.

Members: Porcelain Enamel Institute—Weatherstrip Research Institute

---

**Ask the Experts ...**

(Continued from page 234)

**Bath house**

**QUESTION:** Will a 12 x 60 concrete block bath house be large enough to accommodate from 150 to 200 bathers? Our local Lions Club is considering building one and would greatly appreciate any information you can give.

Elmer Jarvi
Ishpeming, Mich.

**ANSWER:** In our opinion this size is large enough, but the size of the locker must also be considered. You would be wise to consult a local architect for plans and specifications.

**Wants insulation data**

**QUESTION:** I am going to build a few homes in northern Florida for retired people. I am interested in an insulation that will not become infested with termites. What do you recommend?

Ernest Fairbanks
Palos Park, Ill.

**ANSWER:** First make sure that termites can’t reach the insulation. Use a good metal termite shield (not metal coated paper) and make sure that there are no vertical cracks in the shield. As for insulation, the aluminum accordion-fold type is recommended.

**Terrazzo stains**

**QUESTION:** We recently finished a terrazzo installation but were later informed that brownish cement stains were showing through. We would like to know what can be done?

Edward Fendt
Flushing, L. I.

**ANSWER:** It is very likely that you have either an asphalt, oil or tar base in your aggregate. Or it may contain iron which is rusting through. We suggest you contact the National Terrazzo & Mosaic Assoc., 711 14th St. N. W., Washington 5, D. C.
PUT AN END TO "TOSS-UP" SALES

Dodge Reports on new construction help take the "chance" out of selling

In the field of new construction, making a sale is possible only after someone has decided to build. After that, it's no more than a "toss-up" that you will get the order unless you know where the sale can be made, on whom to call and when! Dodge Reports give you this sales-getting information. With Dodge Reports you'll know in advance who's building what and where, and when to make your bid for the business— you'll know the man to see, and when to see him. Furthermore, when you get Dodge Reports, you get more than routine advance information—you get the fastest, most complete construction news service you can economically use. Here's why ...
CONVENTION CALENDAR... 1956


Oct. 25-Dec. 15: Home Builders of Palm Beach County, P. O. Box 667, Palm Beach, Fla. Parade of Homes; Village of North Palm Beach. R. M. McClintock, chairman.


Oct. 28-Nov. 4: N. J. Home Builders, Military Park Hotel, 16 Park Place, Newark, N. J. Convention; Claridge Hotel, Atlantic City. John S. Wright, manager.

Nov. 4-11: Mid-Fla. Assn. of Home Builders, 409 Virginia Drive, Orlando, Fla. Parade of Homes; Tanglewood, Orlando. Rupert Rumpf, Jr., chairman.

Nov. 5-10: Grand Rapids Home Builders, 1565 Plainfield N., Grand Rapids, Mich. Do-It-Yourself and Building Improvement Show; Civic Auditorium. W. H. Blackall, chairman.

Nov. 5-10: Building Contractors of Calif., 1571 Beverly Blvd., Los Angeles 26. 33rd Annual Congress; Hotel del Coronado, Coronado, Calif. Eurnani Bernardi, Harry Stewart, chairmen.


Nov. 7-11: N. J. Home Builders, Military Park Hotel, 16 Park Place, Newark, N. J. Convention; Claridge Hotel; Atlantic City. John S. Wright, manager.
Fabrow WINDOW WALL FRAMES

Are Structurally
LOAD BEARING

Cut labor and material cost!

SOUNDER ENGINEERING
Strong load bearing Douglas Fir Fabrow Frames cut on the job labor costs.

69 MODULAR Styles in beautiful natural wood

Turn your designs into dollar signs—narrow mullions give larger glass areas.

Sounder engineering, superior design, more homeowner comfort, plus quicker installation, give Fabrow windows more 'buy appeal.' Special sizes: trapezoid, cathedral to fit every plan.

Wire, Write or Phone KL 9391
or send coupon to:

FABROW MANUFACTURING, INC.
7208 Douglas Road, Toledo, Ohio

RUSH NEW DATA on FABROW LOAD BEARING WINDOWS
Manufacturers' news

Construction of new plants for expanded operations figure in the plans of four companies. Stylon Corp. has announced its fourth plant is being constructed in Wayne, N. J.; Armco Steel Corp.'s new plant is under way at Middletown, Ohio; Inland Homes Corp. is planning a new factory at Hanover, Pa. and has let contracts for two expansions in Piqua, Ohio; and Woodco Corp. reports its new national headquarters for the E-Zee Loc division will be located in Jacksonville, Fla. Harbor Plywood Corp. has begun manufacture of its Harborite overlaid fir plywood in a new low cost grade.

Fourth annual convention of Architectural Woodwork Institute is slated for Chicago, Oct. 18-19...

Paul R. Rutherford has been named president of Clay Sewer Pipe Assn., Inc., succeeding Maurice Maskrey, president since 1947...

Leonard Kirsten has been appointed director of public relations for Structural Clay Products Institute... Society of Plastics Engineers, Inc. will hold its 13th annual national technical conference Jan. 16-18 in St. Louis...

Irving M. Herrmann has been elected president of the newly formed Midwest Job Galvanizers Assn.

Frank J. Finn has been appointed manager of the Salem plant of the Yale & Towne Manufacturing Co. which also has appointed Walter S. Hottenroth to the new position of vice president in charge of technical sales... Walther H. Feldmann executive vice president, Worthington Corp., has been elected a member of the board of directors...

Grover P. Mandenfield has been promoted to vice president of Woodbridge Clay Products Co. Pittsburgh Plate Glass Co. has appointed Richard P. Bell as assistant to the president...

James A. Sloan, son of the founder of Sloan Valve Co., has been elected president, succeeding Irving H. Russell.

Hupp Corporation has elected Fred W. Hottenroth to the new position of vice president in charge of technical sales...

Walther H. Feldmann executive vice president, Worthington Corp., has been elected a member of the board of directors...

Grover P. Mandenfield has been promoted to vice president of Woodbridge Clay Products Co. Pittsburgh Plate Glass Co. has appointed Richard P. Bell as assistant to the president...

Hupp Corporation has elected Fred W. Hottenroth to the new position of vice president in charge of technical sales... Walther H. Feldmann executive vice president, Worthington Corp., has been elected a member of the board of directors...

Grover P. Mandenfield has been promoted to vice president of Woodbridge Clay Products Co. Pittsburgh Plate Glass Co. has appointed Richard P. Bell as assistant to the president...

James A. Sloan, son of the founder of Sloan Valve Co., has been elected president, succeeding Irving H. Russell.

Frank J. Finn has been appointed manager of the Salem plant of the Yale & Towne Manufacturing Co. which also has appointed Walter S. Hottenroth to the new position of vice president in charge of technical sales... Walther H. Feldmann executive vice president, Worthington Corp., has been elected a member of the board of directors...

Grover P. Mandenfield has been promoted to vice president of Woodbridge Clay Products Co. Pittsburgh Plate Glass Co. has appointed Richard P. Bell as assistant to the president...

James A. Sloan, son of the founder of Sloan Valve Co., has been elected president, succeeding Irving H. Russell.

Hupp Corporation has elected Fred W. Hottenroth to the new position of vice president in charge of technical sales... Walther H. Feldmann executive vice president, Worthington Corp., has been elected a member of the board of directors...

Grover P. Mandenfield has been promoted to vice president of Woodbridge Clay Products Co. Pittsburgh Plate Glass Co. has appointed Richard P. Bell as assistant to the president...

James A. Sloan, son of the founder of Sloan Valve Co., has been elected president, succeeding Irving H. Russell.

Attractive wood-shake pattern and pronounced, horizontal shadow lines.

Made of asbestos fiber and Portland cement... Practically indestructible! Never need protective paint.

Treated with silicone to make water-borne dirt run right off.

K&M "NU-GRAIN" ASBESTOS SIDING SHINGLES

Check SWEET'S LIGHT CONSTRUCTION FILE. See your K&M distributor or write directly to us. Information also available on K&M Roofing Shingles.

Keasbey & Mattison Company • Ambler • Pennsylvania
Unlawful to discriminate against building material

By JOHN F. McCARTHY
Attorney-at-law

It is unlawful for municipal authorities to discriminate against the use of a particular building material. This was a recent decision of a Circuit Court in Michigan in a case entitled University Custom Homes, Inc. v. Township of Redford. There the material involved was gypsum wallboard.

Ordinance No. 30 of the Township of Redford, Michigan, made it unlawful for any building to be constructed where gypsum wallboard was used which contained less than $\frac{3}{4}$-inch thickness. The apparent purpose of the law was to impede dry wall construction.

The University Custom Homes, Inc. presented plans and specifications, and asked for permits, for homes to be constructed with $\frac{1}{2}$-inch gypsum board. The building commissioner of the Township of Redford refused to issue the permits, relying on Ordinance No. 39. Thus the litigation referred to followed.

Witnesses for the plaintiff included, among others, Rodney E. Lockwood, President of the Builders Association of Metropolitan Detroit and past President of the National Association of Home Builders, and Joseph P. Wolfe, Commissioner of the Department of Buildings and Safety Engineering of the City of Detroit and past President of the Building Officials Conference of America.

They testified that $\frac{1}{2}$-inch gypsum wall board was adequate for the purpose and that $\frac{3}{4}$-inch board was unnecessary.

They gave as their opinion, based on their experience, that it was safe from the viewpoint of public health and public safety.
WE COULD WRITE YOU A CHECK... OR HAND YOU THE CASH... INSTEAD

We’re offering—FREE—“How to Cut Chimney Costs—For Bigger Building Profits”! An invaluable booklet—packed with the latest, job-tested ways to eliminate costly operations... reduce labor time... cut your costs and increase your profits.

It’s actually as good as money in your pocket! Write for your copy today.

AIR-JET® IS THE PROFIT MAKING CHIMNEY! SAVES YOU:

- Time ... Installs in one man hour.
- Labor ... Comes preassembled.
- Money ... No special tools needed.
- Space ... Enough for a linen closet.
- Worry ... UL approved. VA and FHA accepted.

"LOOK FOR THE GENERAL WHEREVER YOU BUY"

GENERAL PRODUCTS®
COMPANY, INC.
Dept. AB-2
FREDERICKSBURG, VA.

7 BESSLER
DISAPPEARING STAIRWAY MODELS TO MEET EVERY NEED!

AS LOW AS $53.00 LIST
Generous Trade Discounts!
Write for Free Catalog and Wall Chart

BESSLER DISAPPEARING STAIRWAY CO.
1900-A East Market St., Akron, Ohio

Bessler Disappearing Stairway Co., 1900-A East Market St., Akron 5, Ohio
☐ Please send free Catalog, Wall Chart, Prices and Discounts

Name _____________________________
Address ___________________________
City ___________________ Zone ________ State ________

OCTOBER 1956
Today's house, with its large glass areas and tight exterior construction, affords little opportunity for the house to "breathe." While progress in the building industry has brought improvements and conveniences, it has also developed problems inherent in proper and economical cooling, heating and ventilating.

Some of these problems can be eliminated effectively with adequate ventilation. The wide range of metal ventilator louvers, with sizes and types for every purpose, are available to the builder, and if he follows the rules as outlined on these pages he will produce satisfactory results.

**VENTILATION FOR SUMMER COMFORT**

All insulated buildings should be provided with attic ventilation. In summer, proper vents let out the accumulation of air heated by the sun on the roof surfaces and thus greatly increase summer comfort. Such vents, of course, should be above the insulation and should be open at all times.

Since hot air rises the ideal method of ventilating an attic space is to have the openings located both at the highest and lowest points of the space thus insuring a constant movement of air.

The sun radiates so much heat in summer that the outer surfaces of walls, directly exposed, may get as
hot as 120° even though the surrounding air is much cooler. Exterior surfaces of roofs may reach a blistering 140° or even higher because they catch the sun's rays more directly than do vertical walls. A free circulation of air in the attic area is a “must” in order to permit the escape of hot air replacing it with cooler outside air.

VENTILATION FOR CONDENSATION CONTROL

Just as moisture will collect on the outside of a glass filled with ice water, so will walls and roofs collect moisture when water vapor passes through the interior finish materials of the home and condenses on the inner surface of the colder walls. Such condensation results in wet insulation, swelling of the sheathing, curling of the roof shingles, discoloration of interior finishes and exterior paint peeling.

Research has proven that this condensation problem can be controlled through the use of vapor barriers on the inside of the outside walls and by providing adequate ventilation in attic spaces. Ventilation is effective because warm air carries more water vapor than cold air. Through ventilators this warm air can leave the house, conveying more water vapor, than is brought in by the cold air which replaces it.

CRAWL SPACES

Excessive dampness in crawl spaces can result either from leakage of rain inward, from the outside, or from condensation due to lack of air circulation on the inside of the dwelling.

Often a closed unheated home, in a warm climate, becomes damp on the inside. Weather changes contribute to this result. When a crawl is used without proper ventilation, the damp earth evaporates moisture which is carried upward and condenses on material in the upper part of the house.

Ventilator openings — at least four, one at each corner of the building—should always be used in crawl spaces so as to insure a free passage of air from the outside. These openings should be placed as high as possible in the walls for greatest efficiency. A good rule of thumb to follow is: two square feet of free area ventilation for every one hundred feet of foundation wall.

VENTILATOR AREAS

To avoid confusion in the estimating of ventilator sizes a definite understanding should be made between “gross area” and “free area,” or “net area.”

The “free” or “net” area of a ventilator is the total unobstructed clear area of the ventilator through which the air can move. This area is arrived at when such obstructions to air, such as the louvers, screen or grilles have been deducted from the total area of the ventilator.

The “gross area” is the total area of the ventilator including louvers, grilles or screens—the solid material which obstructs the flow of air.

ACKNOWLEDGEMENT

Much of the data contained in this article was furnished by the Metal Ventilator Institute, 22 West Monroe St., Chicago 3, Ill. One of the objectives of the Institute is to develop a seal of approval which will clearly state the net free ventilating capacity of ventilators after all obstructions are accounted for.
FHA REQUIREMENTS
Provide cross ventilation for all spaces between roof and top floor ceiling with corrosion-resistant 8-mesh screened louvers as follows:

ROOFS WITH SLOPES 2 IN 12 OR GREATER, 1/300th of the horizontal projection of the roof area over each space. One-half the required ventilation shall be in the upper part of the ventilated space as near the high point of the roof as practicable.

ROOFS WITH SLOPES LESS THAN 2 IN 12, 1/150th of the horizontal projection area over each space unless a complete, continuous vapor barrier is provided, in which case use 1/300th.

FREE AREA VENTILATION GUIDE

<table>
<thead>
<tr>
<th>WIDTH (IN FEET)</th>
<th>20</th>
<th>22</th>
<th>24</th>
<th>26</th>
<th>28</th>
<th>30</th>
<th>32</th>
<th>34</th>
<th>36</th>
<th>38</th>
<th>40</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>192</td>
<td>211</td>
<td>230</td>
<td>250</td>
<td>269</td>
<td>288</td>
<td>307</td>
<td>326</td>
<td>346</td>
<td>365</td>
<td>384</td>
<td>403</td>
</tr>
<tr>
<td>22</td>
<td>211</td>
<td>232</td>
<td>253</td>
<td>275</td>
<td>296</td>
<td>317</td>
<td>338</td>
<td>359</td>
<td>380</td>
<td>401</td>
<td>422</td>
<td>444</td>
</tr>
<tr>
<td>24</td>
<td>230</td>
<td>253</td>
<td>276</td>
<td>300</td>
<td>323</td>
<td>346</td>
<td>369</td>
<td>392</td>
<td>415</td>
<td>438</td>
<td>461</td>
<td>484</td>
</tr>
<tr>
<td>26</td>
<td>250</td>
<td>275</td>
<td>300</td>
<td>324</td>
<td>349</td>
<td>374</td>
<td>399</td>
<td>424</td>
<td>449</td>
<td>474</td>
<td>499</td>
<td>524</td>
</tr>
<tr>
<td>28</td>
<td>269</td>
<td>296</td>
<td>323</td>
<td>349</td>
<td>376</td>
<td>403</td>
<td>430</td>
<td>457</td>
<td>484</td>
<td>511</td>
<td>538</td>
<td>564</td>
</tr>
<tr>
<td>30</td>
<td>288</td>
<td>317</td>
<td>346</td>
<td>374</td>
<td>403</td>
<td>432</td>
<td>461</td>
<td>490</td>
<td>518</td>
<td>547</td>
<td>576</td>
<td>605</td>
</tr>
<tr>
<td>32</td>
<td>307</td>
<td>338</td>
<td>369</td>
<td>399</td>
<td>430</td>
<td>461</td>
<td>492</td>
<td>522</td>
<td>553</td>
<td>584</td>
<td>614</td>
<td>645</td>
</tr>
<tr>
<td>34</td>
<td>326</td>
<td>359</td>
<td>392</td>
<td>424</td>
<td>457</td>
<td>490</td>
<td>522</td>
<td>555</td>
<td>588</td>
<td>620</td>
<td>653</td>
<td>685</td>
</tr>
<tr>
<td>36</td>
<td>346</td>
<td>380</td>
<td>415</td>
<td>449</td>
<td>484</td>
<td>518</td>
<td>553</td>
<td>588</td>
<td>622</td>
<td>657</td>
<td>691</td>
<td>726</td>
</tr>
<tr>
<td>38</td>
<td>365</td>
<td>401</td>
<td>438</td>
<td>474</td>
<td>511</td>
<td>547</td>
<td>584</td>
<td>620</td>
<td>657</td>
<td>693</td>
<td>730</td>
<td>766</td>
</tr>
<tr>
<td>40</td>
<td>384</td>
<td>422</td>
<td>461</td>
<td>499</td>
<td>538</td>
<td>576</td>
<td>614</td>
<td>653</td>
<td>691</td>
<td>730</td>
<td>768</td>
<td>806</td>
</tr>
<tr>
<td>42</td>
<td>403</td>
<td>444</td>
<td>484</td>
<td>524</td>
<td>564</td>
<td>605</td>
<td>645</td>
<td>685</td>
<td>726</td>
<td>766</td>
<td>806</td>
<td>847</td>
</tr>
<tr>
<td>44</td>
<td>422</td>
<td>465</td>
<td>507</td>
<td>549</td>
<td>591</td>
<td>634</td>
<td>678</td>
<td>718</td>
<td>760</td>
<td>803</td>
<td>845</td>
<td>887</td>
</tr>
<tr>
<td>46</td>
<td>442</td>
<td>486</td>
<td>530</td>
<td>574</td>
<td>618</td>
<td>662</td>
<td>707</td>
<td>751</td>
<td>795</td>
<td>839</td>
<td>883</td>
<td>927</td>
</tr>
<tr>
<td>48</td>
<td>461</td>
<td>507</td>
<td>553</td>
<td>599</td>
<td>645</td>
<td>691</td>
<td>737</td>
<td>783</td>
<td>829</td>
<td>876</td>
<td>922</td>
<td>968</td>
</tr>
<tr>
<td>50</td>
<td>480</td>
<td>528</td>
<td>576</td>
<td>624</td>
<td>672</td>
<td>720</td>
<td>768</td>
<td>816</td>
<td>864</td>
<td>912</td>
<td>960</td>
<td>1008</td>
</tr>
</tbody>
</table>

HOW TO USE FREE AREA VENTILATION GUIDE
Using length and width dimensions of each rectangular or square attic space, find one dimension on vertical column, the other dimension on horizontal column. These will intersect at the number of square inches of ventilation required by FHA to provide 1/300th. Multiply this required ventilation by two for roof slopes of less than 2 in 12 without vapor barrier. Remember — 1. Include overhang of roof area in measurement of attic areas. 2. At least 50% of the required ventilation must be in the highest part of the roof practicable. 3. Provide cross ventilation for each separate space.

Attic or spaces between roof and top floor ceiling.
1. Provide effective cross ventilation for each separate space between roof and top floor ceiling by means of corrosion resistant screened ventilators.
   A. All ventilators shall be designed to provide adequate weather protection under normal conditions.
   B. All soffit or under-eave ventilating openings shall be provided with ventilators having adequate fins throughout the area of the ventilator running parallel to the adjacent side wall to resist water and snow infiltration.
2. Ventilation area
   A. All ventilators shall bear the manufacturers or makers certification of the net free ventilating area which shall remain affixed until after inspection. The net free ventilating area shall be the sum total of the orifices after all restrictions have been deducted.

3. Materials
   A. All materials shall be corrosion resistant.
   B. All screening shall be 8 mesh per inch having a maximum wire diameter of .013

4. The net free ventilating area for each separate space shall be less than:
   A. For roofs with slope 2 in 12 or greater, 1 sq. in. for each 2 sq. ft. of horizontal projection of the roof area over each space except as noted after "C" below.
   B. For roofs with slope less than 2 in 12, 1 sq. in. per sq. ft. of (Continued on p. 248)
the all New DEEP HARDENED
BEVEL SHARPENED HARD-TIP SAW BLADE

the HARD-TIP saw blade that can be RE-SHARPENED in minutes... and saves you 50% to 60% on sawing costs. Stays sharp 5 to 7 times longer than conventional blades. DEEP HARDENING now gives you many of the qualities of an expensive carbide tipped saw. We also manufacture a complete line of conventional, carbide and special saws. Write for new catalogue #22.

C—combination saw M—cross cut and mitre P—planer

HEINEMANN SAW CORPORATION
CANTON, OHIO, U. S. A.

Fasten to Concrete IN SECONDS

Timberlock

SPLIT RING CONNECTORS and FRAMING ANCHORS
engineered, tested and approved

COST LESS

Omark HAMMER DRIVE

Omark Hammer drive fastening tool sets hardened steel drivepins (headed or threaded) into concrete, mortar, concrete block and steel. All you need is a hammer!

It's this easy: Insert drivepin in tool, place tool against work surface and strike driving ram head 3 or 4 times with a hammer—fastening is made. It's strong and secure. Drives 32 sizes and types of pins. Call for a demonstration.

Attractive Dealerships Open write to Omark Industries
5001 S. E. Johnson Creek Blvd., Portland 6, Ora.
horizontal projection of the roof area over each space unless a completely continuous vapor-barrier is provided; in which case 1/2 in. per sq. ft. of the projection of the roof area over each space is required except as noted after "C" below.

C. For roofs with slope greater than 2 in 12, at least 1/2 of the required ventilating area shall be in the upper part of the ventilated space as near the high point of the roof as practicable.

Baselessness spaces

1. No foundation wall vents are required for ventilating a basementless space one side of which, exclusive of structural supports, is open to a ventilated basement, provided the total area of ventilating openings in the exterior walls of the basement is at least 1 in. per sq. ft. of the combined area of the basementless space.

2. When the floor construction above a basementless space is of wood or metal, and the space is not open to a ventilated basement as described above, provide:

A. At least four foundation wall vents located near the corners of the basementless space, having an aggregate free ventilating area equal to 1/160 of the ground area of the basementless space in square feet, or;

B. Ground surface treatment in the form of a layer of smooth asphalt roofing weighing at least 55 lbs. per 108 sq. ft. lapped at a minimum of 2 in. plus at least two foundation wall vents, located for effective cross ventilation, having an aggregate free ventilating area of not less than 10% of that required in 2A.

3. In each vent opening install a corrosion resistant grill screened with corrosion resistant 8 mesh screening having a maximum wire diameter of .013. All ventilator materials shall be corrosion resistant.

4. Ventilation Area

A. Prefabricated ventilators shall bear a stamped certification of the net free ventilating area calculated in accordance with the following formula: "Net free ventilating area of any foundation ventilator shall be the unobstructed screen area less 19%."

B. Job site fabricated ventilation shall be calculated on the above formula.
Mount the quarter-yard hydraulically operated HOPTO on any one and a half ton or larger truck! Give a good, non-skilled worker a couple of hours to familiarize himself with the four simple hydraulic controls. Then turn HOPTO loose on your toughest job. You'll be profitably amazed at the amount of work done by this fast-cycling, 200° swing unit! Hydraulic outriggers quickly stabilize HOPTO with a firm operating base. Heavy-duty HOPTO bites into blacktop, roots and other pick and shovel obstructions keeps schedules rolling!

**DOES THE WORK OF 16 MEN ON 101 JOBS!**

HOPTO digs 11' deep, loads in highest truck. Special dipper stick extension tilts bucket thru 180°, digs straight-sided, square-cornered holes! Here's the hired man that never gets tired or fired! HOPTO is the low-cost, heavy-duty unit you can mount on a truck already 'written off' and have a mobile shovel, crane at lowest equipment investment!

A wide variety of backhoes and shovel buckets adapts HOPTO to your exact requirements!

**CHOICE OF MODELS**

HOPTO is available in two additional models for truck mounting. Units for wheel or track-type tractor mounting as well as complete wheel and track-mounted units, a power take-off and a self-powered trailer model. Available with 24 G.P.M. or 36 G.P.M. hydraulic system.

Write for complete information and name of nearest dealer

BADGER MACHINE CO.
WINONA, MINNESOTA • DEPT. 23
SYNTRON
CONCRETE
VIBRATORS
for uniform compacting and settling of concrete...
Syntron Concrete Vibrators are designed to save time and labor in settling and finishing concrete. 

**Form Vibrator Models**—clamp directly to wall forms—Quick acting vise clamp make these Vibrators easily adaptable to many applications.

**Flexible Shaft Mass Vibrators** are for larger concrete mass settling such as dams, bridges, and piers, etc. Available with gasoline or electric motors.

**Electromagnetic Vibrating Floats** take the hard work out of floating concrete, make stronger denser concrete.

Other SYNTRON Equipment of proven dependable Quality

**ELECTRIC SAWS**
Belt driven to insure fast, easy cutting of wood, plaster board, plastic or concrete, no bucking or jerking just smooth high speed power cutting.

**ELECTRIC HAMMERS**
Fast, easy cutting, chipping or drilling in concrete. Electromagnetic design 3600 powerful blows per minute. Automatic rotation of bit for drilling.

**GASOLINE HAMMERS**
100% Self-Contained. Drill, dig, cut, tamp. No need for compressor or accessories. Automatic rotation of drill bits.

MERCHANDISING...
(Continued from p. 81
weekend to close the sale. Then they ran full-page ads in the local papers. People who read the ads came out and saw all those sales being closed. It was very slick. They sold 400 houses that weekend.

Another popular feature which builders are finding helpful in merchandising is built-ins—the more the merrier—especially in higher-price houses.

Jack Zimmerman of Traverse City, Mich., for example, has two subdivisions at present. "No built-ins in the $9,000-$13,000 class," he points out, "but all they want in the $13,000-$21,000 class."

However, says Alyne Grant, Lake Charles, La.: "We get many young married couples from the nearby air base. We promote complete kitchens to them because if she likes it, he'll buy it. They go for push-button living."

Complains Carson Cowherd, Kansas City, Mo.: "Appliance manufacturers are really the best promoters in the industry. They have us buying $1,500 worth of their merchandising to put in our houses because people ask for it. Home builders can learn a lot from them."

Builders agree it's never too early or too late to be promotion-minded. To wit:

*The first visit* the prospect pays to the model house, John W. New, Salt Lake City, Utah, uses a camera that develops a picture in one minute.

"We take a shot of the prospect as he comes out of the model house and give it to him. Chances are he'll show the picture to his friends and, in a way, sort of half-commit himself to that particular house."

*To help clinch the sale,* Gordon P. Peterson, Kenmore, N. Y., actually tailors his houses ($14,000-$18,000) to the needs of his customers.

"We keep control of outside color schemes but let customers choose interior finishes, built-ins, colors, even alter dimensions of rooms somewhat."

*Moving in.* Once the sale has been made, David J. Sprout, Dayton, Ohio, sends men to help the customer pack and then move him in.

"We give the woman a floor plan and she marks where she
JAY announces white magic brand new kitchen fixtures

This new JAY creation for kitchen, bathroom and over-kitchen-sink, provides exceptional light output. Housewives prefer its simple construction, attractive appearance, ease of cleaning (without removing wired metal receptacle holder). Available in 3 sizes — 1 light, recommended lamp sizes; 75 to 200 Watts. Finish Chrome and White or Copper and White.

TO INSURE PROMPT DELIVERY JAY MAINTAINS WAREHOUSES IN: TORONTO, ONTARIO; CHICAGO, ILLINOIS; DENVER, COLORADO AND HOUSTON, TEXAS.

Send Today for Complete Catalog featuring the JAY LIGHTING COLLECTION Outstanding examples of Distinctive Design, Moderately Priced.

Write to JAY LIGHTING MFG. CO., Inc. Dept. ABIO 25 Quincy Street Brooklyn 38, N.Y.

for PROFIT MAKING IDEAS......it’s a must! 3rd ANNUAL “PRODUCTS IN ACTION” EXPOSITION at Chicago! Dec. 10 thru 13 A national product and equipment show for retail lumber dealers! Four full days, packed with action and discussion clinics! Get your registration in NOW! —Write:

NATIONAL RETAIL LUMBER DEALERS ASSOCIATION 18th and M Streets N.W. • Washington 6, D.C.
Shure-Set converts lost motion into profit

Every minute counts when one contractor moves in on the heels of another. Recently a leading contractor did a day's work in less than an hour. The time saved by Shure-Set turned loss into profit!

Where it once took three concrete nails to anchor a junction box, one Shure-Set drive pin now does it faster, holds more securely. Where drilling, bolting, chipping and plugging once delayed fastening jobs, now one man with Shure-Set can outdistance other crews. It is no longer necessary to go back and refasten loosened boxes. Shure-Set drives like a nail, holds like an anchor!

For every fastening assignment in mortar, concrete, light steel—Shure-Set does it easily. Uses no cartridge, just makes your hammer power more effective. For every contractor, it's a necessary companion tool for Ramset®, the powder-actuated fastening system.

Catalogs describing Shure-Set and Ramset are yours for the asking. Write for both today.
HANSEN ONE-HAND TACKER... CUT COSTS ON THIS JOB

You, too!
Can Cut Your Costs—Do A Faster, Better Job—with HANSEN

...TACKING
BUILDING PAPER

HANSEN—the Modern Way to do all kinds of tacking and fastening jobs—is easy to grip and operate. Designed to do a better tacking job—faster!

ZIP! ZIP! FAST AS YOU GRIP—HANSEN drives Tackpoints for installing insulation, hydron, metal lath, cornerite, building paper—and does many other tacking and fastening jobs.

CUTS COSTS! Light weight. readily portable. one-hand operation; rapid, positive driving action; balanced design: steady, on-the-job performance are features that insure economical operation and low-cost installation.

A BETTER JOB—FASTER! Accurate driving, with precision-made Hansen Staples, insures faster work without waste of time, steps or materials. Hansen holds 84 to 140 Tackpoints per strip. Staple sizes up to 1/2" length. Tackers in 36 models. Specify—buy—use HANSEN!

A. L. HANSEN MFG. CO.
5029 RAENWOOD AVE., CHICAGO 40, ILL.

ALLITH GARAGE DOOR HARDWARE

USE YOUR OWN OR ANY STANDARD DOOR

NO MAINTENANCE COSTS

SIMPLIFIED INSTALLATION

ADAPTABLE FOR ANY TYPE GARAGE

ALLITH hardware works with equal efficiency on either custom or mill-made doors. All working parts simple and sturdy—no springs to stretch or loosen. All hardware parts inside and protected from weather.

Unit shipped complete to the last screw. Quickly and easily installed. Standard set fits any opening up to 9' wide x 7½" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high. Write for details.

ALLITH PROUTY, INC.
DANVILLE
ILLINOIS
more who can be developed into first-rate salesmen. So the first consideration in sales training is the trainer himself, whether it's the builder or his sales manager.

In this phase of merchandising, builders recognize the importance of professional direction; they rely on specialists in sales management as well as market research, advertising, and sales promotion. And, where they can, they help themselves.

For instance, David J. Sprout, Dayton, Ohio, keeps an intercom system in his model houses, with the receiver in the sales office. The sales manager can tune in on any house and hear the salesmen deliver their pitch.

"It's helped save a lot of sales," says Sprout, "because sometimes the sales manager can run over and give the salesman a hand if he needs it. The salesmen don't resent being listened to; in fact, they tell us it has spurred them to sell better."

When it comes to paying salesmen, there are about as many ways as there are builders. Compensation may be as low as $40 a house or as high as $200 among tract builders, more for custom builders. Some pay a flat salary, others a commission (usually around 1 percent of the sale price). Still others pay salary plus commission, with all fringe benefits, including paid vacations.

One common problem involves fee splitting, when one salesman gets the prospect and another closes the sale. Here, too, arrangements vary; e.g., some builders pay a flat sum such as $25 or $50 to the man who closes, deducting this amount from the commission of the salesman who lined up the prospect.

Jacksonville's Frank C. Uible, has an interesting incentive plan: "We have six salesmen. We used to pay them a flat $100 a house. Several months ago we decided it would help to raise this to $200 a house. Well, we found that was a mistake. The men didn't work so hard. Now our sales manager's job is to keep the men hungry. So we've changed our payment arrangement. Instead of paying $200 a house, we pay $150 and put the remaining $50 into a kitty. After six months the three salesmen who have sold the most houses share in this kitty in proportion to their sales.”

---

**MERCHANDISING ...**

(Continued from page 252)

$159.50

(Continued from page 252)
Mix bigger yardage with a Jaeger

Get up to 15 extra yds. a day from the same labor with a Jaeger 3'2S Auto-Loader, the fastest half-bag mixer built, because you load as you mix and measure as you load. Power-shaker action charges drum in a flash; extra big bucket and flight blades mix thoroughly, discharge rapidly.

Pours 60 yds. a day with Jaeger 6S Speedline mixer. Mixer and 7 man crew (3 loading, 3 wheeling, 1 operating mixer) averaged a batch every 1 1/4 minutes pouring footers and floor slab. Famous “Skip Shaker” loader speeds batch into drum in 5 to 7 seconds. Discharge is just as fast. Criss-cross double mixing action assures uniform quality concrete.

See your Jaeger distributor or send for catalog.

THE JAEGER MACHINE CO., 521 Dublin Ave., Columbus 16, Ohio

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. Steate is general superintendent.

WINCO VENTILATOR COMPANY St. Louis, Mo.

WINCO SCREW ANCHORS

ALWAYS ASK FOR GENUINE

© MOLLY CORP. • DEPT. 2-00 • READING, PA.

CATALOGS AND ADDITIONAL INFORMATION ON FORMS SENT ON REQUEST.
Inside Story of Sales Success

Contemporary design accents figured glass entranceways in Frostwood Addition.

Sales Start at Doorway When Glass Greets Prospect

Continuing sales have proven to Fischer & Frichtel, St. Louis County builders, that today's home buyer is sold on contemporary design. And nothing is more modern than translucent glass. "Buying starts at the door", says Ed Fischer and "we found that Mississippi Bandlite helps dramatize the interior, set the stage for the sale".

Translucent glass floods interiors with flattering "borrowed light"... makes them appear larger, friendlier, more liveable. And glass adds an air of luxury, for it is modern, practical, beautiful. And glass is so easy to install and maintain. It eyes right and sells on sight!

Buyers want that "different look". See your nearby Mississippi distributor and select from a variety of patterns and surface finishes that can add extra sales appeal to your homes.

Mississippi Glass Company

88 Angelica St. New York Chicago

World's Largest Manufacturer of Rolled, Figured and Wired Glass

Ed. Tillman, Architect

LOW VOLTAGE miniature relay fits ordinary outlet box, replaces centrally located transformer in other systems.

SOLDERLESS CONNECTIONS and #18 bell wire make job of matching switch and relay wires easy. Unit uses 6 volts.

FIVE SWITCH CONTROL has standard size face plate which is screwed to plaster ring instead of a conventional box.

In their 330-unit Oceanside, L. I. development builders Ballin, Glicksman and Langfur installed a low voltage remote control system (Remcon) for under $75. The five-switch bedside control turns on lights in all parts of the house. The builders say it saves on roughing-in time for the electrician, who ordinarily requires about ten and one-half hours to do a house; with a Remcon system he can do it in about six hours.

Write today for free catalog. Address Dept. 34. Samples on request.
NEW HAR-VEY

Slide-A-Fold Doors provide beauty, permanence, accessibility.

Har-Vey Hardware gives added uses, new versatility to WOOD DOORS.

HARDWARE

MANY APPLICATIONS
- for extra convenience, beauty and accessibility
- Wardrobes • Cabinets • Bars
- Room Dividers • "His 'n Her" type closets • Linen Closets
- Irregular width Closets • Kitchen and Utility area "close-offs"; etc.

VARIETY OF DOOR MATERIAL
- Har-Vey Hardware enables you to use doors made of many different materials for slide-a-fold applications: Solid wood • hollow • plywood • woven wood strips in wood frames • plantation shutters—any framed screening, fabric, glass, or plexiglas, etc.

Low Cost • Panels from 5/8" to 1 1/4" are accommodated by standard Har-Vey hardware packaged sets—which list for $6.59, $7.59, $8.59 and $9.59.

Designed for new construction, to be built in the wall between studs. Gives interphone communication between master unit and any or all remote units. Master station includes fine AM radio and electric clock for automatic operation. Easy to install. Complete installation can be made in 30 minutes. Write for complete details and names of distributors.

Mercant builders report homes sell better when they feature Fire Hose Station, household form of the fire hose cabinet used in major structures. "Most sales appeal I can get for $40," says one.

Private builders and even remodeling contractors find this novel and practical product brings extra profit. "Anyone will pay $100 for Safety," one states. "Especially in areas where it cuts insurance cost."

Fire Hose Station is a steel cabinet not much bigger than an album of phonograph records. It can be recessed between studs or simply wall-hung. Inside is 25 to 75 feet of fire-type hose on patented quick-release rack. Adjustable nozzle is locked on; valve at other end connects to standard cold water line. Door can match wall. By the leading manufacturer of Interior Fire Protection Equipment since 1887...

W. D. Allen Manufacturing Co.,
Allenco Bldg., Room 720
566 W. Lake St., Chicago 6.

No New home is completely modern without

RADI-COM

Built-in radio and communication system

Cornerite Duo-Fast-ed up with the CT-859.

MANY OTHER USES
Send for the complete, money-saving story on fully guaranteed DUO-FAST STAPLE TACKERS.

Duo-Fast Gun Tacker simplifies ceiling tile job.

Duo-Fast Hammer Tacker speeds insulation work.

Home Builders! Save Time and Money with DUO-FAST Staple Tackers.

One Hand Does the Job.

Slips in 20 minutes • Lasts a lifetime
- Balanced weight distribution
- No lubrication needed

Send for information on Duo-Fast Tackers®

Easy to install. Complete installation can be made in 30 minutes. Write for complete details and names of distributors.

Home builders make money with safety "extra"
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 guidance you get on even a single house construction detail can repay you a hundred times the small cost of this wonderful volume! Send for free-examination copy today. Mail coupon below.

**Every Step in House Construction**

*Explained and Illustrated*

- Excavations
- Footings and drainage
- Foundation forms
- Sills
- Girders
- Joists
- Sub-flooring
- Exterior wall framing
- Interior wall framing
- Ceiling joists
- Gable roof
- Hip roof
- Gambrel roof
- Dormers
- Siding
- And shingling
- Cornices
- Porches
- Exterior walls of wood
- Exterior walls of brick
- Interior walls
- Finished in plaster, in plywood
- Wall panels
- Mouldings for interior trim
- Stair construction
- Windows
- Sash details
- Window framing details
- Doors and door trim
- Hardware used in dwellings
- Closets, shelves, built-in equipment
- Breakfast alcove
- Sewing room
- Flooring
- Chimneys and fireplaces
- Mantels and seats
- Outdoor fireplaces
- Scaffolds
- Garages
- 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 hutches
- Septic tank
- Painting and finishing
- Heating systems
- Air conditioning systems
- Prefabricated houses

**The “How” Book of House Construction**

Nothing else like it! Other books may show you what to build, but this is the book that shows you HOW to build! Every detail in the construction of a house is clearly described—illustrated with large, easy-to-follow drawings—indexed for ready reference. Send coupon below to get your free-trial copy.

**MAIL THIS COUPON**

Simmons-Boardman Books, Dept. AB-1056
30 Church Street, New York 7, N. Y.

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 postage) in full payment, or return the book and owe nothing. Mail free-examination coupon NOW.

SAVE! Send $4.95 with this coupon and we will pay postage. Same return and refund privileges.

**SEND NO MONEY**

NEW, ENLARGED EDITION JUST PUBLISHED

Examine 10 DAYS FREE

You don't risk a penny to find out how valuable "House Construction Details" can be to you. Just mail coupon. See for yourself how you get clear, professional guidance on every building detail. Then either send only $4.95 (plus postage) in full payment, or return the book and owe nothing. Mail free-examination coupon NOW.

258 AMERICAN BUILDER
PLYWOOD SUBFLOOR-UNDERLAY
2 jobs—1 material—solid subfloor—smooth underlay—spans 4'

saves up to $500.00 per house
New 2-4-1 helps you build better and at substantially lower cost. This thick plywood panel makes possible an entirely new floor construction system that will save you from fifty to five hundred dollars—depending upon local costs, size of house and type of construction you are now using.

halves installation costs
You save on framing costs and application time. 2-4-1 can be installed in half the time required for lumber...in a third of the time required for lumber subfloor and underlayment. Because 2-4-1 has structural strength plus smooth surface, it serves as both subfloor and underlayment.

inset girders lower house 12”
Unique framing system lowers house about 12”. Result: attractive “low look” previously possible only with slabs plus important savings in sheathing, siding, painting and concrete work due to lower exterior wall height.

FOR MORE INFORMATION, write
Douglas Fir Plywood Association, Tacoma 2, Washington

Nothing Like
A
FASCO VENT
if you're looking for
Greater Efficiency!
Time & Money Saving Installation!

• TURBO RADIAL IMPELLER WHEEL
An exclusive of FASCO...develops pressures unobtainable by ordinary fan blades. Offers higher air delivery with much less noise than conventional blower wheel ventilators. And quality-controlled production means no service callbacks.

• EASIEST AND QUICKEST TO INSTALL
IN THE INDUSTRY
Engineered as complete and simple packages, Fasco vents are designed for speedy low-cost installation. Builders everywhere are using one or more of the sturdy, efficient, economical FASCO ventilating fans.

“CEIL-N-WALL” DELUXE
Model 1021.
For large and medium sized kitchens. Adaptable for inside wall above stove, through cabinets or in ceiling. 10” Impeller, 530 C.F.M.

“CEIL-N-WALL” BANTAM.
Model 728.
For small kitchens, bathrooms, etc. For installation in walls, cabinets and ceilings. Excellent for use where space is a limiting factor. 7” Impeller, 225 C.F.M.

OUTSIDE WALL VENTILATING FAN.
Designed for outside walls 4½” to 12” thick. Automatic chain operation. Model 847, 8½” blade, 475 C.F.M. Model 1047, 10” blade, 650 C.F.M.

5 YEAR GUARANTEE
Write for Complete Catalog and Specifications

FASCO Industries, Inc. 21 Augusta St.
Rochester 2, N.Y., U.S.A.
Tateinn National OIL BURNING WALL FURNACE

O0 "Warming a Completes many a sale Charming. J Saves you

ie 1 Here's beauty that will warm and up to $150

DAVIS BACK-HOE f rs charm the cockles of any home per installation: r buyers heart. This wall furnace is
designed to complement the most distinguished interior and spread
cozy comfort from corner to corner, room to room.

Powerful, too... panels easily into any wall and heats comfort-
ably up to 1500 square feet. As for cost, you save up to $150 per
installation over other central heating systems

Whatever style architecture your home... for that noes that
DUMPs warms, charms and completes the sale... install the beautiful new
International Wall Furnace.

WRITE FOR PRICES, DETAILS, HEATING DIAGRAMS!

LETS YOU SEE ALL THE WAY!
The Davis Back-hoe takes the guesswork out of digging... stops the worry of cutting through gas, sewer, or water lines. You can dig 13' deep, and still see exactly where the bucket bites in. And you can dump all the excess to just one side, leaving plenty of working space between the pile and the hole to eliminate back-dropping. That's because the Davis will dump... as well as dig... at right angles to the tractor. It is designed for greater utility... comfort and visibility. Compare in quality, versatility, and price with any on the market. IT OUTPERFORMS THEM ALL!

... AND A GREAT RUNNING-MATE
THE DAVIS LOADER

You can't buy a better loader than Davis. You get maximum strength, maneuverability, visibility, and versatility, because of the streamlined, functional design and many different attachments. You can attach or detach the Davis Back-hoe from the Loader in less than 5 minutes. Ask about the Davis Combination Deal!

SOLD AND SERVICED NATIONWIDE BY BETTER DEALERS

Mid-Western Industries, Inc.
1009 South West Street
Dept. AB, Wichita, Kansas

Please send me literature and name of dealer on Davis Loader □ Davis Back-hoe □ to fit a __________________ tractor.

(Please Print)

NAME ..........................................................

ADDRESS ......................................................

TOWN ........................................................

STATE ......................................................

International OIL BURNER CO.
3800 PARK AVENUE • ST. LOUIS 10, MISSOURI

So Warming... So Charming...

Here's beauty that will warm and charm the cockles of any home buyer's heart. This wall furnace is designed to complement the most distinguished interior and spread cozy comfort from corner to corner, room to room.

Powerful, too... panels easily into any wall and heats comfortably up to 1500 square feet. As for cost, you save up to $150 per installation over other central heating systems.

Whatever style architecture your home... for that touch that warms, charms and completes the sale... install the beautiful new International Wall Furnace.

WRITE FOR PRICES, DETAILS, HEATING DIAGRAMS!

International OIL BURNER CO.
3800 PARK AVENUE • ST. LOUIS 10, MISSOURI

Building better homes?

sell the Quality market with the Quality window

Quick turnover your goal? Play up the appearance and salesability of your home with Peterson horizontal, sliding aluminum windows—accepted and recognized in the quality market for its fine engineering, beauty, liveability and convenience features. Thousands of installations are testimonials of customer acceptance. Your customers will respond immediately to Peterson Windows' obvious advantages—their visible quality, ruggedness, ease of operation, And they know the name, Peterson, represents a window built for lifetime durability.

HORIZONTAL SLIDING ALUMINUM
PETESON WINDOWS

HORIZONALT SLIDING ALUMINUM
PETESON WINDOWS

PETESON WINDOW CORPORATION Dept. 10-8
372 Livernois, Ferndale 20, Michigan

Please send me name of nearest Peterson Window dealer and further information.

NAME ..........................................................

CITY ..........................................................

TOWN ......................................................

STATE ......................................................
3 Houses or 300...
put this profit protection into every one you build

Size of your operation doesn’t vary the importance of making full profit on each unit.

Call-backs and replacements due to leaks, rattles, and scrapes in windows and sliding glass doors steal your profits, can’t possibly earn income.

Protect yourself by specifying fenestration equipped with Schlegel Certified Woven Pile. Schlegel wool pile weatherseal assemblies are engineered to work perfectly on the units for which they are designed.

Sliding doors and windows with Schlegel Woven Pile are leaders on the market. They’re available in almost any type to meet your plans. Make sure of positive weather protection. Request Schlegel wool pile assemblies, preferred and used by quality manufacturers throughout the window and door industry.

Dense, flexible tufts of tough wool prevent air from filtering in or out, keep dust out, cushion against rattles, scraping.

THEY’RE ADJUSTABLE!
Patented design allows each model to be adjusted to fit several roof pitches by lengthening or shortening baffles. Cuts fitting time to a minimum, makes installation fast and simple.

THEY’RE ALL ALUMINUM!
Rugged heavy gauge aluminum construction provides maximum strength . . . prevents rusting, eliminates maintenance problems. 8 x 8 mesh inside bug screens furnished.

THEY’RE ATTRACTIVELY DESIGNED!
Construction-tested design combines ventilating efficiency with attractiveness. Smooth surfaces of baffles and frames may be painted to match siding.

Vari-Pitch Louvers are economical too. Records show they actually cost less than the building materials they replace.

THEY PROVIDE MAXIMUM VENTILATION
Vari-Pitch adjustable louvers afford the kind of ventilation required in modern building . . . to meet FHA requirements—to complement air conditioning. See chart below for the free area of ventilation provided by each model.

10 Vari-Pitch MODELS AVAILABLE

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Variable Pitch (Min. &amp; Max. rise per ft.)</th>
<th>Free Area of Ventilation Provided (sq. inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A238</td>
<td>4&quot; to 6&quot;</td>
<td>At 4&quot; pitch—24.5&quot; At 6&quot; pitch—31.0&quot;</td>
</tr>
<tr>
<td>A448</td>
<td>4&quot; to 6&quot;</td>
<td>At 4&quot; pitch—60.0&quot; At 6&quot; pitch—63.0&quot;</td>
</tr>
<tr>
<td>A558</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—35.5&quot; At 12&quot; pitch—49.0&quot;</td>
</tr>
<tr>
<td>A568</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—45.2&quot; At 12&quot; pitch—76.0&quot;</td>
</tr>
<tr>
<td>A688</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—62.8&quot; At 12&quot; pitch—109.2&quot;</td>
</tr>
<tr>
<td>30-4</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—76.0&quot; At 12&quot; pitch—147.0&quot;</td>
</tr>
<tr>
<td>38-3</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—62.0&quot; At 12&quot; pitch—136.0&quot;</td>
</tr>
<tr>
<td>36-6</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—128&quot; At 12&quot; pitch—348.0&quot;</td>
</tr>
<tr>
<td>34-7</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—256&quot; At 12&quot; pitch—505.0&quot;</td>
</tr>
<tr>
<td>62-8</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—343&quot; At 12&quot; pitch—667.0&quot;</td>
</tr>
</tbody>
</table>

See your dealer or write for information on the complete Lo Man Co line of ventilating equipment
Nation’s Largest Exclusive Louver Manufacturer

Vari-Pitch Adjustable Louvers offer the kind of ventilation required in modern building . . . to meet FHA requirements—to complement air conditioning.

See chart below for the free area of ventilation provided by each model.

10 Vari-Pitch MODELS AVAILABLE

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Variable Pitch (Min. &amp; Max. rise per ft.)</th>
<th>Free Area of Ventilation Provided (sq. inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A238</td>
<td>4&quot; to 6&quot;</td>
<td>At 4&quot; pitch—24.5&quot; At 6&quot; pitch—31.0&quot;</td>
</tr>
<tr>
<td>A448</td>
<td>4&quot; to 6&quot;</td>
<td>At 4&quot; pitch—60.0&quot; At 6&quot; pitch—63.0&quot;</td>
</tr>
<tr>
<td>A558</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—35.5&quot; At 12&quot; pitch—49.0&quot;</td>
</tr>
<tr>
<td>A568</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—45.2&quot; At 12&quot; pitch—76.0&quot;</td>
</tr>
<tr>
<td>A688</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—62.8&quot; At 12&quot; pitch—109.2&quot;</td>
</tr>
<tr>
<td>30-4</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—76.0&quot; At 12&quot; pitch—147.0&quot;</td>
</tr>
<tr>
<td>38-3</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—62.0&quot; At 12&quot; pitch—136.0&quot;</td>
</tr>
<tr>
<td>36-6</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—128&quot; At 12&quot; pitch—348.0&quot;</td>
</tr>
<tr>
<td>34-7</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—256&quot; At 12&quot; pitch—505.0&quot;</td>
</tr>
<tr>
<td>62-8</td>
<td>6&quot; to 12&quot;</td>
<td>At 4&quot; pitch—343&quot; At 12&quot; pitch—667.0&quot;</td>
</tr>
</tbody>
</table>
Set a 1/4" stud in steel or concrete with one light tap!

ONLY
$34.75

NEW Remington "Mighty-Mite" STUD DRIVER

HERE'S the new handy-sized cartridge-powered Remington stud driver that handles all fastening jobs requiring a 3/4" stud. "Mighty-Mite" sets a stud a minute—with no pre-drilling or outside power required, and it's yours for only $34.75.

"Mighty-Mite" is compact and easy to operate. Simply unscrew the upper assembly, insert the 22 caliber cartridge with the desired 3/4" stud, and you're ready to anchor wood sections or steel fixtures to concrete or steel! One light tap of a hammer or mallet on the firing pin and your stud is set firmly in place, straight as an arrow.

We have all the facts about the new Remington "Mighty-Mite" in an illustrated free booklet. Included are many applications, with pictures, of this versatile stud driver that pays for itself in just a few fastenings. Send for your copy today by mailing the coupon below.

Remington
DU PONT

Industrial Sales Division, Dept. AB-10
Remington Arms Company, Inc.
Bridgeport 2, Conn.

Please send me your free booklet which shows how I can speed the job and save with the new Remington "Mighty-Mite" Stud Driver.

Name_________________________ Position_________________________

Firm________________________________________________________

Address_________________________ City_________________________ State_________________________

New expandable polystyrene has variety of uses

Uni-Crest, an expanded and expandable polystyrene now on the market, is suggested by United Cork for use as insulation when molded in slab, brick or sheet or combined with laminated and sandwich materials to provide light and sturdy panelling. Variety of shapes and sizes of Uni-Crest plus lightness, ease of installation and low cost make possible many uses to the builder. Laminations with almost all currently used materials. Information from United Cork Companies, Dept. AB, Uni-Crest Div., Kearny, N. J.

New cork floor tile has range of three shades

A new KenCork floor tile with greater flexibility, smoother finish, uniform thickness and a range of natural cork colors is offered by Kentile. The tile has been made available in a 5/8" thickness to afford lower costs, as well as in 3/4", 5/8" and 1/2" gauges. KenCork comes in three color combinations. Tiles are uniformly thick, need no beveling at edges. Approx. retail prices: from 40 cents to 70 cents per sq. ft. installed. Kentile Inc., Attn. A. S. Baldwin, Dept. AB, 58 Second Ave., Brooklyn, N. Y.
MADE TO ORDER FOR "OHI"
(Operation Home Improvement, sponsored by the U.S. Chamber of Commerce)

You can really save money on modernization and remodeling projects, and at the same time provide steel windows of the very highest quality...When replacing old windows or adding new ones, use HOPE’S RESIDENCE CASEMENTS in Hope’s Combination Inside-Outside Steel Trim. Our Inside-Outside Trim entirely eliminates costly window stools, aprons, corner beads, outside mouldings, and the labor costs of fitting and installing these items.

Hope’s Inside-Outside Trim is easily assembled and attached to Hope’s Steel Casements. The entire assembly can be completely installed in a rough opening in less than 15 minutes. Customers tell us they have saved up to four dollars per window opening using these products.

See our Catalog Inserts in Sweet’s Files for additional information, or write for our folder No. 132-AB

HOPE’S
JAMESTOWN, N.Y.

STEEL WINDOWS HAVE THE STRENGTH AND RIGIDITY THAT NO OTHER WINDOW CAN MATCH

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 Paddle Shaft Seal. Power throwouts 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, N.J.
Cable Address MULMIX

Dur-O-wal preserves beauty, adds structural soundness and prevents cracking.

Trussed Design
Butt Weld • Deformed Rods

Phone, wire or write Dept. 2F today for complete dealer information . . . you have a market for Dur-O-wal in your town. Act now.

American Builder  New products

WALLS & FLOORS

Embosed siding adds style to commercial buildings

A box ribbed embossed siding has been introduced by Kaiser Aluminum to give contemporary architectural styling to industrial buildings. Siding may be used as single sheet siding or as exterior of field-fabricated sandwich wall. Sheets of .024" or .032" industrial siding for interior; one-inch layer of glass fiber insulation and exterior of new box ribbed embossed siding combined for sandwich wall. Sandwich wall cost: approx. $1.15 to $1.35 per sq. ft. erected in place. Kaiser Aluminum & Chemical Sales, Merchant Products Div., Dept. AB, 919 North Michigan Blvd., Chicago 11, Ill.

Circle No. 10064 on reply card, p. 154

Large size ceramic facing for commercial buildings

Stylon’s new Magna-Tile is a rectangular-shaped ceramic facing (12” x 16”) which will open new design possibilities for architects and builders. Suggested for use on store fronts, lobbies, washrooms, corridors, clinics etc., the tile is available in eight Matt-glazed colors and seven “ripple” finishes. From $1.50 to $1.75 per sq. ft. From Stylon Corp., Attn. L. S. Dabney, Dept. AB, Box 341, Milford, Mass.

Circle No. 10065 on reply card, p. 154

American Builder

Ask for more facts about WINDOWS BY VENTO

(Steel or aluminum)

VENTO Aluminum Awning Windows

AUTOMATIC LOCKING . . . No gadgets to turn, no gimmicks to operate, nothing to get out of order.
WEATHER TIGHT . . . VENTO alone keeps metal to metal contact plus metal to weatherstrip.
UNLIMITED ADJUSTMENT . . . Unique in ability to be quickly returned to proper adjustment.
POWER PLUS OPERATOR . . . Screw—not worm geared—operator working in self-lubricating nylon journals.
EFFORTLESS OPERATION . . . Nylon roller blocks at all friction points permit finger tip operation.

VENTO Steel Casement Windows

All casements drilled and tapped to receive storm sash and screens, operator arm guide channels attached with screws for easy removal and replacement, if necessary; ventilator frames constructed from the same heavy sections as the outside frame to provide greater rigidity and stronger ventilators.

VENTO Bonderized “Champion” Steel basement Windows

Effortless operation gives any of three ventilation openings, or sash removal. Sturdy 14 gauge jamb fins for easy installation in block or poured concrete walls. An improved cam latch and slotted opening allow greater tolerance, insuring positive operation and latching under all conditions. Basement sash also made in Thrifty style in three standard sizes and in special sizes. Both Champion and Thrifty styles available in putty or puttyless glazing. For poured basement walls, window forms available for both Champion and Thrifty styles to suit individual specifications.

VENTO Industrial and Commercial Steel Windows

Vento Pivoted, Projected and Architectural Windows are suitable for every type of commercial and industrial building, especially where abundant daylight and fresh air are desired. The result of many years of continuous development by experienced window engineers and craftsmen, they now are offered in a broad new range of types and sizes.

Please send further information on Vento Windows as checked.

[ ] AWNING TYPE ALUMINUM
[ ] PIvoted, PROJECTED, ARCHIT.
[ ] STEEL BASEMENT
[ ] FORMED STEEL LINTELS
[ ] STEEL CASEMENT
[ ] UTILITY

[ ] ARE YOU A [ ] BUILDER [ ] DEALER [ ] ARCHITECT

Name
Street
City and State

VENTO Steel Products
CO., INC.
246 COLORADO STREET
BUFFALO 15, N. Y.

Circle No. 10064 on reply card, p. 154

American Builder

Embosed siding adds style to commercial buildings

A box ribbed embossed siding has been introduced by Kaiser Aluminum to give contemporary architectural styling to industrial buildings. Siding may be used as single sheet siding or as exterior of field-fabricated sandwich wall. Sheets of .024" or .032" industrial siding for interior; one-inch layer of glass fiber insulation and exterior of new box ribbed embossed siding combined for sandwich wall. Sandwich wall cost: approx. $1.15 to $1.35 per sq. ft. erected in place. Kaiser Aluminum & Chemical Sales, Merchant Products Div., Dept. AB, 919 North Michigan Blvd., Chicago 11, Ill.

Circle No. 10064 on reply card, p. 154

Large size ceramic facing for commercial buildings

Stylon’s new Magna-Tile is a rectangular-shaped ceramic facing (12” x 16”) which will open new design possibilities for architects and builders. Suggested for use on store fronts, lobbies, washrooms, corridors, clinics etc., the tile is available in eight Matt-glazed colors and seven “ripple” finishes. From $1.50 to $1.75 per sq. ft. From Stylon Corp., Attn. L. S. Dabney, Dept. AB, Box 341, Milford, Mass.

Circle No. 10065 on reply card, p. 154

American Builder
Give the homes you build an extra touch of Sales Appeal with built-in dressing tables featuring tops of beautiful, durable ... Carrara Structural Glass

Carrara® Structural Glass is ideal for vanity tops. Its gleaming beauty is not affected by spilled perfume, nail polish or other cosmetics.

more and more builders are saying:

Here's the "dependable line of hinges to use in all light construction work" ... that's the trade's way of saying, "We like to buy and use Griffin products."

A full line of wrought steel butts and all shelf hardware. Send for new catalog sheet on our #500 Builder's Special.

Get All 3 By Adding Solvay Calcium Chloride To Cold Weather Concrete

You can offset the strength and time losses resulting from temperatures of 50 F. or lower and gain in ultimate strength by adding Solvay Calcium Chloride to your concrete mix.

Speed finishing, remove forms earlier, save 2-4 days operating time. Get all the facts and figures in the booklet entitled, "The Effects of Calcium Chloride on Portland Cement."

NEW, 25-LB. BAG
Easy to Handle
Provides Accurate Measure

SOLVAY
GET THE COMPLETE STORY
GET FREE BOOKLETS NOW. MAIL COUPON TODAY

SOLVAY PROCESS DIVISION
ALLIED CHEMICAL & DYE CORPORATION
61 Broadway, New York 6, N.Y.

Please send me WITHOUT OBLIGATION OR COST your booklet:

□ "When the temperature drops BELOW 50°F., do you know what happens to CONCRETE?"
□ "The Effects of Calcium Chloride on Portland Cement."

NAME

COMPANY

POSITION

ADDRESS

CITY ZONE STATE
How streets are excavated
in Wichita subdivision

Woodlawn Village, an attractive residential subdivision near the eastern limits of Wichita, Kansas, is growing rapidly with the completion of streets and drainage. This modern development, by Wheeler-Kelly-Hagny Realty Company, of Wichita, will eventually occupy a 160-acre tract. The soil is heavy gumbo which runs deeply during the rainy season, bakes hard in dry weather. Good streets and adequate drainage are an important factor to home owners in this area.

Ritchie Bros. Construction Co., of Wichita, contracted to excavate streets in a section of this subdivision. To handle the work efficiently, Ritchie Bros. moved in three self-propelled scrapers and a big Adams 660 grader. The contractor equipped his grader with a heavy push-plate, so it could be used to push-load scrapers. With this advantage he could speed-up his scraper loading without having to add a push-tractor to his fleet.

The “660” grader has power and speed to handle big loads, and get around fast. When not busy push-loading scrapers to bring streets to grade, it leveled sub-grade, spread filled areas to grade, and readied streets for paving.

J. H. Boaz, Ritchie’s Foreman on this job, said, “I have had over 20 years’ experience in all types of construction, heavy and light, and this Adams 660 is the best all-around grader I have seen.” And operator Dean Wolf remarked, “This Adams outperforms any grader in use today.”

Cut costs with Adams graders

Whether you hire outside earthmovers, or have your own earthmoving fleet, there’s an advantage to you in using Adams graders. These sturdy machines will help cut costs, because they do more work in less time. Adams gives you 8 forward speeds to 26 mph, for fast work, fast travel; 3 optional “creeper” speeds, for steady power in turning up buried stones and roots, and for accurate blade control in fine finishing. And Adams gives you 4 back-up speeds, to 13.7 mph, which save valuable time on shuttle-grading and push-loading.

You will find many reasons why Adams graders can speed land-leveling and street-building on your housing projects. Write for complete information. Ask, also, for names of contractors in your area who can put Adams graders to work for you.

LeTourneau-WESTINGHOUSE
Company
Peoria, Illinois
A Subsidiary of Westinghouse Air Brake Co.
Precision-built for the man behind the gun

Light construction levels
...by White

NEVER BEFORE
...such accuracy
and dependability
at so low a cost

DEVELOPED originally for agricultural use, these levels have been recently improved and are now in big demand for a wide variety of light construction operations.

Small, compact and sturdy, these White levels are exceptionally simple in design and construction. And it's this rugged simplicity that makes them extra reliable and trouble-free.

Model 8017 features 10-power telescope, 2 1/2" long graduated spirit level and 4 1/2" diameter circle graduated in degrees and numbered in quadrants (0-90-0), with an index pointer.

Price: $46.50* complete

Model 8022 convertible — allows you to level and plumb from same setup. Features 10-power telescope, 2 1/2" graduated spirit level, 2 1/4" graduated vertical arc and a 4 1/2" diameter horizontal circle. Price: $79.50* complete

For complete details, write for DAVID WHITE Bulletin 1056 and name of nearest dealer, 301 W. Court St., Milwaukee 12, Wis.

We offer expert repair service on all makes, all types of instruments

*Prices subject to change without notice.

STORM KING

Horizontal Sliding Aluminum Windows
- DESIGN-PATENTED FLEXTRIP
- STAINLESS STEEL HARDWARE
- FULL RANGE of TYPES and SIZES

Write for complete information

STORM KING Corporation
Miamisburg, Ohio

IMMEDIATE SHIPMENT!

COMBINATION WEATHERSTRIP
AND SASH BALANCE

The sash balance with everything you need for fast, easy installation. 4 different types... special sizes to order. Simplified framing. Perfectly balanced with correct spring weight for each size. Gives you a low-cost, PROFITABLE installation. Complete bulletin gives all details. Write today.

- Complete Line of Weatherstrips
- Nosings
- Architectural Bronze Thresholds
- Door Bottoms
- Screen Guides
- Bindings
- Tools
- Calking Compounds

SEND THIS COUPON for your free copies of complete weatherstrip and sash balance bulletins.

NAME
ADDRESS
CITY STATE

CENTRAL METAL STRIP COMPANY
4343 North Western Ave. Chicago 18, Ill.

FOLDING DOORS

...MORE BEAUTIFUL
...MORE DURABLE
...AND FIRE RESISTANT

...WHEN THEY'RE MADE OF
TOLEX SUPPORTED VINYL

No other covering material offers such outstanding quality and features at such low cost! Produced in dozens of patterns and leather effects in a wide range of decorator colors... the perfect folding door material!

We'll send you sources!

THE GENERAL TIRE & RUBBER CO.
TEXTILEATHER Division, Toledo 3, Ohio

Send me the names of folding door makers who use TOLEX supported vinyl coverings:

Name
Address

OCTOBER 1956

267
Slab-Floor System Maintains Temperature at 1° Plus or Minus

The problem was to design a heating system that would result in a room temperature maintenance of 1 plus or minus degree in relation to the thermostat. The solution came by using economical SONOAIRDUCT Fibre Duct, wrapped with 1" Fiberglas insulation, protected from moisture with a Sisalkraft outer-wrap.

The above use of SONOAIRDUCT is unusual. Under normal conditions, it is laid over a moisture barrier and encased in dense aggregate concrete. SONOAIRDUCT is equally suitable for both residential and industrial construction and its use greatly reduces the noise of the system.

SONOAIRDUCT is aluminum foil lined and wrapped with asphalt duplex kraft. Made to comply with F.H.A. Minimum Property Requirements. 23 sizes—2" to 36" I.D., up to 50' long. FREE Installation Manual sent on request. Write for details today!

Levitt blasts curbs

Haverstick was not alone in his attack. From William J. Levitt, one of the country's biggest builders, came the grim prediction that unless the mortgage interest rates are allowed to rise, the volume of small-home building will drop by one-third next spring.

The cure, as Levitt sees it, is to raise interest rates on both FHA and VA loans to 5½ per cent. (Congressional action would be necessary in the case of VA. For more discussion on financing, read Dickerman's column, p. 25.)
LEARN TO ESTIMATE
You can estimate building construction costs quickly and accurately, and bid on profitable commercial and industrial jobs without worry about "What did I leave out?" or "Am I bidding too high, or worse yet too low?" Become a successful building contractor by devoting some spare time to the study of our estimating course.

WHAT WE TEACH
We teach you to read plans, list and figure the cost of materials, estimate the costs of labor, and all the other things that you need to know to bid on construction work with confidence. The labor cost data that we supply is not vague and theoretical—it is specific, complete, and accurate. It gives you the actual cost of labor required to do work in your locality at today's wage scales. We teach you to prepare estimates complete in every detail.

OUR GUARANTEE
Best of all you don't need to pay us one cent unless you decide that our course is what you need and want. We will send you plans, specifications, estimate sheets, cost data, and complete instructions for ten days study, so that you can see for yourself what this course can do for you. Mail the coupon today—we will do the rest.

CONSTRUCTION COST INSTITUTE
Dept. 1056 Box 8788
University Station Denver 10, Colorado

Send me your course on how to estimate building construction costs for ten days study. If I decide to keep it, I will send you $19.75 (payable in two monthly payments) as full payment. Otherwise I will return the course, and there is no further obligation.

Name
Address
City
Zone
State

In 30 years of building power tools, from concrete vibrators and rubbing units, through portable electric and pneumatic tools to chain saws and electric generators, MALL has earned a reputation for superior quality, performance, service and fair prices that you can depend on.

Send coupon today for this complete FREE catalog of MALL PORTABLE POWER TOOLS.

MALL TOOL COMPANY
Division of Remington Arms Company Inc.
2502 South Chicago Ave., Chicago 19, Illinois

Please send your latest Portable Power Tool Catalog.

Name
Address
City
Zone
State
Home Buyers Want this BASEMENT ENTRY...

Let SERVICE-WAY add this sales appeal to your homes

Service-way is one of the most desirable convenience features you can include in the homes you build. Home-buyers like it because in no other way can they make full use of their basements. It provides direct access to the basement from outdoors for storage of garden tools, workshop and recreational equipment...shortens the trip from laundry to clothesline...saves tracking dirt through the house.

The wide single door swings up out of the way...locks in full open position. Provides an unobstructed opening for bulky objects.

Built to Last

Service-way is built of heavy gauge steel—electrically welded and reinforced to give a lifetime of service. Overlapping flanges on frame and door assure a snug fit—keep out rain, snow and wind. Slide bolts lock door securely from the inside. The Service-way comes fully assembled, ready to install.

Write for folder and specifications to:
Heatilator Inc., 5610 E. Brighton Ave., Syracuse 5, N.Y.

CATALOGS...

FORK LIFT TRUCKS covered rather completely in this indexed, pocket-sized guide to the Towmotor line. Sections cover specifications and construction features, operating techniques and safety tips. Plenty of illustrations too. Towmotor Corp., Attn. A. Roth, Dept. AB, 1226 E. 152 St., Cleveland, Ohio.

Circle No. 10068 on reply card, p. 154

EVERYTHING ELECTRICAL about these tools for construction, maintenance and trade crafts, pictured and detailed in a 44-page catalog from Thor. Pictured are each tool with its uses, as well as attachments, accessories and replacement parts. Thor Power Tool Co., Attn. J. A. Hill, Dept. AB, Aurora, Ill.

Circle No. 10069 on reply card, p. 154

HOT SPRAY PAINTING equipment for faster, easier, less expensive, more uniform paint job described in this eight-page catalog. Equipment illustrated with cutaway drawings; method fully explained and illustrated. De-Vilbiss Co., Dept. AB, Toledo 1, Ohio.

Circle No. 10070 on reply card, p. 154

DIESEL-POWERED lift trucks are described in new literature from Hyster Co. Lift trucks of 6,000 to 20,000 lb. capacity offered with photographs, specifications and detailed descriptions. From Hyster Co., Dept. AB, 2902 N.E. Clackamas St., Portland 8, Ore.

Circle No. 10071 on reply card, p. 154

CONCRETE EQUIPMENT is thoroughly covered in this 16 page catalog from Stow. Vibrators, grinders, trowels and screeds with all their detachable parts pictured and explained with detailed specifications. Stow Manufacturing Co., Dept. AB, 443 State St., Binghamton, N. Y.

Circle No. 10072 on reply card, p. 154

INDUSTRIAL TRACTORS and other equipment by John Deere completely illustrated in a 24-page catalog. Photos show wide assortment of building equipment in use plus descriptions and other information. From John Deere Industrial Div., Dept. AB, Moline, Ill.
THIS FOLDER HAS ALL THE FACTS ON NEW Bostwick CHAN-L-FORM METAL STUDS

- Construction Elements!
- Weight Per Square Yard!
- Flexibility!
- Five Different Sizes!
- Job Adjustment!
- What Sizes to Use!
- Ceiling Attachment
- Various Bases!
- Framing of Openings!
- Architectural Specifications!

Now you can use metal studs easier and more economically than ever before.

Get this folder with plenty of usable data.

Four pages are cram packed with drawings, dimensions and sketches which clearly augment the text.

Ask your dealer for prices. Send for your Bostwick Chan-L-Form Stud Folder Now!

- Construction Elements!
- Weight Per Square Yard!
- Flexibility!
- Five Different Sizes!
- Job Adjustment!
- What Sizes to Use!
- Ceiling Attachment
- Various Bases!
- Framing of Openings!
- Architectural Specifications!

THE BOSTWICK STEEL LATH COMPANY
103 HEATON AVE. - NILES, OHIO
Now it's **TWINPANE**
by
**TRIMVIEW**

**TWINPANE** is a new aluminum sliding glass door, designed by Trimview for complete year around weather protection in all climates. Gives you a highly saleable luxury item of unsurpassed quality... at a surprisingly moderate cost. **TWINPANE** is another Trimview Package Plan product. Write today for brochure.

**OUTSTANDING FEATURES**

- Takes standard sizes of Twindow and Thermopane glass
- All panels slide
- Continuous double weatherstripping in jambs and rails
- Smooth, quiet operation on sturdy phenolic rollers
- Beautiful, satin anodized finish for high corrosion resistance
- Sloped sill with effective run-offs prevents water infiltration
- Handsome, combination aluminum and Lucite handle with Trimview’s new flipper-type latch
- Trimview rubber glazing beads
- Hollow, box-shape aluminum extrusion section
- New Trimview gentle insert neoprene glazing bead.

**OPTIONAL EXTRAS**

- Cylinder type key lock
- Adapter for single glazing 1/4" plate, 7/32" or 3/16" crystal
- Nail-on trimfin for all types of inside or outside construction
- Interior snap-on sill extensions
- Exterior sill-flashing.

**TAKE ADVANTAGE OF TRIMVIEW’S PACKAGE PLAN**

More than a dozen fine, matching metal building products are available under Trimview’s Package Plan... You buy from one firm... You gain beauty and product uniformity... Your building schedules are expedited.

For information; write, wire or phone.

**Catalogs...**

**POWER TROWELS** showing radical improvements, especially the use of four blades to reduce vibration and lateral pull away from work and to “get on the concrete” sooner. Also by Muller is a line of Plaster and Mortar mixers, with “Mayari” abrasion-resistant steel. Muller Machinery Co., Dept. AB, P.O. Box 248, Metuchen, N.J.

Circle No. 10073 on reply card, p. 154

**NEW 36 HP.** self-propelled concrete saw has 4-cylinder air cooled engine to drive saw up to 25 ft. per minute; also “Tip-N-Turn” features allows instant maneuverability. Eveready BrikSaw Co., 1509 S. Michigan Blvd. Dept. AB, Chicago, Ill.

Circle No. 10074 on reply card, p. 154

**TRANSITS, LEVELS** and tripods for heavy and light duty work including new David White convertible level, No. 8006, for light construction market. Realist, Inc., Dept AB, Milwaukee.

Circle No. 10075 on reply card, p. 154

**PERIMAHEAT** baseboard convectors with hot water heat described, with typical installations and working methods, including damper and splitter devices. A. H. Slaasted, Young Radiator Co., Dept. AB, Racine, Wis.

Circle No. 10076 on reply card, p. 154


Circle No. 10077 on reply card, p. 154

**HYDRO-PAC GAS** hot water systems in $19,000 split levels for $750, with boiler, fin tubes, and circulator. Hydrotherm Inc., Dept. AB, Clinton Ave., Northvale, N.J.

Circle No. 10078 on reply card, p. 154

**CHURCH LIGHTING** for architects and builders is covered in an eight-page brochure by Pittsburgh Reflector. All phases of sanctuary and meeting room illumination presented. From Pittsburgh Reflector Co., Dept. AB, 484 Oliver Building, Pittsburgh 22, Pa.

Circle No. 10079 on reply card, p. 154
Now—from EVANS

A NEW TWO-WAY TOOL

It's a Chalk Line

It's a true Plumb Line

It’s a real Professional Tool...

Priced Right

For You!

50 ft. — $1.49
100 ft. — $1.69

First time ever — this real mechanic's tool, at a low, low price! Engineered and Designed for Accuracy. It's Easy to Handle, Built for Long, Dependable Service!

Here's what you get:

- Positive S-L-I-D-E action brake . . . separate from rewind wheel. Automatically released on rewind.
- Full rewind cylinder — with disappearing handle that lies flush.
- Built-in true Plumb Bob.
- Easy refill — just a twist of the fingers and the Plumb Bob tip opens for instant on-the-spot refills.
- Streamlined design . . . made of tough lightweight aluminum.
- Grip case with non-slip knurled edge . . . comfortable, sure . . . fits palm of hand perfectly.

Unconditionally Guaranteed

See it — try it — Buy it at your dealer's today!

Evans RULE CO. Elizabeth, New Jersey

... still the leader for quality at a LOW PRICE!

Herman Nelson "THRIFTY"

Portable Air Heater

Better than ever — vastly improved design
New all-weather overheat safety control
90-second starting cycle — even at sub-zero temperature
Heat output can be easily regulated
Fewer moving parts assure longer, trouble-free service

HERMAN NELSON
Best Known Name in PORTABLE HEATERS

Get Free Weather Forecast Service, Mail Coupon!

Ideal heater for Home Builders. Choose the portable heater that's designed especially for your needs... the new Herman Nelson "Thrifty"! Gives you low first cost and low operating cost — gives you the safety and dependability of "sealed flame" indirect firing. Oil-fired, uses only 0.7 to 1.25 gallons of fuel per hour. Electric motor powered. The "Thrifty" may be used indoors or out, and canvas ducts may be used to spot heat where wanted. Also has provision for venting, when desired. New simplified control system has only one fuel control valve, one starting switch. Your Herman Nelson dealer offers you liberal trade-ins on your old job-worn heaters!
Quality construction is important—sure! But in wall panels, it's the Surface that Sells! And FineWood means not only quality construction, but also the finest, most beautiful surfaces of any Pre-Finished Hardwood Panels! One wall or a room paneled with FineWood precedes all else in a perfect setting for future decor and furniture.

FINER CONSTRUCTION Even back and center veneers are specially selected to guarantee a permanent glue bond assuring a perfect face surface always.

SPECIAL PROCESS FINISH FineWood's exclusive finish contains basic ingredients that enhance the lustre and stability of the panels, making them resistant to moisture. In addition the natural color finish gives added beauty and prevents any change in color and texture.

GREATER VARIETY Nine select hardwoods—Birch, Maple, Mahogany, Red Oak, White Oak, Sycamore, Walnut, Cherry, and Limba. Other special woods available on request.

ONLY GENUINE FINEWOOD PANELS BEAR THIS SEAL
DULANEY PLYWOOD CORPORATION
1401 SOUTH 12th ST.
LOUISVILLE 10, KENTUCKY

Catalogs...

WINTER BUILDING with concrete masonry tackled in a four-page pamphlet from Portland Cement. Includes photos on protection of masonry, good heating equipment as well as a good deal of explanatory text on how to meet winter building problems. From Portland Cement Association, Dept. AB, 33 W. Grand Ave., Chicago 10, Ill.

Circle No. 10080 on reply card, p. 154

USE OF GRANITE for churches, commercial buildings, street curbing and in homes is illustrated in this 12-page booklet from Mount Airy. Complete data, photos, specifications included. From North Carolina Granite Corp., Dept. AB, Mount Airy, N. C.

Circle No. 10081 on reply card, p. 154

BETTER MORTAR with use of Brixment is suggested in this four-page catalog from Louisville Cement. Water-roofed masonry cement is described along with application details, durability data and specifications. Louisville-Cement Co., Attn. F. Lovell, Dept. AB, 2nd and Walnut Sts., Louisville, Ky.

Circle No. 10082 on reply card, p. 154

NEW FOR FLOORING is this four-color folder on Vina-Lux vinyl asbestos tile. Twenty shades of the flexible, resilient tiling along with several installation shots illustrated in the brochure. From Uvalde Rock Asphalt Co., Dept. AB, Frost Bank Building, San Antonio, Tex.

Circle No. 10083 on reply card, p. 15

FOR A SLIGHT CHARGE...

HOUSEPOWER continued from p. 96

One convenience outlet for general use. For unfinished attic, provide junction box with connection to distribution panel.

Special purpose outlet for summer cooling fan is recommended. Outlet to be multiple-switch controlled.

□ BASEMENT

- Outlets to illuminate work areas and special equipment. Additional outlets to be installed at foot of stairs and for each 150 square feet of enclosed space. Lights may be pull-chain controlled except at foot of stairs. Pilot light for switch at head of stairs is desirable.

- At least two convenience outlets are needed. Additional outlet required for work bench. Outlets also useful near furnace, laundry, hobby areas and for appliances such as space heater, dehumidifier, etc.

- One special purpose outlet for furnace usually required. One for food freezer recommended.

□ TERRACES AND PATIOS

- At least one outlet, either on building wall or centrally located post—to be wall-switch controlled from inside house.

- One weatherproof outlet located at least 18 inches above grade line—to be wall-switch controlled from inside house.

□ PORCHES AND BREEZEWAYS

- At least one outlet for every 75 square feet of floor area—to be wall-switch controlled.

- One convenience outlet for each 15 feet of wall—to be weatherproof if exposed and split receptacle type. Wall-switch controlled.

□ GARAGE OR CARPORT

- At least one ceiling outlet, wall-switch controlled, for one or two-car garage. Exterior outlet, multiple-switch controlled, also desirable. Additional outlets if garage is to be used for other purposes. Also wall-switch controlled.

- At least one convenience outlet for either one or two-car garage.

□ EXTERIOR ENTRANCES

- One or more outlets at front and service entrances. Steps leading to entrances and long approach walks should be lighted.

- One weatherproof convenience outlet, wall-switch controlled from inside entrance, for decorative lighting.

"TAKES ME 10 MINUTES"

Yes Sir — just 10 minutes or less that’s how little time it takes me to assemble and set a Bilco Door ready for pouring the concrete. And it’s my best selling feature!

Cost? None at all. I save money by cutting down man hours during construction with that direct opening to the basement.

A must for rumpus room or work shop.

For satisfied customers and faster sales install

Bilco® AMERICA’S FINEST BASEMENT DOOR

Sold by Lumber & Building Supply Dealers.

THE BILCO CO., DEPT. 370-B, NEW HAVEN, CONN.

Please send me complete information on the BILCO DOOR, sizes, prices and dealers’ names.

I build □ 10 or less □ 10-100 □ 100-500 houses

NAME ____________________________________________

ADDRESS _______________________________________

CITY _____________________ STATE _____________

OCTOBER 1956
How Bertch coordinates his crew...

(Continued from page 93)

- Any tool broken or damaged beyond repair is recorded on charge sheets.

Step 3. Materials charged in shop

Time charge is made for the use of shop facilities, machinery, sandpaper, glue and nails used in small quantities.

A separate charge sheet is used for each job each week.

The first person to work on a particular job initiates the form by filling in the name of the job; the week ending date; and his name, and number of hours worked.

The next person to perform shop work on that job uses the same sheet.

Part of every job is the replacement of tools and materials to their proper places.

The time required to perform this clean-up operation is charged to the applicable job.

Step 4. How material is charged

Bertch claims that materials used and not recorded are given away.

All materials leaving the shop for a particular job are recorded on a 3 x 5 white card. Material returned to stock is recorded on a credit card. Each card indicates the name of the job and the date.

Step 5. Jobbing Work Orders

Time spent in thinking about a job and its requirements pays big dividends, according to Bertch.

This is the reasoning that brought these forms to life. Jobbing Work Orders are used for small jobs and for dispatches to do particular items on larger jobs.

This form lists work to do; materials needed; equipment list; job finished—if not, what is left to do; time spent on job.

To double-check materials and to make sure the proper ones go to each job, Bertch posts a Loading Reminder Sheet. This serves as a guide for the men by listing all equipment available.

While some of the items involving charges for materials, equipment and shop time may not seem to apply to most of Bertch's business (which is on a fixed price basis) he claims he trains his men to report on these items for two reasons: first, if they have not formed the habit they will not use the forms on the occasional cost-plus job which he takes; and most important, Bertch finds it advisable to keep a cost record on each job.

He wants to be sure he makes money on every job. If he doesn't he wants to know why. Has his estimate been too low? Were there unusual circumstances which were not anticipated? Did the work progress more slowly than he figured?

Knowing the answers to these questions helps him to make estimates on other similar jobs.

---

GRAHAM Architecturally-Correct Garage Doors Add "Buy-Appeal" To Your Homes...Without Adding Cost!

A builder's biggest and best advertisement is a beautiful front elevation. Don't spoil it with an ordinary-looking, "warehouse-type" garage door. Catch the cruising shopper's eye with dramatically styled GRAHAM sectional doors. Unlimited choice of house-flattering designs. Give your look-alike homes that one-of-a-kind appearance. Add glamour without adding cost. Specify GRAHAM "custom-design" garage doors...they're customer catchers!

Architects and Builders: Write today for "New Ideas" brochure. Illustrations show importance of garage doors in today's architecture.

Graham Garage Doors

6901 Carnegie Avenue
Cleveland 3, Ohio

Division of
GRAHAM INDUSTRIES, INC.

263 N. Washington Dr.
St. Armands Key, Sarasota, Fla.

"YOU GET SO MUCH MORE WITH A GRAHAM DOOR!"
PORTABLE POWER
When and Where You Need It!

- Have reliable electric power available at any location. Pioneer Generators can furnish power and lights to keep construction crews on the job. Hi-wattage, lightweight models can be hand carried for easy portability, 2400 Watts.
- Heavy duty slow-speed skid mounted plants for continuous operation. Over 40 models from 500 Watt to 12 KW continuous duty units.

Write today for FREE catalog
PIONEER GEN-E-MOTOR CORP.
5852 West Dickens Ave., Chicago 39, Ill.

Generators  Electric Generating Plants  Power Lawn Mowers  Electric Portable Power Tools

CLASSIFIED ADVERTISING

The Market Place for buying and selling used merchandise, help wanted, positions wanted, and other classified listings.
Rate: 50c minimum for 40 words or less. 1c for each additional word.
Display Classified—$1.50 per inch. Reverse plates not accepted. No illustrations. No agency commission or each discount. One column only—2-1/2 inches wide. 2 inches maximum. Signature cuts and trade names allowed.

MANUFACTURERS REPRESENTATIVE WANTED
Ten-year-old Michigan concern manufacturing all-steel folding closet doors and steel type garage doors is seeking representation in North Central and North East states. Direct inquiries to Stylecraft, Inc., Roseville, Michigan.

FOR SALE—Lumber and building material facilities (concrete block store building, two-story warehouse and 56' X 120' lumbershed) in rich farming area in central Illinois. Lumber yard potential $100,000.00 up depending on operator. Sell facilities for $13,500.00—owner will finance. Write Box 7261, American Builder, 30 Church St., New York 7, N.Y.

INVENTION FOR SALE
Patent pending on new labor saving anchor bolt. Serve to find huge market. Will sell for reasonable cash allowance plus royalty. For particulars write E. R. Maclean, Carpenter Road, Pine City, N.Y.

Low-Cost Blade Makes Your Light Tractor an Efficient Earth Mover!

A Heavy-Duty Tool for Landscaping, Grading, Ditching, Scraping, Backfilling.

One man can operate the DANUSER BLADE by himself and make adjustments without leaving the tractor seat. Blade uses the tractor three-point suspension principle, with adapter kits available for older models. It is raised and lowered by the tractor's hydraulic system, and turns all the way around so you can push with it.

Rugged construction throughout. Built of reinforced welded structural steel and heavy tubular members. Abrasion-resistant moldboard with replaceable, standard grade cutting edge. Moldboard mounting is supported on two oversize tapered bearings to maintain stability. It shifts 8 inches right or left of center for cutting beyond tractor wheel line.

Danuser built the original rear-mounted blade, and is still producing the finest tool of its kind on the market. Thousands are in daily use throughout the world. Tested and approved by tractor manufacturers.

"Quality Since 1910"

DANUSER MACHINE CO.
534-45 East 3rd Street  Fulton, Missouri

the most versatile, practical and economical JOIST HANGER ever developed —

TECO Trip-L-Grip FRAMING ANCHORS
Add strength and rigidity. Eliminate heavy strap hangers, notching and shimming.

One size fits joists from 2" x 4" to 2" x 12"

TIMBER ENGINEERING COMPANY
1319 18th Street, N. W., Washington, D. C.

Please send FREE booklet, "Aids for Better Homes and Other Wood Construction," showing details on how and where to use Teco Trip-L-Grip Framing Anchors for stronger wood framing.

Name..................................................
Firm..................................................
Street............................................... City, Zone, State........................................

OCTOBER 1956
Another big-selling cedar product from Giles & Kendall for do-it-yourself customers!

**KNOCKDOWN CEDAR CHEST UNITS**

made of genuine Tennessee aromatic red cedar

You'll make the sales because...

* customers want additional storage space that is moth-proof and handsome.
* this is genuine Tennessee aromatic red cedar.
* customer saves about $25.00 per chest.
* anyone from 12 to 70 is a potential customer.
* strong promotional item to draw new customers.
* across-the-counter item, packaged to take home.
* nationally advertised in Living for Young Homemakers.
* nationally advertised in Living for Young Homemakers.
* nationally advertised in Living for Young Homemakers.
* nationally advertised in Living for Young Homemakers.
* strong sales because... customers want additional storage space that is moth-proof and handsome.
* this is genuine Tennessee aromatic red cedar.
* customer saves about $25.00 per chest.
* anyone from 12 to 70 is a potential customer.
* good gift item (estimated 50% of sales are for gifts).
* sells steadily the year round.

This is a beautiful, completely milled out and sanded cedar chest from the heart of genuine Tennessee aromatic red cedar. Carefully selected for fine appearance and sturdiness. It is solid 1/2" cedar, with 5-ply panel top that will not warp or crack. Each unit is complete with all hardware, push button lock, brass ferrules. Size: 30" x 20" x 47".

**GILES & KENDALL COMPANY**
Box "D" Huntsville, Alabama

---

**FINGERTIP DRAWER OPERATION**

For Only 26 4/10¢ PER DRAWER
(Cost of One Roll-eez "A" Set in Bulk to Cabinet and Fixture Manufacturers)

Roll-eez ROLLER BEARINGS FOR WOODEN DRAWERS

Quick, easy to install. Roll-eez performance compares with high priced slides—yet you figure the cost in fractions! Made with perfectly molded NYLON rollers mounted on steel frames, they eliminate friction of wood-against-wood and keep drawers in alignment. Compliments, "call-backs" due to drawers sticking and binding are a thing of the past!

Write for Free Sample Roll-eez "A" Set & Literature Showing Complete Line.

JUNIOR-PRO PRODUCTS CO., 118 E. Marceau St., St. Louis 11, Mo.

---

**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**

American-Boardman Books, Dept. AB-1056
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 _______________________
City _______________________
Street _______________________
State _______________________

SAVE. Send $3.75 with your order. We pay postage, handling. Some trial terms.

---


GOLDBLATT TOOL COMPANY, Dept. C-10 1912 Walnut, Kansas City 8, Mo.
KLOSET KING Closet Doors Will Help You—Close Sales

Women like the attractive appearance—the silent operation—the full open closet—the space-saving swing—the general de luxe atmosphere of Kloset King doors.

You'll like the fast, easy installation—the long life with no call backs.

A Kloset King All Steel Door Unit is a "plus value" you can give at practically no extra cost to you.

Write today for full colored circular and name of nearest dealer.

HILL MANUFACTURING CO.
339 North River St.
Batavia, Ill.

BOSTROM LEVELS FOR HALF A CENTURY
Have been the most economical precision leveling instruments on the market.

Used and endorsed by contractors and builders everywhere. Sold on guarantee of satisfaction or money back.

Carried in stock by distributors from coast to coast. Write today for literature, prices, and name of our distributor near you.

Bostrom - Brady Mfg. Co.
535 Stonewall St., S. W.
ATLANTA, GA.

SIMPLE STEPS for faster, lower cost finishing of concrete or masonry walls with wallboard or wood.

With 2x4s and THESE BRACKETS you can make a SAWHORSE in a Jiffy

There are scores of uses for a sawhorse... now it is easy to have one whenever you need it.

Set up and knocked down instantly without nails, screws or bolts. Easy to move from job to job, and takes little storage space when not in use. Jiffy Sawhorse Brackets are ALL WELDED... stronger than any 2x4s you can use for crossbar and legs.

Ask your hardware or building supply dealer for Jiffy Sawhorse Brackets. If he cannot supply you, write us direct.

GRAND HAVEN STAMPED PRODUCTS CO.
Grand Haven, Mich.

HERE IS ALL YOU NEED

Gemco Anchor Nails have ample strength to hold sidewall loads in place securely. Easy to install. Anchoring is sure, safe, permanent. Great time- and money-savers!

Tuff-Bond General Purpose Adhesive bonds the anchor nails securely to concrete or masonry; super-strength; waterproof. Also Tuff-Bond Quick-Set for fast bonding to smooth surfaces.

GOODLOE E. MOORE, Incorporated,
Danville 36, Illinois
Please send details and prices on Gemco Anchor Nails and Tuff-Bond Adhesives.

Name
Company
Address
City
State

OCTOBER 1956
Dressing room space for a desert

**DETAIL A**

- 3/8" PLYWOOD
- BANDING
- 1/8" CHROME CLIP
- DOOR

**DETAIL B**

- 5/8" PLYWOOD
- 2"x4" FLAT
- 5/8" PLYWOOD
- METAL LATH
- 3 C 4.1 CONT. 2"x4"

**COUNTER DETAIL**

- 2"x4", 16" O.C.
- 5/8" PLYWOOD
- 2"x4" TIE FACE
- REDWOOD
- 1/2" MASONITE
- MIRROR
- MIRROR CLIP
- TILE CEMENT MORTAR BED
- SCREED PLASTER
- STUD FACE

**ELEVATION**

ROOM IN FOR 27-1/2" x 17" OPENING
FOR COOLING UNIT

- 2x4" V-JOINT REDWOOD, 5/8"
- 1x6" T&G
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-5.

Designed by:
Robert H. Thomas, A. I. A.
Builder: Bennington & Smith
Apple Valley, Calif.

October 1956
TRY ONE ON YOUR NEXT MODEL HOME

IMPROVES APPEARANCE OF OLD AND NEW HOMES

Write for catalog sheet and prices

NEW PACKAGED CUPOLA KIT

Large size Cupola, (30” high, roof 23” sq, base 19” sq.) complete ready to assemble. Couldn’t be scratch built for less than $75 — yet your cost is less than 1/4 of this figure. Can be used for ornamentation or as a roof ventilator.

Wrought Iron Weathervanes to go with Cupola. Retail $7.95 to $24.95, less regular mark-up.

SHEATHING, SIDING, INSULATION ETC.

For information on the complete line of INSTO-HOT SALAMANDERS and INFRA-RED HEATERS see your dealer or mail coupon today.

CONTINUED FROM P. 107

ESTIMATING GUIDE

House Frame Ranch
Area — 2329 sq. ft. 18,713 sq. ft.
Cub —

CONCRETE WORK

Location Actual
Foundation Wall & Lip 595 cu. ft. 595 cu. ft.
House Slab 4" 780 cu. ft. 780 cu. ft.
Chimney Footing 68 cu. ft. 68 cu. ft.
Pier Footings 19 cu. ft. 19 cu. ft.

*Add 5% for waste

CONCRETE ACCESSORIES AND MASONRY

Location Description Amount
Slab 6" x 6" 10/10 mesh 595 sq. ft.
Reinforced Bars 1/2" Diam. 476 Lin. ft.
Vapor Barrier Rigid Insulation 238 Lin. ft.
Anchor Bolts 12" long 30 pieces
Chimney Stack Concrete Block & Brick 500 cu. ft.
Flue Lining 15" Diam. T.C. 27 Lin. ft.
Flue Lining 8" x 8" T.C. 40 Lin. ft.
Planter Brick 70 sq. ft.
Stone Veneer 4" Stone 230 sq. ft.

FRAMING SCHEDULE

Location Size Piece Lin. Ft. B.F.M.
Studs 2 x 4 40/8 320 427
Plates (3) — 1710 1140
Bathroom Plates (3) 2 x 6 — 60 60
Bathroom Studs 2 x 6 20/8 160 160
Living Room Girder (2) 2 x 14 — 56 123
Garage Beam (2) 2 x 10 2/10 40 67
Ridge Board (2) 2 x 14 — 44 103
Posts 4 x 4 2/8 16 22
Ridge Beam (2) 2 x 14 2/12 24 56
Rafter 2 x 6 49/16 784 784
Knee Wall Studs & Jacks 2 x 4 100/8 800 533
Rafter 2 x 6 49/20 980 980
Rafter 2 x 6 60/16 940 940
Continuous Wall Beam (2) 2 x 8 — 500 667
Interior Studs 2 x 4 400/8 3200 2123

MILLWORK

Location Description Amount
Ext. Trim Asbestos Board 3270 sq. ft.
Fascia 1 x 8 Redwood 2500 lin. ft.
Soffit ¾ Gypsum 273 Sq. ft.
Frieze Molding 2 x 2 140 lin. ft.

Int. Trim

Location Description Amount
Cl. Polt 1 1/2 Diam. 30 lin. ft.
Pipe Sockets Pair 6 Pair
Ceil 1 x 3 35 Lin. ft.
Hook Strip 1 x 4 58 Lin. ft.
Shelving 1 x 12 45 Lin. ft.
Base 1 x 4 500 Lin. ft.

INSTO-HOT SALAMANDERS and INFRA-RED HEATERS

For quick, clean, portable heat choose the INSTO-HOT Heater best suited for your job.

Eliminate dirt — soot — noxious fumes forever with instant lighting LP Gas heat. Eliminate handling of flammable liquids on the job! Accepted and approved by thousands of users. Many models available.

SHEATHING, SIDING, INSULATION ETC.

When flooring and sheathing is laid diagonally a waste factor of 30% should be used; when it is laid horizontally 20% may be used.

STEAMERS CORPORATION, Detroit 7, Michigan AB

SALAMANDERS and INFRA-RED HEATERS

For quick, clean, portable heat choose the INSTO-HOT Heater best suited for your job.

Eliminate dirt — soot — noxious fumes forever with instant lighting LP Gas heat. Eliminate handling of flammable liquids on the job! Accepted and approved by thousands of users. Many models available.

For information on the complete line of INSTO-HOT SALAMANDERS and INFRA-RED HEATERS see your dealer or mail coupon today.
### DOOR SCHEDULE

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead 3 panel</td>
<td>2</td>
</tr>
<tr>
<td>Louvered Door</td>
<td>1</td>
</tr>
<tr>
<td>Flush S.C.</td>
<td>1</td>
</tr>
<tr>
<td>Flush S.C.</td>
<td>1</td>
</tr>
<tr>
<td>Overhead 3 panel</td>
<td>1</td>
</tr>
<tr>
<td>Overhead 3 panel</td>
<td>1</td>
</tr>
<tr>
<td>Flush S.C.</td>
<td>2</td>
</tr>
<tr>
<td>Flush S.C.</td>
<td>3</td>
</tr>
<tr>
<td>Flush S.C.</td>
<td>4</td>
</tr>
<tr>
<td>Flush S.C.</td>
<td>5</td>
</tr>
</tbody>
</table>

### INTERIOR DOORS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flush H.C.</td>
<td>1</td>
</tr>
<tr>
<td>Flush H.C.</td>
<td>2</td>
</tr>
<tr>
<td>Flush H.C.</td>
<td>3</td>
</tr>
<tr>
<td>Flush H.C.</td>
<td>4</td>
</tr>
</tbody>
</table>

### SLIDING DOORS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'0&quot; x 6'0&quot;</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: All door frames, trim saddles, casing etc. are to be ordered from the door schedule.

### WINDOW SCHEDULE

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'0&quot; x 7'6&quot;</td>
<td>Sliding</td>
<td>14</td>
</tr>
<tr>
<td>3'0&quot; x 7'6&quot;</td>
<td>Sliding</td>
<td>7</td>
</tr>
<tr>
<td>3'0&quot; x 7'6&quot;</td>
<td>Sliding</td>
<td>1</td>
</tr>
<tr>
<td>5'0&quot; x 8'0&quot;</td>
<td>Triangle Fix</td>
<td>2</td>
</tr>
<tr>
<td>5'0&quot; x 6'0&quot;</td>
<td>Sliding</td>
<td>1</td>
</tr>
<tr>
<td>5'0&quot; x 2'6&quot;</td>
<td>Triangle Fix</td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 27

Windows listed are approximate sizes to be decided upon by the builder to conform with standard manufactured sizes.

### Paneling Schedule

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x 6</td>
<td>120 Lin. ft.</td>
</tr>
<tr>
<td>1 x 8</td>
<td>130 Lin. ft.</td>
</tr>
</tbody>
</table>

---

**For paneling, for doors, for all fine woodwork choose**

**Ponderosa Pine**

one of the dependable woods from the Western Pine mills

Ponderosa Pine is especially well suited for paneling, woodwork, windows, doors, furniture and other manufactured items.

It is straight-grained, takes any finish beautifully, and comes in 3 select, 5 common, 4 dimension, 4 factory grades. It can be ordered in straight or mixed cars, along with other fine-quality woods from the Western Pine mills.

Get the facts to help you sell Ponderosa Pine. Write for Free illustrated booklet to Western Pine Association, Yeon Bldg., Portland 4, Oregon.

**The Western Pines**

Idaho White Pine  
Ponderosa Pine  
Sugar Pine

and these woods from the Western Pine mills  
WHITE FIR - INCENSE CEDAR  
RED CEDAR - DOUGLAS FIR  
ENGELMANN SPRUCE  
Lodgepole Pine - LARCH

are manufactured to high standards of seasoning, grading, measurement.

TODAY'S WESTERN PINE TREE FARMING GUARANTEES LUMBER TOMORROW
The Month Ahead

STRAIGHT DOPE
One of the best ways to take all this HOUSEPOWER business to heart is to (1) use all the national promotion available and (2) come up with some clever ideas of your own. For example: hand out small capsules labeled DOPE, inside of which are strips of paper rolled up with a complete list of circuits, fuses, etc.

BACK TO BUILDER'S SCHOOL
The Small Homes Council of the University of Illinois will hold its Fourth Annual Advanced School for Home Builders on November 5-14. If you've got $130 and don't know a better place to put it, then we urge you to send it to Urbana. But do it early, as registrations are always filled.

BELL RINGER
If you're lining up remodeling jobs at this time, take a look at Bulldog Electric's new strip-mounted outlets. You don't have to tear into plaster, since strip is surface mounted. And you can adjust your outlets to any position. It looks like a good idea.

LAST CHANCE
By the time November comes out, our Best Model Homes contest will have been judged and finished. This is our last chance to beat you over the head and say, get your entries in now! We have to have them by October fifteenth.

Up periscope!
The shouting is dying down from National Home Week, (by all odds the biggest and best ever), and now is the time for you to get your head above water for a few minutes and see what all the fuss was about.

Naturally you couldn't run around the whole country and see what the various Parades of Homes were pushing as their best guesses as to what the 1957 buyer is going to demand in his house. But American Builder can and did cover the U. S. from coast to coast, and what they found were the hottest trends for the coming year is the big story in the November issue.

In addition to reporting on the National Home Week houses, we'll also have features on both new construction and remodeling showing how alert builders are planning for next year. And there'll be a story on a new design trend from California that's coming East fast.

Put down that hammer and think
With the end of the year coming up, and with it the annual cloud of government reports forecasting the state of economic affairs for 1957, it might be a good idea for you to sit back for a moment and remember that besides being a builder, you're a business man too. Have you taken the time to study the government money reports? They'll have a powerful effect on your mortgage situation in 1957, and every indication is that money is going to get even tighter than it is now. Have you seen the government estimates on how many private homes will be built in 1957? They might show that your plans as they now stand are unduly pessimistic. Or maybe optimistic.

Remodelers can get snowed in too
We've talked about the new house builder and his cold weather problems in the feature on "Winter Building" in this issue; don't forget, though, that snow and ice can hurt the remodeler just as much. In most parts of the country, outdoor work will be pretty regular until December; after that you just can't be sure. Might be a good idea to promote as much outside work as possible right now, and perhaps offer some sort of price incentive for indoor remodeling through the winter months.
Colorful MATICO Tile Flooring was selected for these modern Sun Gold homes. Here are two kitchen-dinette arrangements featuring easy-to-clean MATICO tile.

More and more builders are finding that MATICO Tile Flooring meets their needs as the ideal flooring.

Low in cost, MATICO saves on installation because it always lays flat . . . is precision cut to butt tightly, immediately. But MATICO has other important advantages, too. It's a smart, colorful flooring that helps sell the home . . . attracts the eye of the prospective home buyer . . . harmonizes with any decor or style of architecture . . . can be installed on, above or below grade. And what housewife could resist the wonderful cleaning ease that MATICO offers!

Yes, you'll find MATICO first choice in every type of installation from homes to factories and institutions. Be sure to consider MATICO Tile flooring for your next project.

MATICO . . .
the floor
that helps you
sell the home
In the new Visual Display Package

These attractive merchandise containers (polyethylene bags) have a separate compartment for the screws to protect the plated finishes on the hardware. Hang them up on your display counters and you will note how eye-appealing they are to your customers who can see at a glance all component parts for an easy and accurate installation.

All National hardware is still packed in the conventional manner but for those who desire these new VISUAL packs we offer all of the items illustrated here. Other items will soon be available in this new form of packaging which is supplied to our dealers without increase in price.

Our 55th Anniversary

We celebrate another added productive year made possible through the confidence expressed in our products by our dealers nationwide.