MERICA'S BIGGEST INDUSTRY MONTHLY FOR AMERICA'S BIGGEST INDUSTRY

APRIL 1960 SIX DOLLARS A YEAR - ONE DOLLAR A COPY

House Home

	underground service
	outdoor lighting
	service entry
	wiring devices
	sub-panel centers
	small appliances
	hot water heater
	bedside appliances
	cooling
	heating
	thermostats
	ventilation
	power tools
5	telephone
And a sub-	garage door operators
	intercom
	incinerator
	radio/TV/hi-fi
In the second design of the	water system
	door chimes
	lighting controls
	lamps and lighting
	range and oven
	washer and dryer
	refrigerator and freezer
	dishwasher and disposer
A REAL PROPERTY AND A REAL	cleaning system
	snow removal

Electrical Living in the Quality House

WS BEGINS ON PAGE 47 / NEW WAYS TO BUILD BETTER, PAGE 163 / COMPLETE CONTENTS, PAGE 101

Brightest low-cost sales aid Sparklewood* Vinyl Asbestos Tile



Congoleum-Nairn's great new vinyl asbestos includes Sparkling Metallics for excitement from cellar to attic

Now, a popularly priced floor can give your rooms wonderful selling excitement. It's Congoleum-Nairn's new Sparklewood Vinyl Asbestos Tile... an exclusive wood grain background... plus brilliant gold... and "SPARKLE", a shower of flashing gold and silver stars. Mix or match the decorator colors in this vinyl tile floor to beautifully dress up your homes. See the spectacular Sparklewood now, and also learn about Congoleum-Nairn's big Builders' Selling Aid Program.

ALL PATTERNS ACTUAL SIZE. Upper left 516, upper right 514, lower left 518, lower right 511.

SPECIFICATIONS: 9" \times 9" tiles. 1/16" gauge. Usable on above-grade, on-grade or below grade floors of wood, concrete or ceramic tile (with or without radiant heating).



*Trademark C Congoleum-Nairn Inc., Kearny, New Jersey, 1960



EFFECTIVE NEW WAY TO SELL HOMES!

Tell your prospects that a General Electric "Air of Satisfaction" home offers a wonderful new life in many ways—healthful atmosphere, more cleanliness, greater comfort, plus higher resale value. That's a combination that's sure to help you sell homes.

Whether your project calls for 10 homes or 100, plan your sales promotion around General Electric Central Heating and Air Conditioning and the G-E "Live in an Air of Satisfaction" program. This is not a do-it-yourself program but a powerful, personalized sales plan master-minded by General Electric to bring



prospects to your homes and close sales at your homes.

For complete details, call your G. E. heating and air conditioning dealer (listed in the yellow pages)—or mail coupon today.



GENERAL ELECTR Air Conditioning I Tyler, Texas			HH-3
Attention: Mr. J. J	Heffernan		
I'm interested in	teaming up with Gene give me full details.	ral Electric's "Air of	Satisfaction"
Name		1	Same and
Firm			
Address			
City			
County	State		

AIR CONDITIONING DEPARTMENT, TYLER, TEXAS



It goes in fast

Builders say the new General Electric Dishwasher is the easiest, quickest dishwasher to put in its place. ¶And it just happens to wash dishes better than any other dishwasher. So why break your back and waste valuable time with lesser machines? ¶And why mess with dishwashers that lack the very essence of dependability and customer confidence embodied in the "General Electric" name. Why?

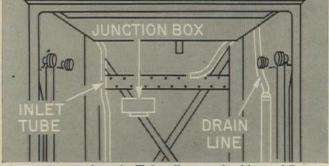
THE GOLDEN VALUE LINE OF THE 60's





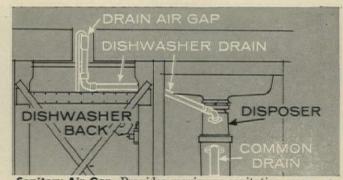
... you get out fast

WHAT COULD BE SIMPLER?



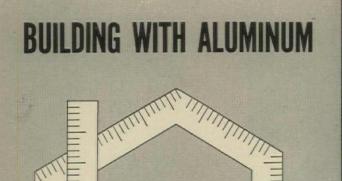
Saves time and work. Tub rolls out of cabinet while you make electrical and plumbing connections. (Four wood wedges let you shim and level cabinet while in place.)

Available in five colors, five woods and three new fashion finishes. It's the only dishwasher with Power Shower, top and bottom washing action and four cycles. Who knows, it might just help you sell your homes faster! General Electric Company, Louisville 1, Kentucky.



Sanitary Air Gap. Provides maximum sanitation, uses one drain for both dishwasher and sink. (Optional: sanitary drain which utilizes existing sink.)





minuluuluulu

SOFFIT · FASCIA

This is the first in a series of advertisements to help home builders find new solutions to building problems through application of aluminum's unique design advantages and saving opportunities. Extra copies of advertisements in this series will be supplied on request. Write Kaiser Aluminum & Chemical Corp., Dept. HB-154, Kaiser Center, 300 Lakeside Drive, Oakland 12, California.

Structural aluminum soffit and fascia eliminates outlookers, offers savings of up to \$5000 per house

Recent Kaiser Aluminum development of low-cost soffit system cuts overall material cost, installation cost, and finishing cost...while providing more pleasing soffit appearance and added durability. System now available in major markets... with distribution spreading throughout the nation during 1960.

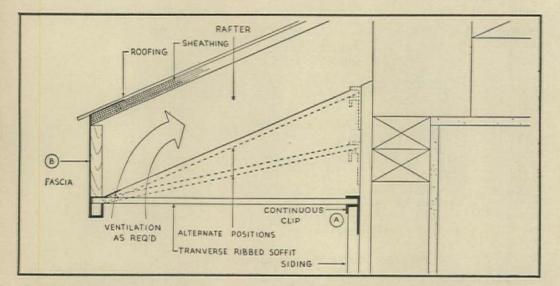
A new aluminum building product is now becoming readily available to help solve one of the ten most difficult problems that builders face today: soffits.

Today's residential architecture, in particular, emphasizes the problem because of increased roof overhang to afford better protection of window and door openings. Finishing this added overhang has increased construction expense.

A Solution:

Aluminum Soffits and Fascia

Aluminum soffit systems are designed to enclose the entire area between exterior wall and roof eave—without the support of outlookers or other rough carpentry.



Typical cornice can be greatly simplified by the three elements of the new aluminum system. (1) Ribbed aluminum soffit eliminates two by four wood outlookers. (2) Continuous clip (detail A) eliminates supporting carpentry at exterior wall. (3) Aluminum fascia (detail B) replaces rough plus finish wood fascia. The total saving, including materials and labor, could amount to about \$50.00 for a typical medium-size house. They are far lighter in weight than conventional plywood or cement asbestos. With ribbed design, they have built-in structural rigidity, to eliminate the need for outlookers.

As shown in the accompanying sketches, an aluminum soffit system offers the builder a completely new—and greatly simplified—cornice. The soffit panel may be used alone, in an otherwise conventional construction. Or, it may be used with aluminum fascia and soffit panel clip accessories for maximum saving—and maximum added value!

Rot-Proof and Vermin-Proof

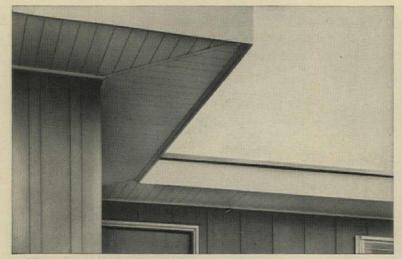
The aluminum soffit, because it is rustproof metal, is highly resistant to moisture attack. Aluminum resists corrosion ... even forms its own diamond-hard oxide coating: Vermin can't touch it!

Added Beauty, Reduced Upkeep

For appearance, the aluminum soffit gives the builder an important selling advantage! Its smooth, even, baked finish is factory-applied to last for many years. Colors are available in a range similar to standard aluminum siding colors or may be painted to the builder's own taste.



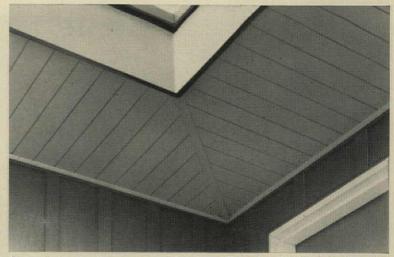
Simple replacement of plywood or cement asbestos facing material with aluminum panels results in cleaner appearance, easier application. Factory-finished aluminum eliminates painting expense.



Miter joints for either inside or outside corners may be easily cut and fitted in the field. Joints between panels may be attractively finished with snap-on trim strips of matching aluminum.



Used with conventional wall support and wood fascia, aluminum soffit panels can eliminate material expense and labor cost of outlookers. Panels may be field cut to standard sizes without waste.



Complete aluminum system, fascia, soffit and wall clip, eliminates all wood construction from cornice. Continuous clip replaces wall support carpentry, provides functional and attractive trim.

TAKE ADVANTAGE OF KAISER ALUMINUM'S PROGRAM TO HELP YOU ADD VALUE WITHOUT ADDING COSTS!

Complete information on cost, how to install, and where to buy aluminum soffit materials is yours for the asking! Simply mail the coupon.

And watch this magazine for more news about building with aluminum! The aluminum soffit and fascia system is the first of a series in Kaiser Aluminum's continuing program to introduce new products



See the home values featuring aluminum building products advertised on "Maverick"—see ABC-TV Network, Sunday evenings. Consult your local listing.



that help builders add value without adding cost.

Kaiser Aluminum works closely with both builders and building product manufacturers to help bring the advantages of aluminum to manufacturer, builder and homeowner.

Kaiser Aluminum & Chemical Corp., Kaiser Center, 300 Lakeside Drive, Oakland 12, California.

Dept. HB-154	-A
Kaiser Center	, 300 Lakeside Drive, Oakland 12, Cali
Gentlemen:	
Please send full i	information about aluminum soffits to:
NAME	
COMPANY	
ADDRESS	
	STATT

To Build Better ... To Live Eclic? *Trademark Hunder, Manufactor & Chemical Corp.





- Architects: Bailey A. Swenson & H. William Linnstaedter, A.I.A.



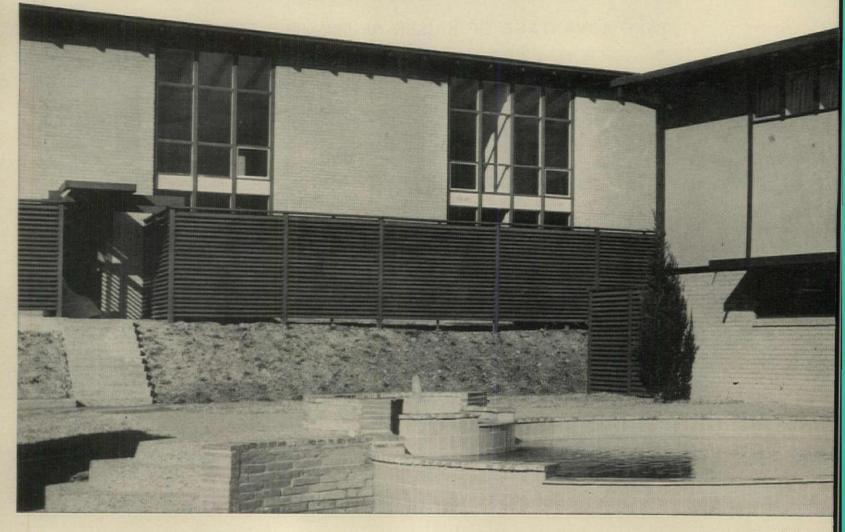
Rugged Insulite Sheathing was also used on Hillside Apartments. Easy to nail, easy to saw, the Insulite panels cut application time, saved waste.

Strong, easily supports workmen. Insulite Roof Deck is made in 2' x 8' tongue and groove panels; 1½, 2 and 3" thick. 18,000 ft. of 3" type used on the job.

Four-in-one: decking, insulation, vapor barrier and finished ceiling are installed in one operation!



INSULITE, made of hardy Northern wood Insulite Division of Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota INSULITE IS A REDISTERED TRADE-MARK, U.S. PAT. OFF.



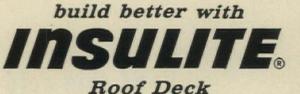
Houston luxury apartment uses Insulite Roof Deck for structural strength, ceiling beauty

It's roof decking, insulation, vapor barrier and pre-finished ceiling—all in one cost-saving package!

Builders Jerry McCall and Henry Hodell chose Insulite Roof Deck and Insulite Sheathing in creating this truly luxurious Hillside apartment on Houston's Memorial Drive.

The exceptional decorative and functional characteristics of Insulite Roof Deck blend perfectly with the overall plan. The open beams provide a striking contrast against the gleaming white surface. Insulite Roof Deck's 4-in-1 functional advantage economically provides a strong, durable roof decking . . . efficient insulation . . . a continuous vapor barrier . . . an attractive, finished ceiling that can be "scrubbed" with soap and water—all in one simple application.

Save money, add beauty like this to your homes, apartments, commercial buildings—with Insulite Roof Deck. Contact your building materials dealer, or write Insulite, Minneapolis 2, Minnesota.



"this sold me!

- more family living space
- a safe place for the kids to play
- summer entertaining that can't be rained-out
- a price we could afford to pay!"

MRS. HOMEBUYER, Peoria, Illinois

PATIO PHOTOS COURTESY OF RAYNOR MEG. C

PATIO



GARAGE

FRED SCHOTTHOFER Schotthofer Construction Co. Peoria, Illinois Pres. Homebuilders Assn. of Illinois

"and this sold me!

- one-third more usable space at little added cost to me
- appealing features that help me sell homes
- a nationally known product distributed locally
- manufacturer's warrantees that I can pass on to my buyers!"





HOMESHIELD INDOOR-OUTDOOR GARAGE-PATIO CONCEPT

Let us show you how this million-dollar Homeshield idea can work right in with your present building plans . . . at little cost to you. Just call your nearest Homeshield screen section fabricator. He has been franchised on the basis of his integrity, manufacturing facilities and ability to fulfill your needs.

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OHIO

OHIO AKRON-Tropic Kool Jalousie CINCINNATI-Aristo Products Inc. COLUMBUS-Able Builders Supplies Inc Patmer-Donavin Mg. Co. DAYTON-Aluminum Materials Inc. GEAUGA LAKE-Suburban Storm Windo & Door Co. TROY-Elco Products

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RHODE ISLAND PROVIDENCE-Shoor-Elias Glass Co. WARICK-Weather Products Corp.

SOUTH CAROLINA er & Millwork CHARLESTON—Southern Lumber & Millwork COLUMBIA—Boozer Lumber Co. ORANGEBURG—Palmetto Sash & Door Co. Inc.

TENNESSEE CHATTANOOGA--Chaltanooga Venetian Blind KNOXVILLE--Conner-Tate, Inc. SWEETWATER--Vestal Mfg.

TEXAS AUSTIN-Dismukes Venetian Blind Co. HOUSTON-Air Vent Awning

WASHINGTON, D.C.-The Shade Shop

WISCONSIN BUTLER—Advance Aluminum Products SHEBOYGAN—Sheboygan Glass Co.

Roddis does wonderful things with wood..

PRODUCT REPORT

Roddis has a special way with wood, developed through more than 60 years of craftsmanship. On the following pages you will see many of the Roddis products that are of particular value to the architect, dealer and builder. Revolutionary *new* products developed through Roddis research . . . and *traditional* products—the finest expressions of the woodworker's art. All of them can make vital contributions to your design and construction plans.

Roddis does wonderful things with... HARDWOOD PANELING

Nothing demonstrates the special Roddis "way with wood" more dramatically than Roddis' famous hardwood panelings. Here's where the enthusiasm for wood, the instinctive sense of beautiful graining, of our skilled craftsmen finds full creative expression.

The wedding of traditional Roddis woodworking skills with modern manufacturing techniques—automated production lines, electronic quality controls, advanced research facilities—is the secret of Roddis' success with paneling.

The result? All the richness and warmth of the world's most beautiful woods . . . ready to transform any wall into a work of art.

Whatever your application—commercial, residential or institutional you'll find that Roddis has the paneling that's "right" for your design.

For complete details and specifications on any Roddis paneling mail the coupon on page 8 of this insert. (See also Sweet's Architectural File.)



Roddis Architectural Grade Hardwood Paneling. For your finest, custom-designed institutional installations choose the finest in hardwood paneling. Select from the world's most beautiful veneers. Each panel sequence matched and numbered by Roddis' woodworking experts. Prefinished if desired. Guaranteed for the life of the installation. The ultimate in luxury and good taste.



Roddis Craftwall Genuine Wood Paneling. Roddis is the originator of 1/4", V-grooved, prefinished paneling! Called Craftwall, this revolutionary paneling was the first in the market and has earned a reputation for beauty and economy. A unique Craftwall finish keeps the wood beautiful indefinitely. Roddis guarantees that, in writing. Shipped in special protective cartons. Another Roddis "first" . . . special molding, trim and matching finishes.

Roddis $\frac{7/6''}{\text{Architectural Craftwall.}}$ A new cost-saving, labor-saving wood paneling with a special center core of Timblend, Roddis' man-made board. Works and handles like fine $\frac{3}{4''}$ material. Installs direct on studs, no underlayment! Prefinished. Guaranteed for life.

Fire-Retardant Wood Paneling. Roddis' ¹/₁₆" Architectural Craftwall is the only particle-board-core paneling that is available in fire-retardant form! Rated and listed by Underwriters' Laboratories, Inc. Equals or exceeds most Building Code requirements! All other Roddis wood panelings are available fire-retardant

treated on your special order. Roddis Fire-Retardant wood panelings assure beauty . . . plus exceptional *fire safety*!



Roddis does wonderful things with...

WOOD DOORS

The design and manufacture of fine wood doors is a major part of the Roddis tradition. In fact, it was more than half a century ago that the first Roddis Door was produced.

Since that time Roddis has pioneered with many innovations in door design and construction to become the leading flush veneer door manufacturer in America. (One recent example of Roddis innovation: revolutionary *wood particle core Fire Doors*—exclusive with Roddis!)

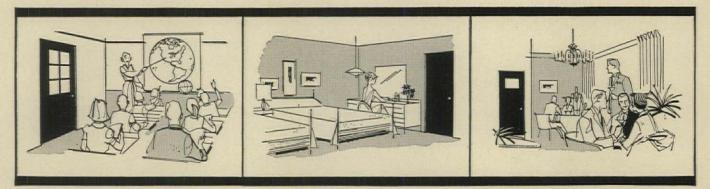
Today, Roddis, the most respected name in doors, offers the most complete, and the most popular, line of flush veneer doors in the country. Actually, an independent survey reveals Roddis Doors are preferred by architects 2 to 1 over the next leading brand.

New Roddis prime-and-seal and custom-finishing service for architects and builders!

You gain important on-the-job cost savings—assure beauty—when you specify factory "prime and seal" for your Roddis Doors.

This service makes possible a uniform, perfect first coat on every door. Dirt, moisture and stains are locked out during transportation and storage. Final finishing is faster, more foolproof.

If you prefer, Roddis will completely finish your doors to your own specifications. Colors may be selected and Roddis' famous finishes (or those of other manufacturers) are available. backs up your promise of quality... the door with the lifetime guarantee



Institutional Doors. For hospitals, offices, schools, churches. Built for special hardware ... closures, kick plates, panic bars. Laminated frames add strengh. Economy priced.

Hollow Core Doors. New 7-ply Housemart hollow core doors give economy, flexibility of installation. Strength without extra weight. Ideal for limited budget applications.

Plastic - Faced Doors. Designed for hard wear, easy maintenance. In restaurants, offices, schools, public buildings. Choice of many colors and patterns. Mar-proof.

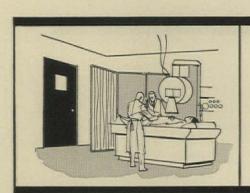
Roddis' Famous Golden Dowel Doors (ALL WOOD, SOLID CORE)

The golden registration plate on every Roddis Golden Dowel Solid Core Door is proof to your clients of the quality you are giving them—a door that will stay straight, true, beautiful for the life of the installation. This lifetime guarantee dramatizes the fact that you have provided the finest door available anywhere. Of course, what makes possible such a long-term guarantee is the unique construction of Roddis Golden Dowel Solid Core Doors. They are all wood, with the proven stability of *staved core* or new, *wood particle core* construction. In addition, each staved core Golden Dowel Door is TIME CONDITIONED by an exclusive Roddis process. The result is a door that is not only sound-deadening and fire-resistant, but a door that defies time.





Solid Core Doors. Choose the Golden Dowel Door with lifetime guarantee. Or Standard solid core doors. For interior and exterior. **Sound-Retardant Doors.** For offices, music rooms, radio and TV studios, sound stages. Veneered to match regular Roddis doors.



X-ray Doors. With continuous sheet of protective lead midway between divided core. Combinevital protection, outstanding beauty. Easy maintenance.

Fire Doors. Patented core assures strength in all directions, extra weight gives outstanding fire-resistance, sound-resistance. B-label, 1 hour; C-label, 3/4 hour.

Send the coupon on page 8 for complete details on Roddis Doors. (See also Sweet's Architectural File.)

.....

Roddis does wonderful things with ... TIMBLEND

A revolution in wood technology! One of the most exciting developments to emerge from the "Roddis way with wood" is the famous man-made board— Timblend. Twenty years of research and seven years of field testing came before Roddis introduced this unique woodblend board to America. Today, the acceptance of Timblend by builders, designers and manufacturers is the "success story" of the industry.

Why Timblend is outstanding! Timblend is wood in a new form . . . fabricated from special, dimensionally-sliced wood shavings. It's these precision-cut shavings that make the big difference! Combined with an exclusive resin formula in a unique criss-cross pattern, they are formed under heat and pressure into a board that is test-rated as outstanding in strength, dimensional stability, warpresistance and workability. 1st shavings board plant in United States! To fill the demand for Timblend, the Roddis people have recently completed a \$4,000,000 plant in Arcata, California, the first of its kind in America. A triumph of electronics and automation, this facility is in operation around the clock, seven days a week. Even so, the demand for Timblend is so great Roddis is now proceeding with a new 50% expansion program!

A new designing and building opportunity! Timblend surpasses both lumber and plywood in many building applications. Use it for soffits, walls and sheathing. Ideal for cabinets, built-ins, sliding doors, underlayment, too.

Send the coupon on page 8 of this insert for complete Timblend information.



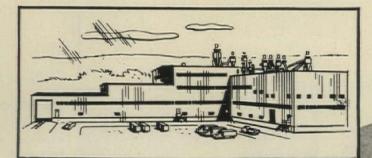
Standard Timblend. It's the original wood-blend panel. Use instead of plywood for many interior applications. Ideal for all underlayments.



Veneered Timblend. All the beauty of your favorite hardwoods, plus the strength and warp-resistance of Timblend core. For cabinets, sliding doors, etc.



fillers for ease of application . . . supersmoothness.

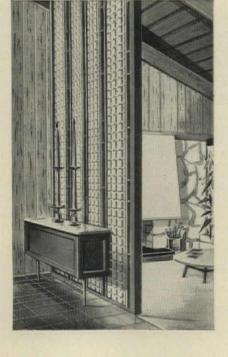


The new Roddis \$4,000,000 Timblend manufacturing center at Arcata, California.

Exclusive manufacturing process gives Timblend compactness and desirable density. Edges are solid and surfaces are super-smooth. Timblend works fast and easy... resists warping.



Phenolic Timblend. Made with waterproof phenolic resin. Unaffected by moisture and humidity. Ideal for sheathing, soffits, etc.



Sculptured Timblend. The outstanding workability of Timblend makes possible a new dimension in decorative design applications. For new intricate patterns are actually "carved in" to provide a variety of artistic effects. This "Sculpturewood" is ideal for room dividers, acoustical ceilings, window displays, wall treatments, etc. Outside, it adds beauty and permanence to fences, walls, facades and sun screens.

Roddis does wonderful things with ...

wood finishes

Anything made of wood-furniture, paneling, floors, doors-will look better and last longer when treated with Roddis' special wood finishes. There's one that will enhance your wood's beauty and give outstanding protection against scuffs, stains and household chemicals.



For the professional . . . and for gen-eral use . . . Roddis makes available

a full line of adhesives. Each one for-

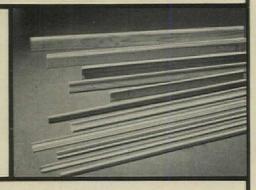
mulated to do the job quickly and

easily. They include Roddis All Pur-pose Glue, Roddis Waterproof Glue, Roddis Contact Cement, Roddis Plastic Urea Glue.



molding and trim

Roddis hardwood molding and trim is manufactured to exceed U.S. Government standards. Available in both traditional and contemporary design to match the style of any room decor -add a look of quality. Ideal for use with wood paneling.





hardboard and fir

adhesives

There's a Roddis hardboard to fit your exact needs. In fact, Roddis offers 11 different types. (Standard, Temper-Treated, Striated, Laminated, etc.) Each produced for a specific use. And if you work with fir plywood, Roddis makes practically every type and welcomes the opportunity to be of service.

send for

and figures

free facts

I'm listing the Roddis products I want to know more about. Please send free information immediately.

Roddis Plywood Corporation,	Dept. HH-460, Marshfield, Wisconsin
Name	
Firm	
Address	
City	State

RODDIS PLYWOOD CORPORATION

Branch Offices

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Associated **Branch Offices**

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HOUSTON, TEXAS-Roddis Lumber and Veneer Co., 2415 11th St.

KANSAS CITY, KANSAS—Roddis Lumber and Veneer Co., P. O. Box 57

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MONTGOMERY, ALABAMA-United Ply-wood Corp., 581 Trade Center St.

NEW ORLEANS, LA. – Tulane Hardwood Lumber Co., 4200 Tulane Ave.

PHOENIX, ARIZONA – Southwestern Glass & Millwork Co., 1655 West Jackson

PORTLAND, OREGON-Lumber Products, 2116 N. W. 20th Ave. RENO, NEVADA-Vaughn Millwork Co.,

P.O. Box 679 SAN ANTONIO, TEXAS-Roddis Lumber and

Veneer Co., 727 N. Cherry St. SAN DIEGO, CALIF.-Sullivan Hardwood

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Roundup:

NEWS INDEX

Housing market	48
Outlook for '60 starts	48
NAHB profiles its builders	49
Boom in land speculation	49
Local markets	50
Housing policy	51
VA's status & prospects	51
Mortgage market	55
First signs of price easing	55
S&Ls woo eastern money	56
Mortgage briefs	56
The promise of pension money	58
The promise of pension money	50
Housing camera	60
Labor	61
Will Congress crimp new methods?	61
John Dunlop, quiet conciliator	61
voin Duniop, quier concinuor	01
Materials & prices	65
	0.5
Building producers' '59 earnings	65
Urban renewal	66
New York gets a new text	65
URA slashes its red tape	65
Public housing	67
Can the 'liberals' save it?	67
People	68
Savage gets top PHA post	68
Robert Moses: exit	69
Canada	71
Starts head for a drop	71
Architects study urban sprawl	71
Statistics & indexes	73
Mortgage quotations	57
Housing starts	73
FHA, VA applications	73
Boeckh housing costs	73
RIS' materials prices	73

Mortgage discounts show first signs of shrinking

Signs are multiplying that the price of mortgage money is headed down. In the first place, more money is available than most experts foresaw last fall. Life insurance companies have been active buyers through the winter. And now savings banks are beginning to come back into the market. S&Ls are committing heavily—particularly on the West Coast where their $4\frac{1}{2}$ % rate to shareholders (see p 56) is netting them big deposit gains. Last year S&Ls financed 40.6% of US home mortgages—the first time above the 40% mark.

The price of short-term money (ie Treasury bills), which fell below 4% in February, has continued to 3.451%. And HOUSE & HOME's monthly sampling of mortgage prices shows March brought the first decline in FHA and VA discounts in nine months. Nobody is forecasting that the price of mortgage money will fall very far, but at least it is headed in the direction the housing industry likes.

GOP Congressmen rip Rains' \$1 billion housing bill

Rep Albert M. Rains' bill to pump up housing starts with another \$1 billion of Fanny May mortgages at subsidized prices (ie par) is headed on a slow course toward a Presidential veto. The House banking committee has voted the measure out onto the floor, 18-7, on party lines. The House will probably take it up after Easter recess.

Most notable thing about the proceedings so far is the unusually vigorous denunciation of the bill in a minority report signed by nine GOP members of the banking committee. It calls Rains' plan a "\$1 billion back-door raid on the Treasury" which amounts to "irresponsible spending" in the face of "no emergency" in housing. As for the cries by "liberal" Democrats about "unconscionable discounts," the minority report says: "If Congress really wants to do something, it could knock out half the GI discount if it would just [give VA interest the same flexibility as FHA has]. Maybe someday Congress will realize it is unsound to spend federal billions to rescue programs which otherwise will work under the free enterprise system if hamstringing restrictions are adjusted to realistic levels."

The report attacks Rains' claim that his \$1 billion Fanny May special assistance fund "sparked the recovery in housing that pulled the country out of the [1958] recession." By year-end '58, it notes, only 8,802 homes had been built and sold under the subsidy—0.8% of the year's starts.

Politics of housing, 1960-style

Last year, organized builders decided their bread was buttered on the Democratic side (*June, News*). They backed the housing bills boosted by self-styled "liberal" Democrats only to see two Presidential vetoes upheld. They stood apart from Administration efforts to get rid of the 42-year-old 4¹/₄% ceiling on long term (ie over 5 years) government bonds, only to find the result was a Treasury raid on Mortgage money via the celebrated "Magic 5s" last October.

Now, signs grow that NAHB leaders are having second thoughts about their political posture. The new posture that seems to be emerging is one of neutrality, and sticking to the thing builders know best (ie building). An indication of this cropped up in January, when some of NAHB's elder statesmen fought long and fairly successfully to prevent the association from outright endorsement of a \$1 billion federal mortgage subsidy, via Rep Albert Rains' bill to force Fanny May to buy that many loans at par on homes priced up to \$14,500.

A much stronger indication of new thinking is the association's support for a compromise bill to let the Treasury sidestep the $4\frac{1}{4}$ % bond ceiling (see p 56). This should strengthen NAHB's hand in plugging for elevation of HHFA to cabinet-rank, even though here builders find themselves political bedfellows with their economic enemies: public housers and organized labor.

WASHINGTON INSIDE: The Producers' Council has decided to go ahead with a three-year, \$75,000 study of building industry distribution problems that was urged on it in St. Louis last fall (Nov, News). Economists Reavis Cox and George Goodman told the producers then that so little data was available on the industry that it was barely possible to identify distribution problems, let alone suggest solutions . . . A straw-in-thewind hint (but not much more) at cheaper mortgage money comes from the regional Home Loan Bank in Pittsburgh, which dropped its rate on loans to member S&Ls from 5% to 41/2% for collateralized loans and 43/4 % for uncollateralized, thus giving it the lowest rates of any of the 11 regional

HLBs . . . FHA is dusting off Title VII of the Housing Act, which provides for insuring a minimum yield on rental properties instead of insuring a mortgage. New regulations are being prepared and sent out to the field, despite the fact that the program has found no takers since it was set up in the 1948 Housing Act. Catch now, as then, is that the maximum insured yield is only 23/4 %, plus 2% for annual amortization charge on the outstanding investment . . . FHA's assistant commissioner for operations, Dan Minto, will quit May 1 to return to California where he was an auto dealer before becoming director of FHA's San Francisco office in 1958, whence he was brought to Washington last May. NEWS continued on p 48

HOUSING MARKET:

Is housing headed up?

Private starts sink to 18-month low, but winter blizzards, rains may be partly to blame. Easing money for mortgages hints at upswing ahead.

The annual rate of private housing starts has slipped to its lowest level since June 1958. And chances are good that the Census Bureau's count, when it is released in mid-April, will show that they fell even lower during March.

But government and builder spokesmen agree this was almost a foregone result of last fall's dramatic tightening of mortgage money. Government housing officials remain confident that spring will bring a more-than-seasonal upturn probably no later than May.

Says HHFAdministrator Norman P. Mason: "I estimate that the year's production will reach 1.2 million or even a few more, despite the current temporary decline. It takes some time before builders find that money is more available and then translate that finding into new building plans and actual operations. Money is now more available (see p 55), and in my opinion will be sufficient to support the (1.2 million) volume." Builder spokesmen concur that this year is still likely to bring 1.2 million units. Says one: "The February drop in starts reflects the inability of builders to get mortgage commitments last October through December. Last fall's predictions that money would stay tight affected builders' planning for this year. Now that may change . . ."

February private starts fell to an annual rate of 1,115,000 units (see p 73 for details), which left private starts for the year so far some 16% behind their 1959 pace. As usual, FHA and VA starts—which more and more economists blame for the entire roller-coaster course of housing production—are off the most. Comparing the first two months of 1959 and 1960, conventional starts are down 14%, FHA starts are down 16% and VA starts are down 33%. In February, conventional and allcash starts were down 22.5% (to 52,248), but they have never been any higher than that in February except in 1959.

FHA applications for new one- to fourfamily units showed a 30% increase in February over January. But this is seasonal, not the first sign of more bustle in housing. The annual rate of both January and February applications was the same: 264,000 units.

Expectations that 1960 will be a 1.2-million-starts year are buttressed by FORTUNE's annual survey of builder intentions.

Builders themselves are "optimistically" predicting they will start 1.3 million units this year, the magazine reports in its April issue. But it adds: "More probably starts will total only about 1.2 million, though the builders have a fair record as forecasters. They were right in their optimism for 1959 when other experts were pessimistic. In recent years their forecasts have been substantially correct six years out of nine. But they were badly off in 1953, 1955 and 1956 when money unexpectedly tightened. FORTUNE calls the shape of today's mortgage market "favorable to a large volume of building" because two-thirds of starts are being financed conventionally (where mortgage interest rates are free to move with supply and demand).

Severe winter weather is blamed for both poor sales and low starts in many parts of the nation—especially where winters are often mild.

Census declines to let weather take the blame for February starts, but it may be a different story in March. Since mid-February, unusual cold, snow or rain has hampered builders from Florida to Texas, as well as in Oregon and Washington.

Don't expect FHA to cut its down payments just because starts have dipped below 1.2 million for one month.

FHA Commissioner Julian Zimmerman has indicated he would probably cut down payments—as the 1959 Housing Act permits—if housing output fell below 1.2 million-a-year. But insiders say FHA is unlikely to act until both the March and April figures are in, and then only if they show a real drop.

Moreover, by June or July Census is expected to complete its revisions of the much-criticized housing starts figures. Insiders say these may show the US has been building closer to 1.6 million units a year than the 1.2 million the outdated estimating systems permitted the government to guess. This could mean that the politicians, mostly Democrats, who have been crying that regulations should be eased to encourage more building would find their goals have already been reached under existing rules. "They'll have to shut up or raise their goals," says one Administration official. "It could be embarrassing."

MARKET BRIEFS

Housing's cost-push

The average new house will sell for 3.8% more this year than last, predicts the Home Loan Bank Board.

Most of the increase will be via mortgage discounts, which builders pass along to buyers by boosting prices, and the higher cost of suburban land, say HLBB analysts.

A survey of 2,000 S&Ls produces these 1960 estimates: the average home buyer will pay \$18,365 for a new house as against last year's \$17,697 (1950 average: \$10,842).

Record for prefabs

Production of manufactured homes reached a record high of 132,054 units last year a 20% gain over 1958's 110,080, reports the Home Manufacturers Assn.

This contrasts with the 80,000-unit output estimated by HOUSE & HOME (*Dec*). The latter count, however, includes only houses produced by manufacturers who sell through builders or dealers and thus does not include "shell house" production unless purchased, put up and sold by the builders and dealers.

Biggest prefab state was Ohio, according to HMA, with 20,390 prefab starts. Some 64 concerns ship into the state.

Autos vs. homes (cont'd)

Is the new popularity of foreign and economysized autos helping builders sell new homes? One who thinks so is Ed Hemard, New Orleans builder. He says more families are willing to live in the far outskirts of town because it doesn't cost so much any more to own and operate a second auto. And with the little car, the housewife can even find a place to park when she drives downtown to shop.

Rent control's shackles

• In New York—the last great US metropolitan center trapped in rent control—the average rent for three rooms in a controlled apartment is \$54, but in a new apartment it is \$141.

• The average rent of *all* controlled units is \$60. Yet three-quarters of New York City's households earn over \$4,000 after taxes and so should be able to pay from \$75 to \$80 a month for their housing. And one-third earn over \$7,500, could pay \$140 a month rent.

• "Control engenders a permanent 'low-rent' psychology which has important repercussions throughout the whole real estate market, including new construction. . . . Controlled tenants have no inducement to move to new quarters [so] builders are actually *discouraged* from trying to put up what the city so obviously needs—ie middle-class housing."

These were among the findings of HOUSE & HOME's sister magazine, FORTUNE, in an analysis of what 19 years of rent control have done to New York. FORTUNE noted that other US metropoli have thrown off rent control without experiencing huge rent increases. Examples: rents have risen only 28% since Chicago abandoned controls in 1953; rents have risen only 11% since Philadelphia dropped them in 1956. Concluded FORTUNE: "New York must follow [this example] if it is ever to solve its housing problem."

The biggest argument for ending controls was overlooked: in proportion to its almoststagnant population, New York now has more apartments than in 1939. So there would be no housing "shortage" if rent control were not creating excess demand. In 1939, with less housing per capita, people thought New York City had a housing surplus.

TTE

How few builders build how many houses? New survey leaves it unclear

A fresh picture of how few builders build the bulk of new US housing emerges from an NAHB survey.

The organized builders, whose total membership has just reached an all-time peak of 43,800, surveyed its 16,791 builder-members —the ones that actually do construction of some kind.

They found (based on 7,000 replies from the 16,791 NAHB builders) that 59% of the homes built last year by NAHB members were built by only 10% of NAHB-builders, who averaged 350 homes per builder. The second 10% of NAHB builders built 15% of the total and averaged 89 homes each. The third 10% of NAHB builders put up 9% of the total and averaged 53 homes each.

NAHB found that the "typical" NAHB builder produced 20 homes last year. Stated another way, this is the builder whose output ranked 3500th in the 7,000 builder sample; half the NAHB builders built more, half built less. Because of the huge production by the biggest builders, the average number of units built per builder last year was 60.

What this means in terms of the total housing market is open to question. In 1949, when the Bureau of Labor Statistics made the last comprehensive count of building contractors, it found 116,000 built less than 5 houses a year, 106,000 built less than 10 houses and 112,000 built less than 25 houses. NAHB's survey covered only the 15% of builders (16,000) who are NAHB members.

The significant fact is that this small minority of builders, averaging 60 houses each, would appear to have started 960,000 housing units last year, or 71% of the 1,350,000 built. NAHB, in disclosing results of the survey in its monthly *Journal*, noted that in both 1958 and 1959 the top volume half of NAHB builders accounted for $92\frac{1}{2}\%$ of all units built by NAHB builders.

Other findings:

• The "typical NAHB-builder" last year was 41 years old, had been in business 11 years, built a house that sold for \$18,000. (But NAHB insists the price of the typical house is probably nearer \$14,000.) Some 60% of his output was financed conventionally.

• Only 15% of NAHB-builders operate exclusively in the FHA-VA market. But 42% have no truck whatever with federal financing aids.

• Second mortgages were a big item last year. Some 27% of NAHB-builders say some of their homes carry second mortgages. 18% report using other types of secondary financing.

• 38% of builders design their own homes, but 46% hire some kind of design professional (27% an architect for a fee, 7.2% a staff architect, 12% a designer). Only 6% say they use a plan service.

• Realty brokers have a hand in selling at least part of their output for 45% of build-

ers. Another 55% sell for themselves, or hire their own sales force. Only 23% use realty men exclusively.

• Model homes are used in some form by 54% of the NAHB-builders—a figure that is subject to question. This would mean 9,000 "Model-house builders." Local NAHB secretaries say there are less than 4,000 builders who use true promotion model houses. NAHB's findings are that $22\frac{1}{2}$ % of NAHB-builders use "furnished models," 18.7% use "unfurnished models." The remaining $12\frac{1}{2}$ % say they use both kinds.

• 42% of NAHB-builders say they take some trade-in homes to sell new ones. But only $6\frac{1}{2}\%$ say trade-ins are involved in as much as a quarter of their business, only 10% use them for 10%.

• Their toughest problem, 45% of builders say is lack of suitable land at a reasonable price. No other problem even comes close; runners up are high construction costs (12.1%) and mortgage money (12.4%). Merchandising & selling ranks No. 4 on the problem list; and community facilities are No. 5.



SCRAPERS DIG WHAT TEXAS PROMOTERS SAY WILL BE DESERT LAKE

Land speculation: now the public is beginning to get in the act

The stampede for land in two of the nation's fastest-growing housing markets has begun to take on riotous proportions. And a third boom is growing in some of the nation's most desolate desert land. Items:

• In Costa Mesta, Calif. a crowd of 1,000 gathered in an open field and stood by in awe as 200 big-money bidders ran the price of the last parcel in what was once the sprawling Santa Ana Air Force Base up to \$19,000 an acre for 250 acres. Successful bidder in the half-hour sale was Macco Corp of Corona Del Mar, which plans to put up 1,000 to 1,500 houses priced between \$19,000 and \$25,000 apiece in the next two years. Local realty men call the price "unbelievably high" compared with other Orange County land that has been going at \$11,500-\$12,000 an acre. But John Klug of Macco, contends his firm got a bargain. The land already has trunk sewers and water lines; the price includes mineral rights to 21 acres of adjoining land used for schools. "It's the third largest piece of land left undeveloped in Orange County and the other two aren't for sale,' says Klug. "We first began studying it a year and a half ago, knew just what it was worth and got it for that. I guess that happens only once in a lifetime." Estimates of cost to develop the land range from a sour-grapes \$5,000-an-acre to Klug's guess of \$60,000 total. Under the terms, Macco pays 10% down, 10% when the bid is formally accepted. and the rest in five installments over 10 years as title is taken, with interest at 53/4 % on the balance.

• In Ft. Lauderdale, Fla., nearly 4,000 persons gathered in War Memorial Auditorium to tangle in a 20-min melee of buying that disposed of 541 lots priced at \$7,500 to \$25,000. The buyers, from all over the country, showed up at 7:30 a.m. for coffee and rolls, watched vaudeville, heard band music

and pep talks about the area's bright future. After an hour and a half, management of Coral Ridge Properties Inc, the sellers, announced discounts on the lots of 30% if the buyers would guarantee to build in six months. Then a bell rang to signal the start of selling; buyers jammed lined-up tables against the auditorium stage, forcing salesmen behind them upon the stage, still furiously writing orders. Driving force behind the sale was flambovant Jim Hunt, 62, ex-Air Force colonel and ex-Coast Guard rear admiral, who has built miles of Ft. Lauderdale waterfront developments in the past 15 years. He has sold as much as \$4 million in lots in less than 5 min using his tent-show technique, but the \$6.5 million sold last month is a record for him. Buyers receive priority cards which must redeem with cash on the line (10%, half price in 30 days, balance in two annual payments).

• In El Paso, where Arthur Rubloff last year announced plans to build "Horizon City, the metropolis of the future," land fever has hit with explosive force. Promoters are buying huge acreages of sand & sagebrush, doing a mystifyingly big business in homesites. Most spectacular is success of Gerald P. O'Leary's Wilco Subdivision, where O'Leary and four brothers bought 20,000 acres 11 mi from town, at \$60 an acre, began selling 60x100 ft lots at \$67.50, \$7.50 down, \$5 a month. The project struck such a mother lode of response that they boosted prices to \$87.50, then to \$137.50 with no demand letup in sight. Three weekend busses shuttle buyers to the site to watch huge earthmovers cutting streets, scooping out a 200-acre basin that will one day be a lake, says O'Leary. And O'Leary's sales staff has grown to 145 with plush quarters on two leased floors of the local Elks Club. Water? O'Leary is drilling for some, says he can tap a big supply 22 mi away if need be.

NEWS continued on p 50

Spring brings rush of stock issues by land companies and syndicates

Housing companies are getting to be so much a part of the stock market that they are even taking part in the seasonal March rush to SEC with registration statements. No less than a dozen filed at a time when SEC says its workload reached an all-time peak of 200 issues. Among them:

• Forest Lawn Mortgage and Investment Co of Glendale, Calif, a subsidiary of American Security & Fidelty Corp (Hubert Eaton, major stockholder), seeks permission to sell \$1 million in common stock plus warrants for a second \$1 million to carry on its general real estate business.

• In a \$7.5 million stock swap, Sunset International Petroleum Corp has acquired San Diego's 4,000 acre San Carlos development, plans a \$200 million city of 8,000 homes. An expected profit of \$25 million will be set off against the firm's drilling costs, which are tax deductible under law, yelding an expected increase in net profit of \$1 million this year and \$2 million next.

• Goelet Corp of New York City (Henry Goelet, president) plans to offer \$1 million worth of debentures and stock in combined units, to finance its commercial and apartment house operations in New York and other major cities.

• Florida-Patsand Corp, Miami, seeks registration of 1.5 million shares of common stock already outstanding so that the holders can market it if they wish. Principal stockholders are President James E. Moore, his brother, William R. Moore, and Irving Katz, executive vice-president.

 Park Royal Associates of New York City, a syndicate promoted by Benjamin Schaffer and Sidney Schwartz are planning to offer \$2.2 million in limited partnership interests to the public to help finance the \$8.1 million purchases of nine apartment buildings in St. Louis, Mo.

• Florida's big General Development Corp (land arm of the Mackle Bros enterprises) seeks permission to offer \$12.5 million of convertible debentures to its stockholders to help finance its sprawling activities in subdividing there. Some stockholders have already agreed to buy \$5.3 million of the issue.

• Public financing of mortgages will be undertaken by Public Mortgage Co Inc of Miami, (H. Barry Ressler, president) under its plan to offer \$4.5 million in investment contracts in a like amount of first and second mortgages, will make its profit on brokerage fees estimated at 13%.

• Development of Washington D.C.'s Foggy Bottom will be financed by public investment if plans to offer \$1.3 million in stock by American Metropolitan Investment Co (Sheldon Magazine, president) are approved. The company last year took over assets and liabilities of American Mortgage Investment Corp, which included an option on the Foggy Bottom parcel.

• Desota B. McCabe Jr of Hallandale, Fla. plans to offer about half of a proposed \$1.25 million stock issue by Desota B. McCabe Enterprises Inc and retain about the same amount himself in return for properties transferred to the company. These include interests in three companies engaged in land development. Capital raised from the public sale will be used to further their operations.

• Union Financial Corp, Cleveland (A. C. Findlay, president), wants to float \$4.2 million worth of common stock to help pay off a loan with which it purchased Union Savings & Loan Co.

• Consolidation of four enterprises of Sidney J. Mensh, real estate syndicate organizer of Washington, D. C. is the purpose of a registration statement of \$893,000 worth of 8% convertible debentures and 40,785 shares of \$1 par common. They will be used by Mensh Investment and Development Associates Inc in acquiring ownership of two limited partnerships and Mentor Investments, Inc. Ultimately the consolidated companies plan to offer stock and debentures to the public.

FHA clears itself in Alabama 221 row

After investigating itself for six months, FHA has reached the predictable conclusion that an Alabama glut of Sec 221 housing, built on land bought at handsome profits from state GOP leaders, (*Oct, News et seq.*) was not caused by any wrongdoing in its local insuring office.

Reporting on the outcome to Sen John Sparkman (D, Ala.), FHA Commissioner

Julian Zimmerman said FBI, FHA and HHFA investigators conducted 127 interviews with everybody who might have been involved. "On the basis of this thorough and comprehensive investigation, it must be stated that no evidence has been developed to support a conclusion of wrongdoing . Many actions taken, now subject to review, were based on the judgment and discretion of various FHA employees in the Birmingham office . . . [They] may or may not be proved sound as time passes." Both Director Charles Holliman and Chief Underwriter Herschel McKinley of the Birmingham office, he said, have asked transfers, but his granting of the request should not be taken as a reflection on them.

The investigation was set off by disclosures that Republican National Committeeman Marvin Mostellar, State GOP Chairman Claude O. Vardaman, and Huntsville Developer Carl B. Thomas, were involved in sales of land to Builders Folmar & Flinn that apparently yielded profits of \$1 million on an \$850,000 investment over two years. Folmar & Flinn used the land to build homes, suddenly turned up last year with an unsold inventory of 1,730 houses—900 of them built under Sec 221, relocation housing authorizations that are supposedly issued only on basis of need.

LOCAL MARKETS How Area housing is changing

Los Angeles: Builders who last year hit it right in predicting a good year for '59 are predicting an off year for '60. Tight money and spotty sales are the signs, they say. And starts for the first two months seem to bear them out. They were off 12% from the same period last year-a total of 20,170 dwelling units (single and multiple) against 1959's 23,043-a decline substantially sharper than the national. If the present rate continues, about 128,000 dwelling units will be built during 1960 as opposed to a record 159,000 for the 14 southern California counties in '59. But builders are hoping the area's growing (about 1,000 a day) population will cushion them against such a drop.

The 1959 record was a 17% gain (23,000 units) over 1958, and 7% (10,000 units) over the previous record, 1955. Seven individual counties showed all-time records— San Luis Obispo, Santa Barbara, Ventura. San Diego, Orange, Riverside and Kings and only one—Los Angeles—showed a drop. It was the fifth straight year of decline there, and the first when the county had less than 40% of the 14-county total, though it still led with more than any other three combined.

Chief spur to the pattern of dispersal is scattering of industry among the suburbs. Most workers want to live close to the job because the area has such poor transit. Local observers see this shift as speeding the day when southern California becomes one vast megalopolis.

Among builders, tight money and land costs are still most-discussed industry problems, but some new ones are drawing attention:

1. Los Angeles has to grow up. A few years ago, only planners and builders were talking high-rise. Now, urbanization, redevelopment and the shortage of suitable close-in land for homes is spreading an interest in these topics. Meanwhile, in spite of high vacancy rates and tight money, multiple-unit builders are continuing to build, although more cautiously than in apartment boom three years ago.

2. Home builders are diversifying. A recent survey shows that 76% of homebuilder members of the Building Contractors Assn do other kinds of building too. Big ones who came from general work to homebuilding after World War 2 say that general work is accounting for more of their volume now. But a substantial number of postwar homebuilders have left the field or added new kinds of contracting. Experts say the trend will continue so builders can move from one field to another depending on market conditions, build commercial when housing is slow, and vice versa.

3. Interest in new methods and materials is growing. With labor costs still headed sky-

NEW REGIONAL REPORT

How widely housing activity varies from city to city is pointed up again by a new quarterly market analysis just started by Irving Rose's Advance Mortgage Corp. It covers ten Midwest areas: Detroit, Chicago, Grand Rapids, Milwaukee, Indianapolis, Toledo, Cleveland, Columbus, Dayton and Cincinnati.

Last year, for example, starts held about level in Grand Rapids, Milwaukee and Toledo, gained in five cities from 7% (Dayton) to 42% (Cincinnati) and fell in Detroit (12%) and Columbus (18%). In Detroit, nearly half the home financing was FHA or VA. In Cincinnati, FHA and VA were less than 10%.

"The current quarter [Jan-Mar] appears to be signalling a reversal [of the uptrend of 1959]," says the analysis. "In all but Cincinnati and Indianapolis, there has been a marked falloff from the same quarter a year ago."

For copies: write Advance Mortgage, 234 State St, Detroit 26. ward, builders look more and more for help in cost-cutting to items like plastics that they considered only "oddities" a few years ago. More and more are willing to accept the need for public-education to get acceptance of such innovations by buyers.

Demand for good houses, well located and priced, is sound. But buliders report buyers are more canny than five years ago, and harder to please if they are second-timers. Says one: "The second buyer remembers the \$20,000 house he couldn't afford eight years ago. He still wants it plus all the new conveniences and gimmicks—but only wants to pay \$20,000 instead of the \$30,000 it costs now."

Houston: Housing starts are running almost 50% behind last year's pace. Houston HBA President Gordon Neilson says many developers shy away from tracts on cheaper land outside the city lest the city immediately annex it and impose higher-cost standards. Inventory of completed, unsold homes is about 11% below a year ago.

Sales are best in the \$12,000-\$18,000 range with buyers showing preference for traditional design. Sales are off sharply in the under-\$10,000 bracket. Builders say extra discounts on pint-sized mortgages make such houses unprofitable.

Buffalo: Builders predict output and sales will go up at least 10% this year. They point to Buffalo's much better terms for mortgage money than many parts of the nation farther from the New York-New England money center. Little trouble is expected from union wage demands.

Pittsburgh: Homebuilding is on the upswing after recession-1958 and steel-strike-1959. Builders generally predict a 5 to 10% gain in starts. Smaller builders say they are having more trouble holding their costs down than bigger operators.

New Orleans: Builders agree that a buyer's market has developed. They are not looking for price so much as location, plenty of space, attractive design and convenient builtins. They are much more sophisticated than buyers were five years ago. They spot shoddy work quickly, are wise about looking into drainage, roads and sewers.

FHA Director Wade Sutton predicts a decrease in the volume of expensive homes, a rise in volume of homes priced under \$15,000. Other builders are keeping an eye on Paul Kapelow's 5,000-site development, Terrytown, which offers fully air-conditioned homes with all-electric built-in kitchens for less than \$15,000 (for the first time in the area). It lies on the west bank of the Mississippi, but a new bridge brings it to within 10 minutes of downtown. Another west bank development, with 4,000 sites, offers the works for \$15,350.

Wichita is gripped by a local recession, caused chiefly by a drastic cut in the Boeing aircraft plant payroll. A builder's survey indicates home building will be off 28% this year (from 2,091 to 1,500 units). This compares with 3,142 in 1958 and 6,300 in 1954, the local peak year.

The unsold inventory of new or almostnew homes is about 1,000 units. But builders say this would melt quickly if economic conditions improve (eg easier credit, or more employment). Builders are stepping up sales efforts to try to move 3,000 homes this year, not 1,500. Should Congress extend the VA home loan program for World War 2 veterans beyond its expiration date on July 25? Should VA home loan benefits be extended to peacetime veterans on the same basis as wartime vets?

Both questions are being raised in Congress this year. So far even housing industry groups have been strangely silent. The reason seems clear: VA's politically frozen interest rate is locking housing out of this once rich market. So nobody cares very much.

Across the country, as housing moves into its spring push, House & Home's 16-city survey of mortgage markets shows VA loans in a nosedive. With a few local exceptions, activity is reported off 60-90%. The supply of houses with available VA financing is dwindling rapidly. In some areas, it won't last through the summer. And VA appraisal requests fell for seven months in a row from 27,164 last June to 11,070 in December. They rose to 11,166 in January. The trend continued in February, to 12,868, but it was miniscule compared to the 30% seasonal increase that FHA is showing.

VA's own loan guaranty officers predict that if the present situation continues, VA will make only 150,000 loans this year—less than half the 360,000 they would expect if the loans could be made at "moderate or no discounts."

Logic of disinterest

So it is not illogical that Rep Olin E. Teague (D, Texas), chairman of the House Veterans Affairs Committee, has found almost no interest among housing groups in testifying at hearings on his pending legislation to extend home loan and education benefits to peacetime veterans.

The situation looks so shaky now that he hasn't even scheduled hearings on another bill to extend World War 2 veterans' entitlements to 1965. This measure would also let VA issue \$5 billion in debentures (and use up to 25% of the National Service Life Insurance Fund to buy them) for direct loans to areas where VA money is "short." The idea is kin to NAHB's proposal to invest NSLI funds in Fanny May debentures for the same purpose.

The Administration opposes all of these plans. It argues that peacetime veterans need no housing benefits because 1) they aren't at the same competitive disadvantage as wartime vets in scrambling for housing, and there is no scramble now anyhow; 2) most peacetime vets are so young they haven't started families when they are discharged. It opposes using NSLI funds for mortgages on grounds that it will set a poor precedent for using these funds for other kinds of capital improvements, impair their liquidity—and complicate Treasury financing, where the funds are now invested. It takes the not unreasonable position on World War 2 veterans that you can't have rehabilitation forever.

Push of politics

But election-year politics favors the measures. The Senate has already passed a peacetime veterans' bill. Some of its provisions will doubtless be cut in the House, but the home loan program isn't one. Only real controversy is over education benefits (a straight subsidy), even though VA Benefits Director William J. Driver estimates home loans for this group will cost \$40 each—some \$40-\$50 million over 14 years if the expected load of applications comes in. In sum, Congress is not likely to vote against veterans—peacetime or World War 2—in an election year, unless the housing industry lets the program go by default.

VA estimates that perhaps 40% of the 9 million World War 2 veterans who have not used their home loan benefits still do not own a home—and many more might be candidates for a second purchase. But those who are second-time prospects are locked into their houses by deep discounts forced by VA's low interest rate.

Big potential

How rich the market might be—even without World War 2 vets—is shown by VA Loan Guarantee Director Phil Brownstein in a profile of the still relatively-untapped Korean GI market:

Only 13% of the 5.5 million Korean GIs have used their loan entitlement in the seven



years it has been effective. Last year was the first when more (55%) GI loans went to Korean vets than to World War 2 vets. By contrast, in 1958, only 46% were Korean loans. "All signs point to larger use of GI loans by Korean vets," says Brownstein. So far, about onethird of World War 2 vets have used their entitlements. If K-vets fol-

low suit, it would produce a volume of 200,-000 houses a year for the five years the program has to run (until Jan 31, 1965). And if 40% use their entitlement, as seems possible, it would produce 300,000 houses a year for the period—a level equal to the 1957 VA volume. Average age of Korean vets is under 30—80% were 25 to 34 inclusive as of June 30, 1959—and average age of the GI home buyer sampled in 1956 through 1958 was 32. So most Korean GIs are just about in the homebuying age group.

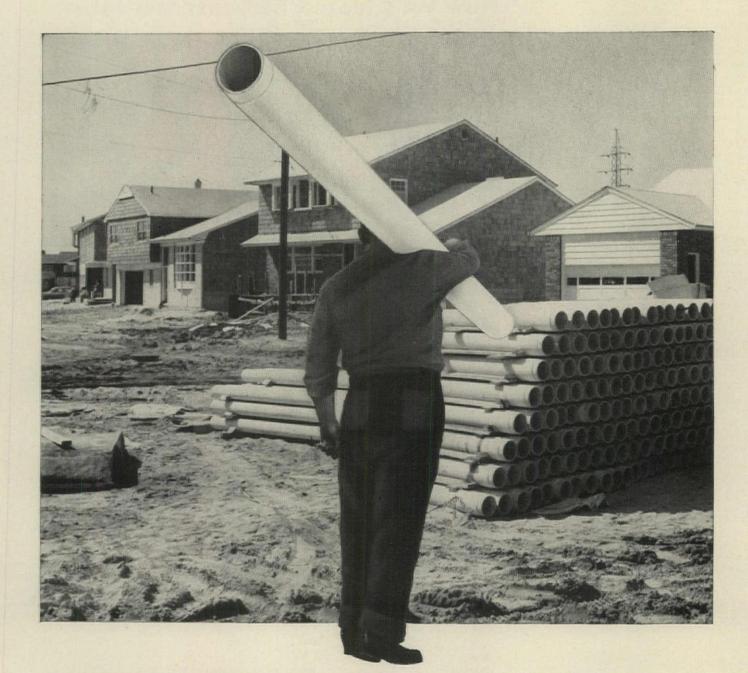
Dim outlook

But, says Brownstein, "It seems unlikely in the months ahead that we will see any easing in the interest rate pattern—at least not enough to produce investor acceptance (of VA 5¹/₄% loans)."

How rich the VA market has been in the past (when its interest rates could compete for money) was shown by Driver in reviewing the program for the House housing subcommittee: as of December 31, VA had guaranteed or made more than 5.5 million home loans totaling more than \$48 billion. More than 25% have been repaid in full, and only about 1% resulted in foreclosure. In the past 10 years, GI loans have financed 2.3 million new houses—about one in every five starts.

But as housing moves into its spring push and VA stays behind, the program seems to stand as a prime example of how politicallyfrozen interest rates hinder 1) fulfilling US housing needs and 2) the building industry itself from achieving more stable output with all its promise of lower costs.

NEWS continued on p 53



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to install. You complete most any installation with a *single* length. There's no material waste... no cutting... no fitting. Write for information.



Racial quotas held illegal in federal test case

Builder Morris Milgram's running battle to drop interracial subdivisions on the outskirts of the nation's major cities has been given a sharp jolt by a federal judge who questioned the legality of Milgram's racial-mix controls.

In Chicago, District Judge Joseph Sam Perry handed down a 76-page opinion dismissing Milgram's civil rights suit against the suburb of Deerfield for trying to block his plans for a 51-house development there (Jan. News). Perry said motives of the Deerfield Park Board which seeks to condemn the site for a park could not be questioned "when the sovereign speaks directly—that is, when the people vote as they did in this case [to build the park]." Then he took a swipe at Milgram's technique for keeping the racial mix

TAXES:

at no more than 20% Negro by retaining first refusal rights to resales of houses: "If there is to be controlled or forced integration, it is most certainly a matter for action by the people through their government, not by a private corporation... A party who plans ... [such a system] cannot seek damages in a federal court for any interference ..."

Perry also said the developers have remedies in county courts to block the condemnation, added "nothing in this finding should give comfort" to segregationists.

But the park board showed no signs of relenting. Said one commissioner: "There will be a park on that spot by next summer."

Undaunted, Milgram announced he would appeal and that construction would continue. Meanwhile another Modern Community Developers' subsidiary, Meadow Homes Inc, announced it has optioned 27 acres, plans to build 101 houses near Waterbury, Conn.

Realtors rap Philadelphia kit for Negro home buyers

Philadelphia's Commission on Human Relations has stirred up a row with realtors.

Cause: a kit of instructions the commission has just issued to potential Negro homebuyers. In addition to information on financing and selecting homes, the kit contains a booklet advising Negroes (who constitute some 25% of the city's 2 million population) to go out of their way to buy homes in allwhite neighborhoods. Urges the booklet:

Avoid ghettos. "To break the stubborn pattern of segregated housing, many Negro citizens must have the courage to live in 'new' neighborhoods."

Realtors cry this constitutes official encouragement for blockbusting. They accuse the commission of inciting social unrest.

NY report shows how slum clearance could support itself

Are federal subsidies for slum clearance and redevelopment necessary?

No, savs a report just handed to New York City authorities, if the city would put its net tax gains from redeveloped areas into a fund to buy more sites.

This finding of a tax policies committee of the influential Citizens' Housing & Planning Council is based on a study of ten redevelopment projects under way long enough for assessed value of the projects when finished to be clear. The completed projects will return \$5 million a year more in taxes than the same areas did before redevelopment—even after deducting \$75 million worth of new tax-exempt uses like co-op housing and educational or cultural structures.

Gross cost of the ten projects including planning was \$109.5 million. Some \$25 million was recovered by selling the land, leaving a \$84.5 million subsidy to be split between city ($\frac{1}{3}$) and federal government ($\frac{2}{3}$).

This, says the report, means the net tax gain "would repay the city's costs in six years and all public costs in 18 years. If the net taxes could be dedicated to a special land-acquisition fund, the Title I program could be made self-liquidating."

The report also makes these points:

Assessors seem to think run-down slum buildings are just as valuable as non-slums.

A comparison of the proportion of assessed value credited to improvements against that given to the land shows that among 12 redevelopment areas, the average ratio was the same as for the entire borough of Manhattan. In the slum areas, improvements accounted for an average of 51.9% of assessed value; in the entire borough, they accounted for 53.3%.

"In the light of the general assumption about slum properties, namely, that they consist of miserable buildings resting on highly valuable land, finding that their land use ratios are almost exactly those of the entire borough was startling," says the report. "From this, one might conclude that either: 1) the condemned properties are typical of all Manhattan, hence the borough is one huge blighted area, or 2) the condemned properties were in good condition—not blighted—hence should not have been destroyed." Since both are obviously wrong, says the report, getting the right answer is of "tremendous importance" but calls for much more investigation.

Land costs, especially in land-shy Manhattan, must be brought down.

Average gross cost of land in 12 projects was \$11/sq ft, or \$1,401 per rental room, \$5,338 per dwelling unit. Net cost to sponsors after writedown was \$2.43/sq ft, or \$309 per room, \$1,178 per dwelling unit. "Among the difficulties besetting the housing field, undoubtedly the greatest single one is the cost of land, especially in Manhattan," says the report. "Any long range program for increasing and improving housing must have as one of its primary objectives the reduction of land costs."

Inconsistent assessment policies, favorable income tax provisions and high condemnation awards tend to keep land prices up.

"Condemnation awards for projects studied ran nearly 66% above assessed values. Making allowance for equalization (a reduction from market value to even out the tax load between areas) this means they were about 50% above market. Either 1) the assessments are too low; 2) the awards are too high or 3) both conditions exist to a degree." Equalization itself seems out of gear, with assessed values ranging all the way from 36% of market to 88% depending on boroughand liable to fluctuations that raise taxpayers' ire (see Housing Camera, p 60). Furthermore, the report says, income tax provisions that let property owners deduct allowances for depreciation of their property encourage blight: the slum landlord, whose rents do not depend on the condition of his property, pockets the depreciation allowance. Then, when the building is written down to nothing, he can still sell it at a price based on its big rent roll.

Exempting new housing from real estate taxes will make construction skyrocket.

In the 1920s, the committee found, in an almost identical housing situation—high interest rates, threat of blight, emigration of the middle class to the suburbs —such exemption for ten years "broke the housing deadlock" and quadrupled dwelling construction—with a general increase in construction that about offset the loss in tax revenues from exemption.

Some exemption is now offered some middle-income housing enterprises, under state laws. But the report recommends its extension to all new housing, to a maximum of \$15,000/dwelling unit.

A better overall answer might be to shift all taxes to land and ignore the improvements.

Thus taxes would be based on the "best use" value of land and blight would be made unprofitable. The shift could be made over a period of time to avoid serious economic jolts to landowners.* Considered for New York City in 1915, the idea was rejected after study because 1) it was feared that untaxing buildings would lead to overuse of the land and undesirable densities and 2) it would be unfair to owners of property where land value exceeded that of buildings. But the report suggests that the first objection be met by setting a top limit on improvement value that would not be taxed, taxing the excess at the same rate as the land so overbuilding would be restrained. The second objection, it says, seems to be met by a big shift in the ratio of land/use values since 1915. Then the citywide average was (on 1914 assessments) 61.5% land/38.5% improvements. Now it is 37.1% land/62.9% improvements.

The committee cautions that considering how land/use values are phonied up by sloppy assessing the effect of adopting the land tax is almost impossible to predict without much more study. "It is our considered opinion . . . that the idea of exempting all improvements from taxation has much to recommend it . . . We recommend that the city sponsor a study [to] re-evaluate the Graded Tax Plan in the light of all available facts," says the report.

^{*}Such a plan has been in effect in Pittsburgh and Scranton, Pa. for years and last November it was extended by a new law to 47 thirdclass cities as a local option.

MORTGAGE ASSOCIATES . A SERVICE OF CHARACTER, MANAGED BY MEN OF IMAGINATION

RENEWED CONFIDENCE in the housing industry, America's largest, is apparent everywhere. Talk about inflation and "tight money" is dying down. Investors now regard residential first mortgages . . . FHA-insured, VA-guaranteed and Conventional . . . with their high fixed-income yields . . . as attractive investments. Mortgages on new homes with yields around 6% . . . average mortgage life of about 12 years . . . and monthly retirement of the investment . . . are especially desirable for pension and retirement fund portfolios.

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There are Sound Reasons for Confidence in RESIDENTIAL FIRST MORTGAGES as an Integral Part of Investment Portfolios

MORTGAGE MARKET:

Discounts drop in some areas, hint that price ease could be on the way

The mortgage market has taken a small but dramatic turn for the better.

Discounts are dropping in enough cities to suggest that a reversal of the ninemonth-old trend to tighter and costlier money is under way, at last. For nearly four months, FHA and VA discounts have been on a plateau while mortgage men pontificated that the money pinch was "bottoming out." Now, indications are that the mortgage market has reached the other side of the bottom, where prices go up and discounts go down. In HOUSE & HOME's monthly survey of 16 cities, discounts were ½ to 1 point lower in five areas for FHAs, in four for VAs.

In Washington, FHA minimum-down immediates moved up from 96 a month earlier to 961/2; VA no-down immediates went from 91 to 911/2. For both,



/A no-down immediates went from 91 to $91\frac{1}{2}$. For both, activity was brisker. In Los Angeles, FHAs went from 94 to 94-95; VAs rose from a straight 90 to 90-91. In San Francisco, the bottom edge of discount ranges moved up—from 94-95¹/₂ for FHAs and from $90\frac{1}{2}$ -91¹/₂ for VAs. Boston savings banks report ¹/₂-point increase for out-of-state FHAs from $94\frac{1}{2}$ -95¹/₂; VAs rose from $90\frac{1}{2}$ -91¹/₂ to 91. No city reported bigger discounts. Typical of the month's mood was the report by Vice-President David O'Neill of Jay F. Zook Inc, Cleve-

land, that while FHA immediates remained at 96-97, "the 97 is a little easier to come by now, and an easing in prices seems to be in the wind."

Conventional rates, usually slower to reflect changes in the market, are showing signs of softening.

In Detroit, the rate is still $6-6\frac{1}{2}\%$, but the lower edge is firming as the usual price. Chicago savings banks and S&Ls, which were asking $6\frac{1}{4}-6\frac{1}{2}\%$, now are down to $6-6\frac{1}{2}\%$. In

Los Angeles, insurance companies which were at $6\frac{1}{4}-6\frac{1}{2}\%$, now are asking $6-6\frac{1}{2}\%$; S&Ls, flush with deposits, have edged down from 6.6-7.2% to 6.6-7%.

Money will grow more and more available in the months ahead, experts agree. Will this lead to more discount shrinkage?

Could be. Economists disagree. Says Dr. James J. O'Leary, economic director for the Life Insurance Assn: "The crystal ball has seldom been so cloudy." But he predicts that pressure for funds will keep interest rates at around present levels the rest of the year. But Economist Leon T. Kendall of the US S&L League, pointing to the fact that S&Ls have stepped up commitments to builders for the first time since last July, says: "More and more lenders are becoming convinced that the peak in mortgage rates has been reached and that the months ahead will bring some easing in the price and availability of mortgage funds."

Many who earlier painted a bleak picture for mortgage lending are reconsidering. One reason: demand for money to finance business expansion has not reached expectations. And consumer spending dipped due to bad weather.

Key to whether the current signs of a price ease is a short-term aberration or a long term trend is probably what happens in April. Vice President Robert M. Morgan of the Boston Five Cents Savings Bank offers this advice: watch government bonds and the stock market very closely this month. If US Treasury bill and bond yields remain lower and the stock market doesn't snap back, the chances are good that a major swing in the mortgage market is in the works. At midmonth, 91-day bill yields tumbled to 3.451%, lowest in seven months.

Savings banks, cheered by their first increase in deposits since last fall's Magic 5s, are coming back into the mortgage market.

For February, deposits showed a net gain of \$35 million. This is far below the February '59 increase of \$130 million. But it is an abrupt switch from last January's net loss of \$68 million and the deposit runout last fall. The return of the savings banks has not been dramatic. One bank economist calls it "a subtle re-entry." But to mortgage bankers who have been crying that the savings banks were dead, it is another optimistic portent.

New York state home builders have almost half of the estimated \$1 billion they want to build one and two-family houses this year. The Savings Bank Assn of NY gives this commitment breakdown: FHA loans, \$107 million; VA, \$110 million; conventional, \$260 million. Based on an average mortgage of \$13,700, they will build 35,000 houses.

The shock of losing deposits unexpectedly when federal financing changed course may have a long range effect on savings bank mortgage buying. More and more are pondering whether to stress immediates, make many fewer commitments. For mortgage bankers, this raises a big question: will they be able, via their own inventory or warehousing, to fill savings banks' need for immediates.

ABCs of SBICs

Minimum capitalization: \$150,000.

Government aid: \$150,000 in matching equity capital (as subordinated debentures), plus another \$150,000 as 5% ten-year loan.

Tax advantages: losses are ordinary losses for income tax, but income from stock held in other corporations is tax-free (instead of 85% taxfree) and SBICs are exempt from holding company tax penalties on undistributed income.

Self-dealing: regulations forbid it, but SBA is lenient in approving lending policies which come close. Prior approval is essential.

Estimated time & cost to form: two months, \$5,000-\$7,000.

Maximum permitted interest charge: 15%, including discounts and fees.

Trade association: Natl Assn of Small Business Investment Companies, 537 Washington Building, Washington 5, D.C.

Small business investment companies catching on as source of hard-to-get loans

Builders and mortgage men are beginning to make significant use of a new government aid to get money for hard-to-finance items like land development and underground utility installation—or even working capital.

It is the small business investment corporation. SBICs were authorized by the Small Business Investment Act of 1958. But builders who have followed the situation closely say the Small Business Administration's administrative regulations were too restrictive until recently. Items:

• An SBIC had to have at least 10 stockholders, none of whom could hold more than 49% of the stock.

• An SBIC could not make deals with companies in which any of its officers were 10% stockholders or with officers or directors holding more than 10% of the SBIC's stock.

Now, the rules have been amended to permit state-chartered SBICs be formed by as few as one stockholder. And SBA will let housing industry groups use them to serve their customers. Three cases illustrate the possibilities that have opened up:

1. Prefabber William B. F. Hall of General Industries is forming General Equity Investment Corp as an SBIC to lend his own dealers equity capital and money to develop land. He figures his SBIC-first in the prefab industry-will help him expand his dealer organization. Hall and a dozen other investors (most of them the same men who had been forming syndicates with him to make land development loans) put up \$150,000 capital, got approval of their organization and lending policy from SBA in Washington. SBA is matching their \$150,000 with another \$150,-000 of subordinated debentures, will also lend them a second \$150,000 at 5% for ten years. With this \$450,000 start, plus commercial loans or perhaps a stock issue, Hall figures he can pyramid his \$150,000 capital into \$1 million of loans.

The government will let Hall charge up to 15% interest—including fees and discounts. (Neither the law nor the regulations impose an interest ceiling on SBICs, but the SBA will not approve applications unless the company adopts a 15% interest ceiling.) An SBIC may not make a loan bigger than 20% of its capital. This will limit Hall to \$60,000 ini-NEWS continued on p 56 tially. He figures most loans to prefab dealers will be almost that big. To finance land, he'll use collateral loans. For working capital, he expects to issue convertible debentures. His approach to interest rates, says Hall, will be this: "We hope to charge less than the maximum and take a bigger share of the profit. Suppose a prefab dealer has \$10,000 cash but needs \$10,000 more working capital to build a subdivision of our houses. We take \$10,000 worth of convertible debentures, which gives us the right to buy a 50% interest in his corporation. If he builds a successful subdivision, he may double his corporation's net worth. Legally, we could stay on his back and remain a 50-50 partner in his success. This is the great stumbling block in private arrangements for equity financing. But we will have a policy of letting the dealer buy that convertible debenture backbut at the new fair value. Of course, if the subdivision fails, we won't get much of anything back."

2. After 12 years in homebuilding (1,600 homes), Builder Lloyd J. Mistrot has decided there is more profit in lending than construction. With his brother, Jack, and Attorney-accountant J. Wilfred Leblanc, he has organized the first small business investment company in New Orleans with a minimum \$303,000 capitalization, half from SBA.

"Our plan is to finance people connected with home building," he says, like subcontractors and other builders. "I know what they are up against, whether they can make a success of a particular job. So it's going to be 100% easier to get money from me than from a bank." Because Louisiana has an 8% usury limit, Mistrot will impose service charges and discounts to boost his yield to 11-15%.

3. Mortgage Banker George DeFranceaux of Washington, who organized one of the nation's first SBIC's (Apr '59, News), has found it so promising he floated a \$1.1 million stock issue in January to expand. Now, he has 700 stockholders, some \$1,450,000 capital. His Allied Small Business Investment Corp went into the black at the end of 1959, will wind up its first fiscal year with a profit, he says. At midmonth, he had \$1 million in loans committed, and two-thirds of it disbursed. Typical loans (mostly at 13%: financing utilities in a subdivision, debentures on an apartment house, secured loans (or convertible debentures) to finance builder purchase of raw land. "We set the price at which the builder will buy the land back from his land company for his building company before we make the deal," explains DeFranceux. "So the builder knows exactly what our profit will be before he signs up."

Adds DeFranceaux: "I think this setup has a big future." Agrees Prefabber Hall: "It's perfect to funnel money into small building businesses."

Coast S&Ls woo eastern money but 4^{1/2}% rate squeezes profits

California savings & loans are feeling a squeeze on earnings—a result of their Jan 1 boost in dividend rates from $4\frac{1}{4}$ % to $4\frac{1}{2}$ %.

One reason: the boost came simultaneously with a Home Loan Bank Board ruling that no S&L may get more than 5% of its savings through a broker. Shutting off this ready source of eastern money has left some California S&Ls with less money to lend while paying more than ever on their savings. (In San Francisco, on the other hand, some big S&Ls are growing so fast they are scampering to put all their money to work.) Even at the current 6.6 to 7% rates charged for conventional loans, the S&Ls are not earning enough to compensate for older low-interest loans in their portfolios.

Vice President Franklin Hardinge of the California S&L League predicts the reserve ratio for California S&Ls may drop from 8 to 7½% this year because many will be unable to add as much as usual to their reserves.

In Los Angeles, where the squeeze is particularly acute, some S&L executives predict the $4\frac{1}{2}$ % rate may have to be slashed. Admits one: "If something doesn't break soon we may have to go all the way back to 4%. The only way to bring up earnings now is with fees, and that hits the public. We certainly can't justify $4\frac{1}{2}$ % dividends at 6.6% interest rates."

History runs against such a move. In recent decades, S&Ls have not cut interest paid shareholders except in war or depression. Moreover, say S&L sophisticates, if the government lifts the 3% interest ceiling on time deposits in commercial banks, today's high-rate structure may well become frozen in.

San Diego S&Ls maintain that fewer of



BAIT FOR THE SAVINGS DOLLAR

them are in the same earning squeeze as has happened in LA. Reason: a particularly heavy demand for home loans coupled with interest up to 7.2% and discounts up to 5 points.

Cut off from broker money, more and more S&Ls are soliciting savings in the east through newspaper advertising (favorite media: New York *Times*, Wall Street *Journal*, *Christian Science Monitor*). The campaigns have paid off, agree S&L men. The volume of money obtained through advertising doesn't measure up to that once available through brokers. But it doesn't cost as much; the ads are cheaper than the brokers' fee (around 2%).

Most S&L men keep their advertising costs a secret, but agree that out-of-state solicitation takes 10% to 15% of their ad budgets.

President Earl M. Grant of Watts S&L, who has a \$25,000-a-year advertising budget and now spends most of it out-of-state, says that in the first four months of last year he got \$1 million through brokers compared to only \$270,-000 the first two and a half months of this year. President N. C. Hayhurst of Fidelity Federal of Glendale says his ad budget has been stepped up 10% to compensate for lack of broker money. He adds: "Some of the people who complained most about broker money are now taking it themselves."

Here and there are signs of disenchantment. Says President J. K. Bailey of Los Angeles Federal, an advertiser in the east for three years: "If our competitors are going to do it in volume, we'll stop. For awhile we were the only ones in the *Journal*. It was quite a bargain then."

Vice President George Leonard of Great Western S&L says he is getting $8\frac{1}{2}$ to 9%of his new deposits from the east through ads, compared to more than 15% he got from brokers. He considers the situation satisfactory, but he adds: "If interest rates on savings go up in the east, I'll quit advertising. We need a 1% differential to attract savings here."

ferential to attract savings here." Leonard and Bailey are exceptional. Other S&L men indicate they have not considered giving up the pursuit of the eastern savings dollar.

MORTGAGE BRIEFS

Usury laws (cont'd)

Legislatures in Virginia and Kentucky have defeated measures to ease their 6% usury ceilings. But the Virginia legislature has passed bills permitting S&Ls and mortgage bankers to charge service fees of 1% and 2% respectively.

In Delaware, a similar bill is pending. It does not specify amounts, but says that service charges, fees and discounts are legal so long as the interest specified in the note is no more than 6%. Nine other states have 6% usury laws, but some have similar loopholes to boost yield above the limit.

NAHB reverses stand on bonds

NAHB has decided to back the Administration's effort to persuade Congress to lift the 41/4 % ceiling on long-term government bonds.

As things stand now, builder leaders have decided, the Treasury will have to continue to invade mortgage funds to refinance the national debt. And that means tighter mortgage money and higher interest rates, they warn.

NAHB's new position was spelled out at mid month in a special four-page Washington *Letter* to its 43,800 members signed by President Martin L. Bartling Jr.

He urged NAHB to back HR 10,590, a compromise bill which will not repeal the $4\frac{1}{4}$ % ceiling but will give the Treasury some leeway to get around it. Specifically, it would: 1) let the Treasury refund outstanding bonds in advance of maturity at discounts which will not be counted in applying the $4\frac{1}{4}$ % limit; 2) let the President authorize the Treasury to issue new bonds at interest over $4\frac{1}{4}$ % up to 2% of the national debt per year and 3) let the President authorize the Treasury to offer savings bonds and special issues of government bonds to government trust funds at more than $4\frac{1}{4}$ %.

Bartling noted that the Treasury must refinance some \$80 billion worth of securities this year. At the same time, interest rates have soared so high that it cannot now offer a bond for more than 5 years, because the $4\frac{1}{4}$ % ceiling would bring no takers. "If it (the Treasury) can only go into the shortterm market, we are bound to suffer severely," Bartling wrote. Why- "The rates it has been paying (and unless HR 10,590 is passed, the

rates it will probably have to pay in the future) are so high that the Treasury's unavoidable financing activities are draining money out of the very institutions on which we must rely for mortgage credit." As a sample, Bartling noted that the Magic 5s issue of last fall "effectively took away large sums of mortgage money from savings banks, savings & loans and other mortgage lenders.' He warned: "Lenders must be able to plan their future commitments to builders with greater certainty of having funds available and without fear of being 'raided' by Treasury financing. Stability in the mortgage market required stability in the general long-term investment market. . .

Treasury's position

In backing the compromise plan to sidestep the 41/4% long-term bond ceiling, NAHB President Bartling echoed many of the arguments advanced by Treasury Undersecretary Julian B. Baird three weeks before at a meeting where he shared the rostrum with Bartling.

Baird spoke at the sixth annual conference of the Group V Savings Banks Assn in Brooklyn. He said flatly: "There will be more mortgage credit available with the ceiling off than with it on. In addition, the cost of interim financing should be lower."

Why so? Interest rates are now so high the Treasury is forced to confine its borrowing to the short-term market. Result: unnecessarily high short-term interest rates (higher than long-term rates, in fact) which have siphoned individual deposits out of savings accounts where they otherwise would have been invested in mortgages. Added Baird: "The injury to the mortgage market is substantially greater than the actual withdrawal of savings, since institutions hesitate to make future commitments to buy mortgages until they can further appraise this continuing drain."

At midmonth, the compromise bill had cleared only its first legislative hurdle: the House ways & means committee. It faced an uphill fight on the House floor and still more trouble in the Senate, which is loaded with easy-money Democrats.

Bond swap lays an egg

Fanny May toted up results of its second offer to exchange GI mortgages for US Treasury bonds. The arithmetic was sad: A thumping \$70 million short of the goal.

In response to Fanny May's offer of \$200 million 4% mortgages, only \$130 million in non-marketable Series B 234% bonds were turned in by investors. In last year's swap, Fanny May offered \$150 million, drew so many takers that ultimately \$188 million was exchanged. The average bid this year was \$101.28 in face amount of bonds for each \$100 of unpaid mortgage principal (and Fanny May was grabbing anything at par or over) whereas last year the average was \$102.03.

The bond swap, which cuts the national debt and so helps balance the federal budget, continues to draw opposition from Congressional Democrats who claim Fanny May thus loses millions in future interest. The Rains housing bill (see p 47) would flatly prohibit such maneuvers. Ironically, in 1953-54, Fanny May was ordered by Congress to do much the same thing in the now defunct one-forone deal. In that instance, builders who wanted to get a commitment good for a year could buy a mortgage from FNMA's portfolio. Builders liked it because they were assured of mortgage money but Fanny May figures it lost $\$7\frac{1}{2}$ million in interest.

NEWS continued on p 58

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending March 11, '60.

FHA	A 53/4s (Sec 203) (b)			VA 51/4s					Conventional Ioans					
NMA Scdry Akt xy	Minimum 30 year		uction Onl 10% or m 20-25 year Immed	ore down	Existing * Min Down 25 year Immed	City	FNMA Scdry Mkt xy	No down 30 year	New Const Fut	fuction On 5% or m 20-25 yea Immed	ore down	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Construction loans * Interest +fee
96	96-97	95-97	97-98	97	95-961/2	Atlanta	92	91 b	91b	91 в	91 b	6-61/4	6-7	$6-6\frac{1}{2}+2\frac{1}{2}$
97	par-101 °	par-101 º	par-101 º	par-101°	parm	Boston local	93	98	98	98 ^b	98 b	51/2-6	51/2-6	51/2-6
-	95-9512	95-951/2			-	out-of-st.	-	91	91b	8	ñ	-	-	
96	96-97b	95-97b	96-97b	95-97b	96-97b	Chicago	92	90-92ъ	90-92Þ	90-92 ^b	90-92 ^b	6-61/2	6-61/2	61/4-61/2+11/2-23
96	96-97	95 ^b	961/2-97	951/2-96	97	Cleveland	92	91	8	92		6-61/2	6-61/2	61/2 + 1-11/2
951/2	95-97	941/2-97	96-98	96-971/2	95-97	Denver	91 1/2	92-93 ^b	91-93b	91-93 ^b	91-93 ^b	6-61/2	6-63/4	61/2 + 1-21/2
951/2	96-961/2	96	961/2-97	961/2	88-95 bo	Detroit	91 1/2	92-921/2	92	921/2-93 b	921/2	6-61/4	6-61/4	61/2 + 11/2
96	951/2-96	94-95 ^b	961/2-97	961/2-97	96	Houston	92	911/2-92	a	91½-92×	B	53/4-61/2 0	6-61/2	61/2-7 + 11/2-2
96	95-96	95-96	96-97	96-97	94-95	Jacksonville	92	91-92	91-92	92-93 ^b	8	6-61/4	6-61/2	61/2 + 11/2
951/2	94-95	94-95	96-961/2 bf	96-961/2 bf	94-95s	Los Angeles	911/2	90-91 b	90-91 b	8	A	6-61/4	6.6-7	6 + 11/2-2 *
961/2	961/2	96	97	97	961/2	Newark	921/2	a	8	8	8	6	6	6 + 11/2
97	97ь	97b	97ь	97ъ	97b	New York	93	93 ^b	93 b	93ъ	93 ^b	6t	6b	6 +1-2 ^b
951/2	95-96	956	97-971/2	8	95-961/2 J	Okla. City	91 3/2	911/2-926	90 ^b	911/2-92ъ	B	6-61/2	61/4-61/2	$6\frac{1}{2} + 1 - 2$
961/2	97-98	97-98	97-98	97-98	97-98	Philadelphia	921/2	n		а		5 3/4-6	5 3/4-6	6 + 1-2
951/2	95-951/2 k	95-951/2 k	96-97	96-97	941/2	San. Fran.	91 1/2	91-911/2 d	h			61/4-61/2	7.2-7.6	6-7.2+1½-2½b
96	93-97	921/2-97	931/2-97	931/2-97	911/2-97	St. Louis	92					53/4-61/2	6-7	6-61/2 + 1-21/2
961/2	961/2	961/2	971/2	971/2	96-97	Wash., D.C.	921/2	92	92	93	93	6	6	6 + 11/2-2

*3% down of first \$13,500; 15% of next \$2,500; 30% of balance.

Immediate covers loans for delivery up to 3 months: future covers loans for delivery in 3 to 12 months.

- Quotations refer to prices in metropolitan areas; discounts may run slightly higher in surrounding small towns or rural zones.
- Quotations refer to houses of typical average local quality with respect to design, location, and construction.

Footnotes: a—no activity. b—very limited activity. c—commercial banks do very little mortgage lending in Texas. d—FNMA eligible. e—S&Ls charging 6-6½% plus 2½-3½ point fees. f—5% loans are at 95½. g—10% down only. h—S&Ls charging up to 4 points. j—for better quality loans only. k—top price from life companies only. m—some at 5½, n—some companies refuse to deal at such big discounts. o—at 5½%. w—six months construction loans unless otherwise noted. x—FNMA pays ½ point more for loans with 10% or more down. y—FNMA net price after $\frac{1}{2}$ point purchase and marketing fee plus 2% stock purchase figured at sale for 50¢ on the \$1. z—on houses more than 30-years old of average quality in a good neighborhood.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 53/45

Immediates: 94-95

Futures: 94-95

VA 51/45

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank: Chicago, Murray Wolbach, Jr, vice pres, Draper & Kramer, Inc; Cleveland, David O'Neill, vice pres, Jay F. Zook Inc; Denver, C.A. Bacon, vice pres, Mortgage Investment Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Houston, Everett Mattson, vice pres, T.J. Bettes Co; Jacksonville, George Dickerson, vice pres, Stockton, Whatley, Davin & Co; Los Angeles, Robert E. Morgan, exec vice pres, The Colwell Co; Newark, Arthur O. Pulis, Jr, pres, Franklin Capital Corp: New York, John Halperin, pres, J. Halperin & Co; Oklahoma City, M.F. Haight, first vice pres, American Mortgage & Investment Co; Philadelphia, Robert S. Irving, exec vice pres, W.A. Clarke Mortgage Co; St Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, DC, Hector Hollister, exec vice pres, Frederick W. Berens Inc.

> Immediates: 90-91 Futures: 90-91

FHA 5³/₄ spot loans (On homes of varying age and condition) Immediates: 90-93

Prices for out-of-state loans, as reported the week No. ending Mar. 18, by Thomas P. Coogan, president, (n Housing Securities Inc.

Note: prices are net or originating mortgage broker (not necessarily net to builder) and usually include concessions made by servicing agencies. FNMA STOCK

F	eb 16	Mar 15	Month's low	Month's high
Bid	551/2	551/4	54	561/2
Asked	571/2	571/4	56	581/2

Quotations supplied by C. F. Childs & Co.



EXTRAORDINARY AUDIENCE INCLUDED OFFICERS OF MOST BIG CORPORATIONS, NEARLY ALL BANKS MANAGING PENSION MONEY

Will pension funds end the mortgage pinch?

Lenders reveal new investment plans to trustees of \$20 billion of pension money at H&H seminar.

Are pension trust funds—the fastest growing reservoir of capital in the nation about ready to end their long holdout against buying mortgages?

You could get a sense that this time is approaching from the comments of many of the 125 participants last month in a unique seminar in New York City. Trusteemanagers from nearly all of the nation's \$25 billion in pension funds assembled at the University Club to hear 20 top men from government, housing and lending explain why mortgages (notably FHA and VA mortgages) are too profitable for pension funds to ignore despite the complexities of investing in them. The meeting was sponsored by HOUSE & HOME.

By the end of the day-long session, one of mortgage lending's senior statesmen, retired Senior Vice President Bill Marcus of San Francisco's American Trust Co, rose from the audience to predict:

"This seminar . . . could very well mark the breaking of 'tight money' [ie record high interest rates] in the mortgage field. Why? Credit is a commodity whose market price follows the law of supply and demand. When demand is strong and supply is limited you must shorten the demand or increase the supply if you want to lower the cost. In the past two decades, pension funds have siphoned off some \$97 billion in savings (via social security, the railroad retirement board, corporate and life insurance and other retirement plans). Except for pensions handled by life insurance companies, only 2% is invested in realty loans.

"Now, managers of pension funds all across the country are waking up to the fact that mortgages today offer such bargains no one can afford to overlook them. I predict it will be the managers of pension funds, not politicians, who will be credited with having broken housing's tight money problem."

Pension funds have boosted their mortgage buying by a whopping percentage in the last few years, but the major breakthrough may be just about to start.

In 1955, pension funds had only a tiny \$146 million invested in mortgages, noted Vice President A. Frank Patton of Morgan Guaranty Trust Co. In the next three years, they boosted this investment 276% to \$405 million. Even so, only about 2% of their \$25 billion is in mortgages, compared to 27% in stocks. This year, there is evidence of more significant change. In the last three months, said Patton, Morgan Guaranty has invested \$40 million in residential mortgages for some of the \$3 billion of trust funds it manages. And elsewhere throughout the nation, indications of similar moves are starting to turn up with hopeful frequency (see next page).

Here are the major points made to pension managers by the seminar speakers:

Up to now, pension funds have been shunning mortgages despite their high yield and liquidity.

"Mortgages ought to be a major investment for pension funds," said FHA Commissioner Julian Zimmerman, opening the seminar. "They ought to have 25 to 50% of their assets in mortgages." Instead, pension funds have 2% and national bank trust funds about 5% in mortgages.. This means pension funds are overlooking the biggest investment field in the US. Between 1929 and 1955, there was \$46.9 billion of corporate financing, \$77.5 billion net mortgage financing. Last year alone, corporate net investment came to \$8.5 billion; mortgage investment totaled \$19.3 billion, of which \$13.3 billion was on loans for one- to four-family houses.

FHA mortgages today are yielding many investors better than $5\frac{1}{2}\%$, after servicing and internal costs, noted President John deLaittre of the Natl Assn of Mutual Savings Banks. "This bears out our rule of thumb that mortgages should yield $1\frac{1}{4}\%$ more than long-term government bonds and $\frac{1}{2}\%$ more than AA corporates."

Yield is vital to pension funds, added Robert Kavesh, economics professor at NYU. "If you can realize 1% more yield, this reduces the cost of a given scale of pensions by about 25%," he said.

Mortgages are amply liquid for pension funds, because like insurance companies, they can predict their cash needs actuarially, noted Kavesh. Said President John W. Remington of the American Bankers Assn, speaking of his own Lincoln-Rochester Bank & Trust Co: "What is so important to us [about mortgages] is liquidity. We had a \$9 million runoff last year from a \$100 million portfolio, and we invested \$12½ million in mortgages."

Careful buying can produce negligible losses in mortgage portfolios.

National Life Insurance Co was one of the first to make an FHA loan. It has 58% of its assets in mortgages now—an unusually high ratio—plus 5% more in leasebacks, reported President Deane C. Davis, who is also president of the Life Insurance Assn of America. To achieve this \$463 million mortgage portfolio, "some years we've put as much as 85% of current funds into mortgages." In all, National Life has bought nearly 80,000 FHAs worth \$556 million. At year-end it had 28,000 still on its books. In 25 years of FHA lending, it has foreclosed or assigned only 316 loans, with \$74,168 loss. That is 44/100% foreclosure, and 13/1,000 of 1% loss! Out of \$255 million invested in VAs, it has had 690 foreclosures, but only \$130.07 loss "That is entirely bills we received after settling with VA," said Davis.

and the Al

Mortgages are not as costly to handle as rules-of-thumb suggest.

De Laittre, who is president of Farmers & Mechanics Savings Bank, Minneapolis, said he has cut his own internal costs of supervision on FHAs and VAs to 0.17% by using a single debit system and punch card tabulating. This is 33% cheaper than the traditional 1/4% for home office supervision of out-of-state mortgage investments serviced by a mortgage company.

Swelling economic strength of pension funds invites politically-inspired regulation, but a major switch into mortgages could avert it.

How big are pension funds now? Their \$25 billion assets compares with \$35 billion in savings banks and \$54 billion in S&Ls. But pension funds are growing at \$3 billion a year. "Corporate pension funds may double in five years," predicted Prof Kavesh. "Consider diversification of how they are invested as an end in itself. There is already increasing concern over the increased role pension trust holdings play in corporate management. This could become a political football. It could cause a great deal of trouble. When trouble emerges, there are always Congressmen with remedial legislation. You [pension trustees] are sitting on [what] could be a keg of dynamite. Prudence dictates all feasible areas of investment should be scrutinized.

Added President Joseph A. Grazier of American-Standard: "I'm not sure there isn't a political significance to this tax-free accumulation (of pension money). I hate to think of the day when these funds try to vote their common stock holdings at annual meetings."

Counseled Savings Banker deLaittre: "It doesn't hurt your political sex appeal to have a good record in the homebuilding industry."

New techniques, new financial instruments are making mortgages more suited to pension fund fiscal requirements.

Investors Central Management Corp performs the "home office" job (for 18%) for one Midwest and three New York City banks representing some 64 pension funds. On a 12-year prepayment basis, said President Arthur Viner, it is offering yields from 5.60 to 5.75%. Currently, it has \$42 million of mortgages on its books, \$17 million under written commitments and \$20 million of outstanding orders. ICMC is owned by a group of top mortgage bankers across the nation, does business with 44 servicers.

Mortgage Corp of America, organized to take advantage of a 1957 FHA ruling permitting mortgagees to dispose of partial interests in FHA loans, offers collateral trust notes secured by FHA mortgages to the public. Current coupon on the notes, reported General Counsel Samuel E. Neel, is 51/4%. The \$1,000 notes run 10 or 20 years. "The collateral is a \$1 million pool of FHA mortgages," he explained.

American Bankers Assn has worked out a plan under which pension funds invest in FHAs or VAs originated and serviced by a

PUBLIC PENSION FUNDS

Government and labor pension funds are stepping up their mortgage buying dramatically. Items:

• Hawaii's Employes Retirement System has placed \$16 million of its \$129 million assets in mortgages, likes them so much it is now pondering boosting its mortgage holdings from 15% to a startling 35% of its funds.

• The Carpenters Pension Trust Fund for northern California began a regular program of buying \$400,000 of FHAs and VAs a month. Ultimately, the fund expects to acquire \$25 million worth, say Chairman E. A. Brown and Co-chairman John I. Hennessy.

The recent increase in state and local retirement fund investing in mortgages has been "striking," says Prof Roger Murray, Columbia University finance expert. These funds put \$300 million into mortgages last year, may add another \$400 million in 1960. Within five years, he estimates municipal funds will reach \$500 million a year for mortgages.

commercial bank. "The originating bank acts as custodian of the mortgages, issues the pension trustee a transferable certificate of deposit and makes certain warranties which in practical effort limit risks in connection with the origination," explained Chairman Cowles Andrus of ABA's real estate mortgage committee. "The bank performs the management functions required by competing plans," he added.

Institutional Securities Corp, set up in 1957 by New York State savings banks, uses collateral trust notes to avoid legal and tax complexities of doing business outside of a lender's home state. President Clifford Boyd reported \$3½ million in recent deals with 30 pension funds. Current yields: about 5.40 or 5.50 to maturity, 5.60 or 5.75% on a 12-year basis. NEWS continued on p 60

SPEAKERS, PARTICIPANTS IN PENSION FUND SEMINAR



COMMISSIONER Zimmerman said FHA is willing to modify techniques to encourage pension funds to buy more FHA loans.



ECONOMIST Raymond Saulnier, chairman of The President's Council of Economic Advisers, addressed lunch meeting.



MANUFACTURER Joseph Grazier, president of American-Standard, had to push to get trustees of his own fund into mortgages, he reported.

Photos: Ben Martin, Walter Daran



BANKER Bill Marcus, retired senior vice president of American Trust Co, predicted pension funds will put more money into housing.



INSURANCE executive, President Deane C. Davis told why his National Life, has 58% of assets in mortgages: high yield, low loss.



PROFESSOR Robert Kavesh of NYU warned that huge economic power of pension funds requires steps to avert political interference.

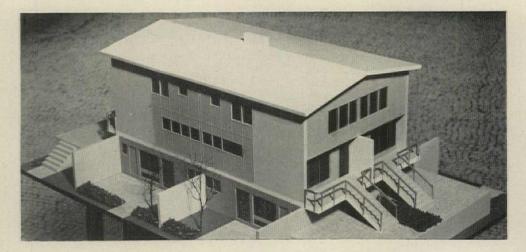


SAVINGS & LOAN leader, W. O. DuVall of US S&L League, suggested funds buy into S&Ls' conventional loan partipication programs.



BANKER Cowles Andrus described ABA's new plan to let commercial banks give pension funds transferable certificates, for FHAs, VAs.

HOUSING CAMERA:



Aluminum-clad apartments for Cincinnati renewal

Reynolds Metals will combine concrete block, metal sheathing in this six-unit maisonette design for its first redevelopment project, expects to meet Sec 213 co-op limits of \$9,000/unit. The maisonettes will be combined with row houses to yield 328 units on 12.5 acres for which Reynolds' local subsidiary, Park Town Corp, paid \$35,000, hopes to start work on this summer.

The company quietly launched its program to

spur renewal last fall with former HHFAdministrator Al Cole in charge. Cole says the aim is to provide seed money, know-how to local builders, to gain a showcase for aluminum in renewal. The company has renewal projects pending in Washington, D. C., Kansas City, Mo., and Philadelphia (where local builders competing for the big Eastwick contract cry they need neither money nor know-how from Reynolds).

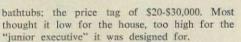
Fox Photos Ltd.



Builders' London House draws mixed reactions

US homebuilders' entry in London's Ideal Home exhibition scored a hit with Britons for its attractive exterior, feeling of space.

But the three-bedroom, 2^{1/2} bath brick and frame structure's open plan didn't go over nearly as well with British men as it did with the women who trooped through by hundreds. Wrote one bowler-hatted male: "There is no escape from togetherness." Most found the family room, with TV, electric organ and hi-fi incomprehensible. Other items visitors questioned were the cooking island with rotisserie between kitchen area and family room; shower stalls and small



Built by NAHB and the Natl Housing Center from plans by Herman York, AIA, the house drew no more or less praise than other entries. Said the *Spectator*: "One of the things not reported often enough about America is the excellence of the common or garden domestic architecture . . But the past has an untypically heavy grip on the place—and the wrong kind of past, at that . . . Everything is in perfect if rather stuffy taste."

Moulin Studios



Builder Joe Eichler enters redevelopment race

In his maiden bid at major high-rise rental construction, Joseph L. Eichler is shooting for a top one: San Francisco's Golden Gateway Redevelopment project. He was one of nine developers who submitted bids (cost to prepare: around \$100,000 each) for almost half of the 44-acre project to revamp the city's shabby old produce district. Architects Anshen and Allen, designers of many of Eichler's prize-winning homes, drew up his plans for ten apartment buildings, six recreational pavilions, a shopping arcade, parks, terraces, pools and a 25' tree-covered embankment to screen off the city's ugly new Embarcadero Freeway.



Can this be public housing?

For years, New York City public housing officials tended to pooh-pooh suggestions that instead of demolishing sound but rundown structures to make way for their projects they should rehabilitate what the city already had.

Now, with public housing under attack for failing to solve slum problems and, in fact, creating some of its own, their attitude has changed. The city's public housing agency has announced it will take over this slum in a racially changing, blighted area on the upper West Side, and another that backs against it on the next street, and rehabilitate them for \$280,000—about half the cost of new public housing. It will reconvert 77 single-room apartments into 24 apartments in each building. Rentals will be \$14-\$16/ rm/mo, about average for public housing in the city.

If successful, the plan will be applied to other buildings in a drive to eliminate single-room occupancy buildings. It could lead to rehabilitation of as many as 12,000 apartments in the city that have been chopped up into single rooms often used to house whole families, says the authority.



A passel of angry taxpayers

Irate taxpayers in New York City's Borough of Richmond (Staten Island) stormed city hall to protest a 26.7% increase in real estate assessments for this year, on top of a 22% increase last year. The new hike compares with an average of 7% for the entire city—enough to draw shouts of protest, placards inscribed, "Let's get the British back—they weren't bad compared to politicians we have today."

Taxpayers contend real estate speculation on the island—only major area of vacant land in the city—spurred by plans for a bridge connection with Brooklyn, has driven values to artificial heights unfairly applied by assessors.

LABOR:

Builders warn changes in law may block technical advances

Insiders call chances "fair" for passage of the Thompson-Kennedy bill to let unions picket whole construction sites if they have a dispute with one contractor there.

Until now, such picketing has been held illegal under the Taft-Hartley law. Courts have ruled that by involving neutral parties (eg, other contractors on the job) and pressuring them to stop doing business with the struck contractor, it constitutes a secondary boycott, banned by the law. A measure to allow the picketing was omitted from last year's Landrum-Griffin labor law, with bipartisan promises it would be passed this year.

At hearings on the bill last month, labor and other supporters argued before a House committee that the existing setup unfairly deprives construction unions of an important organizing and recognition tool enjoyed by industrial unions. Industrial unions can strike whole plants even when their dispute involves only one department. Construction unions, say labor leaders, can't do the equivalent at construction sites and should be able to.

But contractors fear the amendment would lead to costly delays in building.

Past President Rodney Lockwood, testifying for NAHB, said unions already have the right to picket single employers with whom they have a direct dispute, even on the job site.

"What is now prevented, and should continue to be prevented, is the legalization of methods such as the secondary boycott to extend the labor dispute with the primary employer to neutral employers and neutral employees who have nothing to do with the dispute," he said.

"It has been the experience of builders ... that the phrase, 'wages, hours and working conditions' includes any problem whatsoever causing concern to those building tradesmen at the construction site, whether it has origin at the site in the first instance, or off the site. The term . . . is so all inclusive that it provides no limitation whatsoever."

There is no guarantee that the law would not permit unions "to enforce an untold number of restrictive practices or featherbedding conditions. These principally concern the use of various types of materials, prohibition of prefabricated components . . . preassembled units." NAHB's research activities "convince us that a revolution in home building is currently before us. In the next ten years, we will witness more new materials . . . methods of construction . . . than in our entire history. This amendment would cause a setback of many years of progress that we are making through research in preventing application and use of new methods and materials under the guise of legitimate labor activities."

Lockwood also pointed out that when the Taft-Hartley law was passed, a provision to include unions under provisions of the Sherman anti-trust law was left out, on the basis that the ban on secondary boycotts would eliminate virtually all abuses in restraint of trade. If the ban was lifted, he said, the antitrust exemption should be lifted too.

Although both parties, the Administration and some contractors (mostly union subs) support the measure, opponents are getting a strong assist from Rep Robert P. Griffin (R, Mich.) co-author of the reform law. He is fighting for amendments that would simply write present picketing rights—contained in NLRB rulings—into the law.

How John Dunlop hopes to cut strikes by low-pressure tactics

By Robert Seaver

The man who seems most likely, to a good many onlookers, to be most successful in finding solutions for some of buildings' knottiest labor problems is neither a unionist nor a contractor. He is a Harvard University economics professor whose aversion for the spotlight is almost as strong as his conviction that the interests of labor and management are almost never as far apart as they think.

In making this conviction work, John T. (for Thomas) Dunlop, 45, comes to the bargaining table armed with a massive knowledge of labor economics and an impartiality that has earned him the almost universal

respect of unions and employers. It is likely that he has more experience in negotiating labor settlements than any other man in the building industry. In one job alone, his ten years ('47 to '57) as chairman of the industry's National Joint Board for settling jurisdictional disputes, he presided over some 6,-000 cases involving such



DUNLOP

conflicts. He also became a key figure in maintaining a high measure of labor peace.

Now, as chairman of the year-old Construction Industry Joint Conference, he has raised his sights to broader labor-management problems. And it is in this role, as impartial moderator of a union-contractor national panel, that he looks like the best visible bet to bring a measure of order out of the chaos of construction labor problems. NAHB has been invited to join, but shies away from formal membership, mainly because the 50% or so of builders who still enjoy open-shop conditions fear it might lead to national bargaining. Instead, it often sends an observer to conference meetings.

First fruit of the Conference is a plan for eliminating all kinds of construction strikes through a national mediation-arbitration panel, in much the same way that the Joint Board arbitrated to eliminate jurisdictional ones. The plan made the biggest news at the AFL-CIO Building and Construction Trades Dept midwinter meeting in Miami Beach (*March, News*), and has substantial support from both sides.*

It is characteristic of Dunlop that the Joint Conference's first effort should be a strike-eliminating device. A veteran of 20 years' in labor-management mediation in addition to his scholarly career, he is far from the typical picture of the egg-head. Affable and blunt-spoken, with a square jaw and a steady gaze, he is noted for a store of energy that lets him begin conferences before breakfast, continue them long after midnight. "He is," says NAHB's Labor Expert Andy Murphy, "a bear for work." In his \$15,000-a-year post as chairman of the Joint Conference, he spends three days a week in Washington where he conducts its business with the aid of a single secretary. As a faculty member of Harvard's Littauer School of Public Administration, he spends two more days in Cambridge, teaching four

* But another Joint Conference product, a pamphlet boosting contract maintenance of construction jobs by the same unions and contractors who built them, opened some old jurisdictional wounds in the merged AFL-CIO unions. President Walter Reuther of the United Auto Workers charged that the pamphlet, by soliciting maintenance work for construction unions at the expense of industrial unions who operate plants after they are built, was a violation of an agreement between the two factions to resolve such competition by discussion. full courses in economics. In between, he travels on behalf of one job or the other, engages in free-lance arbitration for other industries, and snatches some time at home in Cambridge with his wife and three children. No Ivy League type (of Harvard he says, "I just teach there; I'm not a member of the club"), he favors bright bow ties, has a practical, relaxed air that appeals to both management and union leaders and tends to reduce thorny issues to the scale of commonsense problems to be solved, not shouted over.

"He belongs," says one, who has watched him work, "to the 'lets-all-work-it-out' school. And he is a great one for having all the groundwork laid before getting to the table."

Perhaps more important, Dunlop accepts organized labor's status as a fact of modern economic life. He applies himself to the questions of how it and management can mesh their efforts for greatest productivity.

Dunlop's career in labor affairs began at almost the same time that he went to Harvard, in 1938, as a teaching fellow. He is a graduate of the University of California (Berkeley, '35) and holds his doctorate in economics from there. During World War 2, he served on the War Labor Board's wage adjustment board for construction, met industry leaders in his work. The job continued under voluntary controls to '47, when the National Joint Board was formed by the industry to prevent NLRB taking over settlement of jurisdictional disputes under the Taft-Hartley act. The job lasted until 1957 when he resigned to take a sabbatical and write a book, "Labor Relations Systems," one of a half-dozen he has published.

In 1941, a union friend complained of Harvard's celebrated Graduate School of Business Administration, "Hell, this university does all kinds of things for business, but nothing for the unions." With a celebrated colleague, the late Sumner Slichter, Dunlop organized a series of special 13-week courses

News

in the university for union leadership that now accommodate some 50 students a year. He reports with some satisfaction that one of the earliest graduates is now president of an international union-Harold Crotty, chief of the Brotherhood of Maintenance of Way Employees-and "a good many others are secretaries of international unions"-or in other responsible leadership posts.

Dunlop makes it clear he believes that labor and management can best settle their differences without government intervention. For construction and especially for housing, he contends it is especially vital for them to do so privately. Reason: government tools for handling labor problems are designed primarily for industrial plant or factory situations, work poorly if at all when applied to construction. "The NLRB has no touch for the construction industry," he says. "The issues are not nearly as clear as those in the industrial cases it processes by the thousands. These questions require much more sophistication than any government agency could possibly have."

About the Joint Conference, he says: "My idea is to pick out a half-dozen of the most pressing problems and push ahead with all of them. The important thing is to have a forum where ideas can be exchanged . . . an atmosphere of gradual change. There are lots of problems in this industry, but the only way you are going to get anywhere with them is to sit down and work on them together. If one side or the other stands off and calls names, you are not going to get anywhere at all."

Dunlop believes that some of the problems most shouted about-jurisdictional disputes and restrictive union practices for exampleare not nearly as important in terms of cost as some others. Writing in ACTION's "Design and Production of Houses," edited by Burnham Kelly, he said last year: ". . . the mere listing of practices condemned by builders is not likely to bring improvements. An attempt must be made to analyze the un-derlying problems . . ." Among these, he sees homebuilding's economic organization (mobile, diverse, highly competitive and widely scattered in scale of operation); homebuilders failure to gain representation in labor negotiations; difficulties in achieving a wage policy that can accommodate homebuilding's many kinds and scales of operation; conflicts between builder's desire for specialist in mass building operations, and union desire for broadly-trained journeymen.

But the most pressing problem is to quiet some of the shouting-through the Joint Conference no-strike plan. This involves a national union-contractor panel for settling local disputes. Once these are removed from the heat and pressure of local passions, seen through the broader perspective of national leaders, "We can't conceive of not being able to mediate out one of these things, says Dunlop.

If all leaders on both sides of the table fail to share his confidence that all problems can be worked out, most agree that a significant number can. Most are willing to give the plan a try. It is now a 20-page proposal of principles and rules that is before national union and contractor groups, for comment.

Meanwhile, says Dunlop, "we are having lots of excitement, getting things done. I've always enjoyed the construction industry because it has so many individualists and characters."

NEWS continued on p 65

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PRODUCTS

Earnings soar for materials producers; good '60 seen, too

Materials producers, bolstered by a good and for many, a record—year in 1959, foresee nearly as good a year in 1960. In annual reports which began appearing last month, most agree that a tight-money downturn in starts is the biggest threat. But most also seem confident that 1) a continued high level of nonresidential construction and 2) a boost in fixup sales will offset the loss.

"We believe," says President I. J. Harvey Jr of Flintkote Co, "that the present situation represents an opportunity for the aggressive merchant rather than the converse since this will make it easier to develop business in repair and modernization, for which credit is readily available." His company showed all-time record sales and its second-best profts last year.

Other firms reporting all-time records in sales, earnings or both: National Gypsum, US Plywood, Libbey-Owens-Ford, US Gypsum, Philip Carey Co, Johns-Manville, Georgia-Pacific, Reynolds Aluminum.

Annual figures for 41 representative producers (see box) showed only two—Worthington Corp and Crane Co—with drops in sales, and only two—Trane Co and Kaiser Aluminum—with drops in net income. At the end of 1958, only 46% of the reporting firms had improved both sales and profits over 1957; only 62% showed improved sales, and only 54% improved profits. And where both Congoleum-Nairn and American-St. Gobain Glass showed deficits for '58, none of the 41 concerns lost money in 1959.

Sales and profits would have been even better, most firms agreed, if the steel strike had not stunted fourth-quarter business. Labor problems held down profits for others—Carrier Corp, for example, suffered a continuing strike at its Syracuse, N. Y. plant, where company officials say union pay and fringe demands "are more than the profits before taxes of the entire corporation in 1959." Trane Co blames high labor cost for two years in a row of declining profits. Most of those that said results—even if better than '58 —were "disappointing" hoped new products or harder selling would bring a better '60.

In housing itself, returns of two top prefab companies showed mixed results. National Homes reported increased unit sales—36,478 against 32,837 in '59—for the company and its subsidiaries. But though consolidated revenues rose to \$96.3 million from \$79.6 million, profit dropped 51% to \$1.8 million from \$3.7 million in 1959. National attributes to high labor and materials' cost, plus \$1.13 million of non recurring costs to buy seven other prefab companies (H&H, Sept). On a

LAST YEAR'S PROFIT PICTURE

Sales and earnings for some of the biggest producers in 1959, compared with the same periods in 1958:

	'59	%	%	Cement			
	SALES	CHANGE	CHANGE	Lehigh Portland	101.0	+10.1	+37.6
COMPANY	(MILLIONS)	SALES	Net	Ideal ^g	108.5	+10.9	+10.6
				Penn-Dixie	51.6	+9.7	+11.5
Lumber				Lone Star	104.2	+7.3	+5.2
US Plywooda	\$206.5	+20.2	+37.1	Alpha Portland	39.4	+18.6	+43.7
Weyerhaeuser	458.3	+11.7	+21.8	General Portlandh	67.2	+13.4	+8.1
Georgia-Pacific	192.0	+25.9	+40.1	Marquette	58.2	+7.8	+8.6
		1.1		Permanente	77.2	+14.6	+9.7
				Hardware			
Wallboard, roofing, ti	70			American Hardware ^j	33.2	+10.0	+27.4
Celotex ^b	76.2	+12.6	+32.1	Yale & Towne	144.1	+24.5	+39.3
Masonite ^e		+21.6	+28.7				
Ruberoid ^d		+7.5	+36.6	Appliances			
US Gypsum	301.0	+13.3	+13.2	Carrier ^b	263.4	+4.3	+9.5
Johns-Manville ^e	377.6	+13.8	+35.8	Westinghouse	1,910.7	+.8	+14.9
National Gypsum	226.3	+13.0 +13.0	+31.2	Minn-Honeywell	381.4	+16.1	+30.3
Flintkote	220.0	+13.0 +13.9	+16.8	Whirlpool	430.5	+6.4	+101.5
Armstrong Cork	290.6	+16.3	+10.0 +41.2	Worthington	180.3	-2.1	+5.7
Congoleum-Nairn		+10.0 +13.3	+41.6 n	General Electric	4,849.5	+5.5	+15.4
Certain-Teed				Maytag	123.1	+16.4	+30.1
Philip Carey	73.2	+14.0 +10.2	+76.1 +62.7				
		the state of the s		Glass		and a local	
Bestwall	39.4	+15.9	+12.9	Pittsburgh Plate	606.9	+18.2	+37.5
				Libbey-Owens-Ford .	306.7	+41.4	+150.0
				American-St Gobain	82.5	+31.2	k
Heating & Plumbing				Aluminum			
American-Standard ^r	398.9	+13.5	+51.1	Alcoa	858.5	+14.0	+29.6
Crane	310.2	-7.8	m+200.7	Kaiser	435.6	+6.6	-11.5
Trane	84.1	+3.1	-16.5	Reynolds	489.3	+9.8	+13.7

- " First 9 months of fiscal year ending Apr 30, '60.
- ^b For fiscal year ending Oct 31, *59.
- ^c For fiscal year ending Aug 31, *59.
- ⁴ Figures for both years adjusted to include Mastic Tile Co, acquired Sept 30, '59.
 * 1959 figures include earnings of F. E. Schundler
- & Co, Inc, acquired Sept 22, '59. ¹ Unconsolidated report; excludes foreign activ-
- ities. Figures for both years adjusted to include Valuateer Portland Coment Co. acquired Sent
- ⁹ Figures for both years adjusted to include Volunteer Portland Cement Co, acquired Sept *59.
- ^h Figures for both years adjusted to include Consolidated Cement Corp, merged Apr 30, '59.
- ¹ First 9 months only, ^k Deficit of \$319,732 in '58. Net for '59 was \$802.977.
- ^m Excludes from 1958 net income a special charge of \$3,308,248. If this were included, percent increase for 1959 would be +19.0%.
- Deficit of \$3,569,000 in '58. Net for '59 was \$556,000.

brighter note, Inland Homes says that its fiscal year (ended Jan 31) showed all-time record earnings up 172% from '58—\$288,206 compared to \$105,314. And sales rose 94.4%, to \$5.8 million from last year's \$3 million. And though starts for Feb and March were off nationally, Inland's package house sales are up from last year.

And Richmond Homes, Inc reports sales of \$4.8 million in '59 were up \$1.8 million from '58—earnings were \$173,000 for the year against only \$77,000 in '58.

In more conventional building, Eichler Homes Inc, showed profits of \$377,516 on \$12.5 million sales for the first three quarters, compared with \$273,189 profit for all of 1958. Looking ahead, President Edward P. Eichler predicts: "We do not anticipate insurmountable difficulties in arranging financing for the period ahead."

MATERIALS BRIEFS

Grade marking (cont'd)

Virtually all major US lumber producers, and a substantial number of smaller mills, have decided to go all-out in grade stamping lumber to conform to FHA's April I requirements. They will stamp all of their lumber, not just what is destined for FHA houses. Industry leaders believe the "relatively small cost" that stamping adds thus will be absorbed at the mill level and not affect consumers or builders.

FHA and industry leaders are exploring possibility of standardizing in a single system the hodgepodge of standards and terminology used in grading the species involved.

Prices: lumber steady

Late-winter snows that blanketed the Eastern half of the US in March have held lumber prices below their usual spring upsurge. Plywood, which hit a 33-month high with a firm mill price of \$88/m sq ft for key A-D¹/4 in. sanded panels a year ago, is still listed at \$68. Mills are soliciting business at \$64.

Similarly, bellwether std & btr green fir dimension is lagging at around \$64/mbf, down \$2.50 from a year ago. Other movements in materials' prices:

Copper prices are dropping as mills resume production after settling strikes that have lasted since last summer. Offerings to fabricators by dealers which have been as high as 40e/1b, are in the 35e range, apparently headed for the 33e quoted by major US producers.

Carpeting may be headed for its fourth round of increases in a year. Mohasco Industries, Inc, nation's biggest producer, is boosting prices at wholesale 3-5%. Other producers are "studying" the move.

Ceramic tile market

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Ceramic tile producers can double their volume in the 1960s if they key their marketing to builders. That's the forecast of Walter B. Roach, sales vice president of Architectural Tiling Co. He says the industry's 250 million sq ft output should grow to 550 million if potential in the commercial and homebuilding is fully exploited.

Panuch report: a stiff prescription for New York's ailing slum programs

After seven months of study, Lawyer and Organization Expert J. Anthony Panuch has given New York City the new prescription for fighting urban decay that it asked for last year (*Oct, News*). His recommendations for drastic reform, some experts contend, could well serve as a text for slum fighters across the nation.

In his 112-page, \$150,000 report to Democratic Mayor Robert Wagner, Republican Panuch urges that the city:

1. End policy conflicts and operational crosspurposes in the city's anti-slum agencies that

have all but paralyzed [its] administrative ability to deal with its own renewal," by grouping them under a single three-man Housing and Redevelopment Board. (This would have the effect of ending Robert Moses' celebrated oneman rule of the city's redevelopment efforts.)



2. Take the profit out of slums. This should be done not only through

providing enough manpower for really tough enforcement, but also by 1) new assessment policies that attack the bootleg profit in slums and 2) income tax law changes to make profits on slum sales taxable as ordinary income instead of capital gains, and 3) massive examination of slumlord tax returns to prevent their claiming depreciation allowances when they actually do no maintenance.

3. Provide incentives for self-renewal by continued and expanded tax-abatement policies for private slum rehabilitation, and by tax relief for new housing built to meet the city's needs.

4. Emphasize residential redevelopment of blighted commercial areas so new housing does not create a shock wave of relocation problems ahead of it.

5. Speed assimilation of rural in-migrants, whose ignorance of city living often helps create slums, through school and welfare agency teaching programs.

6. Place more emphasis on saving sound housing the city now has through private and public rehabilitation and conservation; de-emphasize total clearance and redevelopment in these areas.

In its analysis of New York's blight problems, the Panuch report reflects maladies that plague other US cities. It also reflects some of the best thinking and experience in meeting them. Among its conclusions:

Total clearance, with public or private redevelopment, is not the answer.

"In the reform era of the 1930s (says the report) public housing was generally regarded as the total answer ... Today, after 20 years of public housing and the expenditure of nearly \$2 billions, almost a half-million persons of low income have decent homes. But the public housing program has not made any appreciable dent in the number of slum dwell-

ings." So the Housing Act of 1949 was designed to "eliminate their cause—the deterioration of prime residential neighborhoods by combined action of public housing and private building.

Title I of that law—coupled with the ability, imagination and driving force of Robert Moses (slum clearance committee chairman) —generated a large volume of private investment which gave New York City the most massive Title I slum clearance program of any city in the nation. But, despite powerful assistance from the public housing program, Title I has been unable to rid our city of its slums."

Changes in American society made the problem much worse while these were tried.

Technological changes brought droves of rural in-migrants to the city—ready victims for slumlords who crowded them into rapidlyblighted structures at enormous profit—and drove middle-income taxpayers to the suburbs. "What had appeared to be a manageable problem in the 1930s has assumed staggering proportions in the 1960s . . ." In 1950, says Panuch, New York City

In 1950, says Panuch, New York City needed 430,000 new apartments to meet growth needs and replace slums. Since then, some 324,000 have been built, but the need still stands at 430,000. Reason: new slum creation, and demolition of existing sound units to make way for redevelopment.

City action has been slowed by a basic conflict in renewal policy and a scattered approach to the problem.

"One school of thought . . . holds that redevelopment of the city should be on the initiative and under the control of the city administration in planning and execution; that it should be in accordance with a "master plan" for the city, based on a series of studies . . . and that the end . . . should be the planning and building of "balanced neighborhoods."

"The other school . . . holds that the city's redevelopment should be by partnership between the city and private developers; that initiative should come from private enterprise motivated by the expectation of financial gain. While the city exercises approval and control of the planning and execution of the project, and makes available a variety of aids, the end sought is encouragement of private enterprise to develop full tax-paying and middleincome, partially tax-exempted housing . . .

"Both operations compete for scarce federal planning assistance and capital grants in write-down funds. In actual administration, each works at cross-purposes with the other."

Adding to the problem is "the multiplicity of agencies in the field of public and publicly-aided housing" which follow their own courses unfettered by central control. "This 'free wheeling' results in competition for sites, jockeying around for property acquisition, uncoordinated demolition . . . chaotic site clearance and tenant relocation and, finally, in a dissipation of the city's resources . . ."

Panuch's solution: gather all agencies for implementing renewal and aiding private housing under one board; avoid creating a Frankenstein bureau by reserving some functions to others (ie, the City Plan Commission would keep overall approval powers for conformity to city plan and zoning; Buildings Dept would keep its enforcement function; relocation would stay in the city Real Estate Dept). Responsible to the city's Board of Estimate, the Renewal Board would be guided by a policy committee composed of its own head and those of the Plan Commission and Housing Authority. Technical coordination would be accomplished through a second committee including representatives of all city departments whose functions touch renewal and housing.

The broad prescription was pretty much what a good many experts had been urging all along. Some of the measures would require new state laws. But the Panuch report was generally recognized as a workmanlike assembly of good ideas. Mayor Wagner promised speedy action to implement it. What it didn't answer was with Slumfighter Robert Moses determined to resign, who would boss the new agency. One possible choice seemed to be ex-Realtor James Felt, plan commission chairman and advocate of a broad approach to slums and housing. But no sooner had the report appeared than insiders were saying another candidate was Joe Panuch himself.

FTC promises crackdown on suede-shoe selling

The Federal Trade Commission has joined remodelers' fight against the plague of bait advertising. Paul A. Jamarik, assistant to the director of FTC's consultation bureau, told NERSICA members at their annual meeting in New York that it has lodged complaints against three suede shoe operators, stands ready to clout others "subject only to manpower and budgetary limitations."

Jamarik said FTC's enforcement program supplements a "virile voluntary compliance program" and specific laws against bait advertising in 19 states.* The Commission also has a set of "Guides Against Bait Advertising" which spell out what not to do in layman's language. But the best guide, Jamarik said, is to 1) stock a "substantial amount" of any bargain product and 2) shy away from phony advertising. He said FTC will give an advance opinion of ads before publication if asked. Salesmanship to encourage customers drawn by a bargain ad to buy more expensive products is not prohibited, he said, if it is undertaken in good faith. Neither is giving a higher commission for high-price sales-depending on the "degree and purpose."

Current complaints are before a hearing commissioner, he said. If they produce a cease and desist order, violations can bring fines of up to \$5,000 for each violation.

New rules cut red tape, promise 20 % speed-up

The old urban renewal manual, plus other policy documents, came to 1,075 pages of fine type. And it called for time consuming review by layers of officialdom of almost every step in the process of federally-aided city rebuilding, from plans to landscaping.

Last month, URA junked the whole thing. In its place went new 525-page book of regulations—a 50% cut in sheer bulk. And

* California, Connecticut, Hawaii, Georgia, Kansas, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, West Virginia, Wisconsin. the rules themselves, said URA Commissioner David R. Walker, have been "drastically condensed and simplified."

A dry run by URA's Philadelphia regional office found the new rules would cut one year off the average five years it takes to bring a renewal project from plan to completion.

Cities get much more leeway to do as they think best under the new rules. Items:

• Now, cities need not submit eligibility and relocation reports before they proceed with the rest of project planning. This alone should save four or five months, say URA men.

• Washington will no longer review cities' contracts with hired experts like lawyers, appraisers and engineers. (URA retains its veto power over what planning consultants a city wants to hire; it figures some small cities would too often pick a consultant who doesn't know his business.)

• Cities get much more flexibility in how they dispose of cleared land. Up to now, URA has permitted two methods, public bid or negotiation, but has imposed sringent rules on how cities must do either.

The new rules were hammered out in just three months by a seven-man URA team led by Assistant Commissioner William R. Ewald Jr. They should sit well with redevelopers, who have been complaining more and more vociferously that "time is literally money to us," and begging local authorities to move faster.

Can FHA standards stop scandals in remodeling?

Long Island remodelers are asking FHA to establish MPSs for home improvement just as it already does for new homes.

The idea says Jerome Kurtz, vice president of Cross Island Attic Co, is to drive shady remodelers out of the industry. The demand comes just after the FBI arrested 23 on the island on charges of helping make \$1 million worth of FHA-backed loans on nonexistent improvements.

Many existing MPSs could be used in setting up the new standards, say the contractors. And a system of spot checks and penalties could probably take the place of the cumbersome processing and inspection machinery used on new-house loans.

In Washington, FHA reports 1959 was a record year for home improvement loans: 1.1 million loans totaling \$1 billion. Claims paid on defaulted loans dropped 13.7% from '58. But at the same time, FHA quietly circulated a warning to lenders that they had better watch fix up loans more closely to make sure they are really eligible. FHA's regular inspection of lenders' portfolios last year resulted in removal of \$1 million in improper loans from insurance (examples: swimming pools. roofless patios, or work done by blacklisted contractors who now number 6,500). In the same period, 15 lenders were found to be so careless they were suspended from the program. FHA canceled contracts of two, thus ejecting them permanently from its fixup loan program.

In Oregon, NERSICA's state chapter has set up a program to guarantee members' work to home owners. A certificate is issued on each job. Complaints are adjusted by an appeals board. Purpose: to knock out "transient operators who misrepresent workmanship and materials."

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AT WEEKEND RETREAT, HOUSERS PONDER HOW TO DEVISE A PROGRAM THE PUBLIC ACCEPTS

PUBLIC HOUSING:

Is there a better way to subsidize more good homes for poor families?

A dozen plans—some new, some old—to build more subsidized housing for more US families are about to be laid before Congress and the housing industry by a group of public housing experts.

The group—27 in all—spent a weekend behind closed doors at a suburban Chicago hotel in mid-February pondering what's troubling public housing and devising schemes to salvage the program or find substitutes.

The conference "recognized that our past approach to [public housing] is breaking down," says President John W. Baird of Chicago's Metropolitan Housing & Planning Council, which co-sponsored the meeting with Action Inc. Participants included such luminaries as HHFAdministrator Norman P. Mason; Ernest Bohn, director of the Cleveland Housing Authority; former HHFAdministrator Albert M. Cole; Neal Hardy, director of the National Housing Center; Prof Ernest M. Fisher of Columbia University (who just completed a study on the same subject for HHFA); Mortgage Banker Fred Kramer of Chicago; AFL-CIO Economist Bert Seidman; Builder Bill Witt of Virginia Beach. Va.; Architects Walter Netsch and Albert Mayer; Vice President Theodore Yntema of Ford. Former Public Housing Commissioner Philip M. Klutznick, developer of Chicago's celebrated Park Forest, was chairman.

At least three new proposals were broached to provide subsidized housing. They were:

1. A new form of rent certificates. This idea was proposed by former assistant PHA commissioner Warren Jay Vinton (who wrote a Field Foundation-financed background paper for the conference). He would create a new federal agency to make 98% loans at FHA interest rates and amortization terms to private builders. Builders would agree to hold part of the resulting rental units for low-income families. The low-income families would be rent-subsidized by the federal agency. It would credit the difference between what they could pay from their own resources and the market rent for the same unit (established as FHA now does it) against the builder's next amortization payment. Vinton estimated his plan would need \$1.3 billion of federal tax money per 100,000 units-or \$6 billion a year for perhaps 20 years to meet the nation's needs as he views them. (This is about the same amount of money the nation now spends to subsidize farm overproduction.)

2. Direct federal loans at interest rates below the Treasury's borrowing cost. This idea was proffered by Lawyer David Krooth of Washington, former PHAide who is now a consultant for co-operatives.

Adapting the present college housing loan plan (which the Administration would like to un-subsidize by boosting interest to what it costs the government to borrow), Krooth would have the US make low-interest loans to builders. The builders would have to agree to sell the projects upon completion to a nonprofit co-op.

3. Fanny May mortgages about 3% below the market. This idea is the brainchild of Prof. William L. C. Wheaton, just retired president of the Natl Housing Conference. He would lure builders into the program by having FNMA offer them commitments to build 25% above their normal output, earmark it for low-income families. The poor family would get a mortgage from a local bank at whatever interest rate would qualify it to buy the house. The bank would service the loan, but FNMA would hold it until, with the bank reappraising the subsidized family's income every five years and adjusting the interest to ability to pay, the rate rose to free-market levels. Wheaton figures 300,000 units would take \$1.2 billion of subsidy (assuming an average 3% interest subsidy). He sees it as a supplement to the present public housing program.

Indications are, say some participants, that the final report which Warren Vinton is drawing up will also suggest two changes in the existing public housing program which could boost its cost to taxpayers:

1. Build more public housing on urban renewal sites. This was authorized for the first time by the 1959 Housing Act. Its effect is to use the land to write-down subsidy of renewal to make the site cheaper for the local housing authority. This makes the federal government subsidize the resulting project in two ways instead of one.

2. Repeal the law that requires a unit of slums to be torn down for every unit of public housing built (though not necessarily in the same part of the city). This was the appeal by which public housers originally sold public housing to Congress, has been embodied in the law from its inception.

PEOPLE:

Realtor Bruce Savage named PHA chief

An Indianapolis realtor, Bruce C. (for Charles) Savage, has been appointed by President Eisenhower to succeed Charles E. Slusser as public housing commissioner.

Slusser quit at year's end (*Jan, News*) after 6¹/₂ years in one of the nation's toughest housing jobs. Savage will take over from **Lawrence Davern**, PHA counsel general who has held the top job temporarily.

Savage, who has a reputation as a liberal Republican, served on the celebrated Presidential housing policy advisory committee in 1953 and on state and local groups concerned with housing for the aged and human rights. Although he is usually bluntspoken and quick to voice his opinions, he has kept mum on public housing (which is not popular in Indiana). But associates say he is for it.

At 53, he is head of one of the largest real estate brokerage firms (Bruce Savage Co) in Indiana. He deals principally in luxury houses. He entered the business in

Walter Daran



PUBLIC HOUSER SAVAGE Blunt man for tough job

1940. Turned down for service in World War 2 (poor eyesight), he went into politics in 1946 and made an unsuccessful bid for a congressional nomination. Former treasurer of the Marion County Republican Central Committee, he was head of the local Eisenhower-for-President Club in 1952 when most Indiana Republicans favored Taft.

A self-styled "raccoon coated rogue" in college during the 20s (he attended Indiana, Butler and Northwestern universities), he is now a sedate family man (wife and daughter) with a fondness for music. Short and stocky, he is described by friends as "a Hoosier Edward G. Robinson—only more congenial."

AIA boosts 43 architects to top rank of fellow

Among 43 architects to be elevated to the rank of Fellow by the American Institute of Architects at its annual convention in San Francisco some of the most notable are:

Quincy A. Jones, Los Angeles, one of the nation's foremost designers of tract houses for builders, for design; Chloethiel W. Smith, Washington, D. C., lecturer, advocate of renewal for curbing urban blight and designer of some of her city's first and best renewal housing, for design and service to the Institute; Vincent George Kling, Philadelphia, prolific designer of award-winning institutional and commercial structures in eight states, for design; Gilbert H. Coddington, Columbus, Ohio, noted for using modern materials to depart from traditional church architecture, for design; Minoru Yamasaki, Detroit, noted designer of institutional and residential renewal complexes, public buildings, for design; Hugh A. Stubbins Jr, Cambridge, Mass., designer of houses for custom and mass production, and more recently of renewal (rowhousing and international buildings like the US Legation in Tangiers, Morocco, and Congress Hall in Berlin, for design; O'Neil Ford, San Antonio, distinguished teacher, historian of Southwest architecture, co-inventor of liftslab, and experimenter in prestressed concrete and shell construction, for design.

Other well-known architects also honored: Mario J. Ciampi, San Francisco; Neil J. Convery, Newark; Robert M. Little, Miami; Allan G. Lorimer, New York City; John W. Severinghaus, New York City; Robert Law Weed, Miami.

Bob Loftus quits as NAHB public relations chief

Witty, wisecracking **Robert F. Loftus**, 49, NAHB's public relations director since 1954, has resigned to enter private work. An 18-year veteran of United Press' New York and Washington bureaus (financial, economic, general assignments, newsdesk)', he joined NAHB in 1954, quickly made a reputation for humor and ability. He wisely counseled builders to take their major problems to the public even when some local sales might be adversely affected (as in the '57-58 recession).

Rail-thin and rubber-faced, Loftus convulsed friends (and sometimes endangered his job) with irreverences like his lecture on "How Not to Run a Trade Association" or offhand gibes like his 1957 crack: "And even the [place name] homebuilders will be selling plenty of houses-after they get out of jail." But he also sparked National Homes Week, local Parades of Homes, NAHB's Family Conference on Housing, and an international builder exchange program that grew into NAHB's Point Four. His latest project, a major national big-money publicity campaign for builders, was launched last year. Insiders say the decision to leave was his own, and NAHB's official regret, genuine.

FHA information boss resigns to run for seat in Congress

John Rousselot, 32-year-old Los Angeles publicist who has been FHA's public information director for the last two years, resigned to run for Congress.

He will seek the Republican nomination for California's 25th

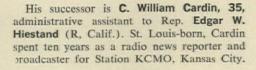
H&H staff

for California's 25th Congressional district, a seat now held by Lawyer **George Kasem**, a Democrat. Kasem squeaked to a 605-vote victory for the job two years ago.

The 25th district is the one from which Vice President **Nixon** was elected to the House in 1946. Rousselot got his first taste of politics as a Nixon precinct

worker in that race. Since, he has managed 11 political campaigns, served as president of the California Young Republicans and as vice chairman of the Los Angeles County GOP central committee.

ROUSSELOT



LENDERS: Harold P. Braman has joined Atlantic Federal S&L, Fort Lauderdale, Fla., as administrative assistant to President Harry P. Greep. Former newsman Braman was managing director of the National League of Insured Savings Assns until last year when he resigned to become a consultant.

Top building trades' job goes to California's Neal Haggerty

New head of AFL-CIO's Building & Construction Trades Dept, succeeding resigned Richard J. Gray (March, News): greying, canny Cornelius J. Haggerty, 66, executive secretary & treasurer of California AFL-CIO and one of the most powerful men in the state.

Haggerty's deceptively mild manner hides a talent at union hall oratory that admirers say rivals even that of Teamster President Jimmy Hoffa. Neal Haggerty looks more like

LIFE: Jon Brenneis



HAGGERTY

a retired schoolteacher than a hard-bitten labor veteran. He is conceded to be one of the most astute lobbyists in the nation, proved it last year by defeating a state right-to-work law largely through debts he was owed by the Republican al. -ation. Although ho ims to be a registered Democrat, he has been accused of acting more

like a Republican, and has supported California's long series of GOP governors ending with **Goodwin J. Knight.** He has also achieved such gains as higher employment insurance and disability benefits during their reign.

Haggerty became a lather in Boston, moved in 1921 to Los Angeles, where he found only 80 of 1,300 lathers organized. He became successively shop steward, business manager and, by 1937, president of the regional labor federation. In 1943, he became secretary-treasurer of the state AFL. Under him, membership has grown from 275,000 to 1.3 million, not counting 100,000 expelled teamsters.

MANUFACTURERS INSTITUTES: President George M. Curtis of Curtis Industries, Inc., Clinton, Iowa, has been elected president of Ponderosa Pine Woodwork, association of lumber producers and manufacturers. He succeeds James F. Shiely. The National Mineral Wool Assn has appointed Fred H. Sides executive officer. Henry Myers, a partner in Chicago firm of Charles A. Myers & Sons, was elected president of the National Concrete Contractors Assn.

DIED: Leonard A. Hardie, 72, developer and builder of large residential projects in southern California, Jan 31 in Los Angeles; William E. Sanders, 43, assistant general counsel and tax director for the Natl Lumber Manufacturers Assn, Feb 14 at Wauchula, Fla.; Harry J. Long, 69, builder of more than 2,500 homes around Toronto and onetime president (1955-56) of Canada's National House Builders Assn, Feb 17 in Florida; Joseph M. Mozeris, 49, executive officer of the District S&L, Chicago, and onetime presi-

68

dent of the Cook County S&L League, Feb 17 in Chicago; William H. Upson, 78, a founder and former president of the Upson Co., wallboard manufacturing firm, and a consultant in the organization of the RFC under President Hoover, March 7 at Lockport N.Y.; John H. McClatchy, 85, Philadelphia area builder who developed some \$1 billion worth of residential and commercial real estate and who built more than 30,000 homes in the city and suburbs, March 11 in Ithan, Pa. NEWS cont'd on p 71

The legacy of Robert Moses:

New York housing czar set an example the US should spurn

Some years ago **Robert Moses**, acid-tongued autocrat of New York City's redevelopment program—the nation's biggest—stunned a critic of his relocation methods by remarking: "Look, in ten years you will have forgotten all about these people and you'll just thank me for the project."

The remark was typical of the "toughmindedness" which has characterized Moses' 37 years as a public servant; and it was probably true. But last month it looked as if the backfiring of just such tough thinking were finally forcing Moses out of housing. Simultaneously, Moses was offered the \$100,000-ayear post of president of the 1964 World's Fair, and a special report on New York's renewal and redevelopment ills appeared with word that Moses is quitting as chairman of the city's Slum Clearance Committee.

Whether, as some say, Moses is being kicked upstairs in a manner befitting his age (71) and laurels as a public servant, or whether he is voluntarily getting off an increasingly hot seat, two things seemed clear:

• Relocation ills and other abuses arising from Moses' creed that the only way slums can be fought is to blast whole neighborhoods off the map had a lot to do with his exit.

• His departure may finally give less drastic slum remedies—especially conservation and rehabilitation—a chance for their first real tryout in the nation's best-publicized urban renewal arena.

For Moses, the World's Fair job will cap a career that has spanned the administration of five mayors, as many governors. In it he has become a New York City and state legend for vision and action in building parks, roads, dams, bridges, tunnels and housing. The quality of his work—and political power—can be measured by the fact he has never been fired and never successfully resigned from a post (though he offered his resignation so often that the late Mayor Fiorello LaGuardia kept a stack of mimeographed refusals handy).

Keeping state jobs

The unpaid job of slum clearance chairman is only one of five city jobs Moses will give up to take the World's Fair job. Others include his paid (\$25,000 a year) one as city parks commissioner, and unpaid ones as city construction coordinator, and member of the Youth Board and Plan Commission. On the state level he is (and will continue to be) New York State Power Commission chairman at \$10,000 a year and, without pay, chairman of the Triboro Bridge and Tunnel Authority, chairman of the New York State Council of Parks, and Long Island state parks commissioner.

These jobs have long given Moses, who was never elected to anything (his only bid, for governor against **Herbert Lehman** in 1934, brought defeat by an all-time record margin of 800,000 votes), more power than most elected officials. In housing, his slum clearance chairmanship gave him the decisive role in shaping New York City's slum fight for the past decade. He himself has listed the prime qualifications for public service as "nerve, an instinct for the jugular vein and the habit of being a little bit mad all of the time." This credo molded his housing policies along with the rest of his enterprises.

One jugular vein often attacked by Moses is anything smacking of comprehensive or long-range planning. Firm in his belief that getting things done is more important than

United Press



NEW YORK'S MOSES Exit gracefully

worrying over what isn't being done, he regularly blasts "goo-goos, long-hair visionaries, planning reds and critics who build nothing." And, say his critics, his virulent opposition is one big reason the city has been so slow in developing a master plan or revising its 1916 zoning ordinance.

Similarly, Moses' impatience with and lack of faith in the more subtle techniques of renewal vs redevelopment kept New York from trying the new tools of the 1954 Housing Act until responsibility was handed to an Urban Renewal Board under **James Felt**. Felt, a former realtor, is also in charge of planning and zoning.

Most important, Moses' creed of action has cast New York's Title I program in a role unique in the nation, and often attacked for just that reason. In it, the committee dispensed with most of the elaborate build-up that attends (and often slows) redevelopment in other cities. Convinced that private capital would shy away from the "risk" of redevelopment, Moses reversed the usual procedure by seeking out Title I sponsors, then letting them pick their sites and make their plans within broad limits set by the committee. And instead of making clearance and relocation city responsibilities, he handed the slums over to their redevelopers intact.

This got results. More, Moses says, than in all other US cities combined. Three projects are complete, thirteen others average 42%

completion. When they are finished, wreckers' cranes will have demolished \$174 million worth of once-gracious but decayed brownstones, rabbit-warren old law tenements and other dilapidated, overcrowded nousing. To replace them, the city will have spent \$33.5 million on public improvements, and private sponsors will have invested \$739 million in high-rise, steel-and-brick apartment slabs surrounded by green space. Containing some 28,500 apartments (7,800 are already occupied), and mostly commanding luxury rentals of \$60-and-up per month per room, these projects will ultimately return taxes of \$13.9 million a year to the city, compared to \$4.3 million as slums.

Main drawback: abuses. Some sponsors milked profitable slums on their sites for years, then defaulted without redeveloping anything. Others relocated tenants into future redevelopment areas, or into less than safe and sanitary housing. Some announced projects were quietly dropped when enraged residents made convincing cases that their homes were not hopeless slums. One sponsor-designate was exposed as a slumlord himself.

Last year, the storm of criticism reached gale force. Moses himself said it made Title I a "dead duck" for future private investors. A once-favorable press turned increasingly cool. Last fall, Mayor **Robert Wagner** appointed Lawyer **J. Anthony Panuch** to survey ills in the city's slum fight, recommend improvements. With pressure growing for a more rounded approach to renewal, Moses wrote Panuch (in a letter that became public with Panuch's report) that the committee had discharged its function, launched an active Title I program in New York, and should now be integrated into city government.

Invective got results

On the national scene, Moses' most notable legacy may well turn out to be his influence on enforcement of the federal concept that every city must have a workable program for doing its part in slum fighting to be eligible for federal aid. Long after it became apparent that New York did not have such a program, Moses' talent for public invective kept federal funds funneling into the city (at 10% of the national total). Though intermittently waving the club of a cutoff, former HHFAdministrator Albert Cole shied away from public tangles even when many counselors advised him to get tough. The effect: the club became about as effective as a feather against other cities.

Less readily apparent is that Moses' stature had the effect of glamorizing his bulldozer strategy if not his tactics, and luring other cities into overemphasizing a redevelopment concept that time has shown cannot stem the growth of slums. And if Robert Moses' departure underlines anything, it is that however good or bad it was under him, redevelopment did not stem the growth of slums in rent-controlled New York.



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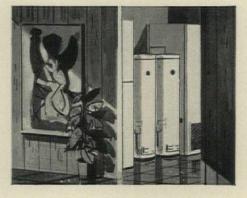
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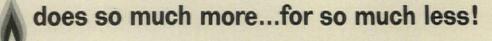
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CANADA:

News

6% bank interest lid foreshadows big drop in starts, experts predict

Indications are that Canadian homebuilders will start closer to 100,000 houses in 1960 than the 125,000 government economists continue to predict. This would be a drop of 29% from last year's 140,000 starts.

Main reason: the chartered banks, who have done some 40% of all private NHA lending in Canada in recent years, are forbidden by law from charging over 6% interest. Current NHA rate is 634%. It was boosted in January in an effort to keep mortgage money flowing (*Feb*, *News*).

Now, admits Works Minister David Walker: "It seems certain the banks will not be participating except at 6%.... I would think a very careful second look would be necessary before one would interfere since to raise the bank rate above 6% in the isolated case of NHA loans would encourage other branches of the bank's activities to seek increases in their permitted rates" (eg small loans and time payment financing which some do by an ingenious, though supposedly not strictly legal, system of discounts).

President A. C. Ashforth of Toronto Dominion Bank confirms banks will not make any mortgages "beyond what they have already committed, which is very little." He predicts: "It is doubtful starts will exceed 105,000." Ashforth sees no relief in sight. "Since our economy is expanding it might well be that the money supply will become tighter as the year progresses. This means interest rates will remain high."

Most builders are resigned to the fact they won't get enough money to build all the houses they want this year. They are turning their attention to other kinds of building. But official builder groups are still beating the drums for more government action. NHBA's Executive Committee met with Walker and CMHC President Stewart Bates in Ottawa last month to ask: 1) legislation to let the banks charge more than 6% and 2) immediate direct lending by CMHC to builders.

Government inquiry raps builders' design

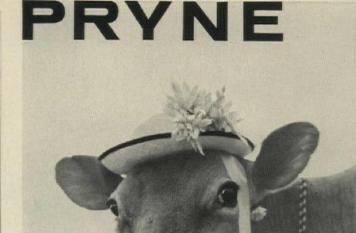
If preliminary reports are a good indicator, builders' ears will burn when the Royal Architectural Institute of Canada issues its report on housing design June 1.

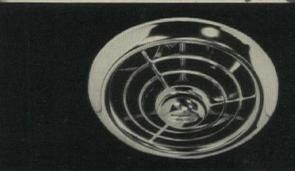
The report is the work of a committee of three architects and one planner. Since last fall they have traipsed 12,000 mi across Canada to see for themselves what is wrong with housing design, how to make it better. Their criticism has been liberally sprinkled with many familiar anti-suburban nostrums, has taken a surprising swipe at the National Building Code and has suggested that worries about mortgage money leave builders little time to think about design. There are a few positive suggestions of ways to improve "this terrible urban sprawl." The committee was launched at RAIC's annual convention in June

The committee was launched at RAIC's annual convention in June last year. The architects had been "taking a few informal looks" at housing design through provincial locals of RAIC, and issued some inconclusive reports. Then President Stewart Bates of Central Mortgage & Housing Corp hinted CMHC might help bear the cost of a fact-finding study. Said he: "So far we have heard little from the architects... You must be prepared to participate in housing to a greater extent than in the past. There are responsibilities that go with leadership, with professeional standing. If you as a profession *continued on p 73*



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News

were to turn your back on housing. Canada would continue to build cities but by accident rather than by conscious design."

RAIC took up the challenge, got a \$30,000 grant from CMHC plus planner Alan Armstrong as executive secretary, named three architects to tour Canada with Armstrong. The three, Peter Dobush of Montreal, John B. Parkin of Vancouver and Ned Pratt of Vancouver have now finished their studies.

Says Chairman Dobush: "We feel a little badly as a profession.... our neglect allowed builders to take over this field. Our profession has to get into this thing and try to develop a more pleasant environment." Their opinions so far have been expressed in the various cities they

visited, plus a conference in Ottawa in February. Samples: Dobush: "The National Building Code, availability of stock hous-

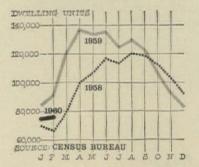
ing plans and wide distribution of housing literature has resulted in a marked uniformity of housing across Canada. . . . There is too much wasteful use of the scarce land. . . . There should be a steady flow of mortgage money rather than the present stop and go system."

Parkin: "The myth of the single family unit may face Canada with bankruptcy in the housing field. . . . There should be some modification in zoning regulations to allow large old residences in the center of cities to be turned into multi-family units; we found illegal multifamily use all across Canada. . . . We have a system of apartheid in our dormitory suburbs that is about as wicked as that in South Africa; but ours is based on income instead of color."

Pratt: "I don't want to be pushed into buying. . . . Urban sprawl has developed as a result of the bullying of the gardening magazines and the Madison Avenue complex, 'own a home of your own, everybody has to have a stake in America.' Lots of people would like to live in a nice apartment in the city, in the center of things. But they can't because it costs too much."

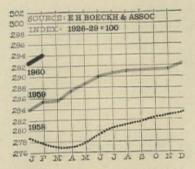
Retorts Vancouver Architect Fred Hollingsworth: "Human beings naturally tend to sprawl. Let's plan it. Architects are to serve man's needs, not dictate them."

STATISTICS:

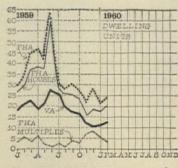


HOUSING STARTS climbed seasonally in February to 76,600 (74,400 private, 2,200 public) — up 0.9% from January's 75,900, but down 19% from last February. The seasonally adjusted annual rate of 1,115,000 is the lowest since June 1958. It is down 7.9% from January's 1.21 million and a substantial 20% down from February a year ago.

During January and February, private starts fell 16% behind their year-earlier level.



RESIDENTIAL BUILDING COSTS jumped to 294 on Boeckh's index in February, 1.4 points higher than January's 292.6. As in past months, main reason for the increase is higher labor rates.



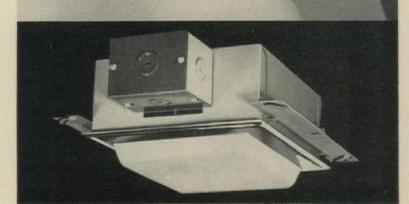
FHA APPLICATIONS on new units showed a seasonal rise in February to 24,613. Although 12.1% over January, this was 28.8% behind February of last year. Project applications were down 38.4% from January and down 31.1% from February 1959. Applications on new homes jumped 29.8% over January but were still 28.4% under February 1959.

VA appraisal requests on new units rose 15.2% to 12,868—38.6% below February 1959.

144 SOURCE BLS	
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132 1959	
128 1958	
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MATERIALS PRICES fell to 134.9 in February, down 0.3 point from BLS' January figure of 135.2. The decline is due to lower prices of lumber, plumbing and heating equipment. *NEWS continued on p 75*

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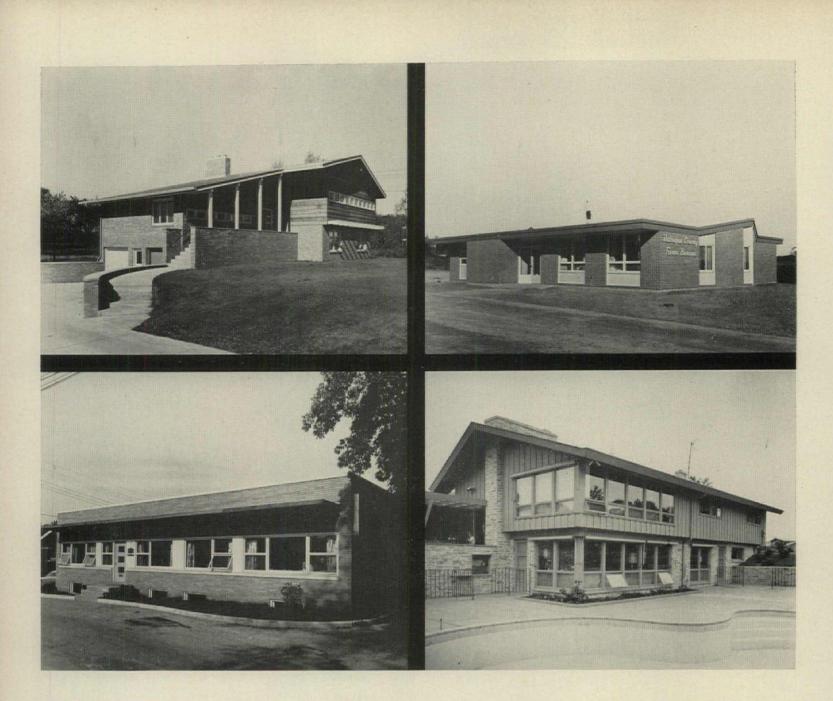
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News

BOOKS:

Suburbs face big spurt in nonwhites, are ill-prepared for it, says expert

ANATOMY OF A METROPOLIS, by Edgar M. Hoover and Raymond Vernon, 345 pp, \$6, Harvard University Press.

MADE IN NEW YORK, by Roy B. Helfgott, W. Eric Gustafson, James M. Hund, ed, Max Hall, 388 pp. \$6.75, Harvard University Press.

THE NEWCOMERS, by Oscar Handlin, 171 pp, \$4, Harvard University Press.

Contrary to widespread belief, the big growth in New York's nonwhite population over the next two decades will not be in the central city. Only about 10% of an estimated 60% growth in Puerto Rican and Negro residents will take place in Manhattan. The rest will occur in outlying areas—many of them suburban communities that are, so far, ill-prepared to deal with the explosive problems of housing, education and community services such growth will dump on them.

So predicts Harvard Historian Handlin in the third and latest in a projected nine-volume Harvard study of the New York metropolitan region. Handlin has written at length on immigration patterns, was awarded the 1952 Pulitzer Prize in history for another work, *The Uprooted*. In *The Newcomers* he strips away a good deal of the hysteria surrounding nonwhite population problems by putting them into historic perspective. "The inference of a good deal of contemporary discussion is that these problems are altogether new and therefore insoluble. Yet the problems of the marginal wage earner, of substandard housing or of juvenile delinquency are by no means new in the history of New York," he says. And his abundantly documented study makes it clear that such problems have been created and suffered by each new wave of immigrants in the city's history, and are not unique for Puerto Ricans and Negroes.

The problems are the price the city has paid, he says, for having "a large, unskilled and poorly paid labor force needed for urban growth . . . In the past, New York benefited greatly from the presence of such laborers; but the city and the immigrants paid the cost in debilitating social disorders. Recovery from those disorders came from the capacity to expand and from the freedom with which the newcomers and their children could rise to the opportunities created by expansion."

But two new developments now complicate the problem:

1. Color prejudice not only hampers Negroes and Puerto Ricans in seizing chances for self-betterment, but also works in combination with cultural traits they have brought with them to inhibit their ability to grasp those that are open to them. Disinclination to save and accumulate capital; inability in business; disorganized family life, lack of social institutions which give them unity and purpose—all these are seen by Handlin not so much as inherent ethnic traits, but traits created by the pressures of prejudice.

2. Changes in the social and economic structure of the metropolis itself limit the social, economic and geographic mobility of new groups. For example, diffusion of older, more prosperous groups to the outskirts of the city was once a standard pattern; and it left room for newer groups to move and grow. Today, this no longer provides a reliable source of used but better housing to which the newcomers can go. At the same time, some of the industries which once demanded the cheap central city labor pool have diffused to outlying areas, and the newcomers must follow.

Says Handlin: "... Inevitably, some part of the colored population will have to find a place in the suburbs. The only question is whether the move will come peacefully or be accompanied by ugly conflicts."

"Although the difficulties are genuine and grave, there is every reason to be optimistic about the future. . . . If New York continues to witness, in the next 25 years as it has in the past decade, an abatement of prejudice in accord with its tradition of diversity, the problems of occupational mobility, of education, and of the competition for space will certainly be eased."

Like the two earlier volumes, Handlin's book is based on a study by the Harvard graduate school of public administration under sponsorship of the New York Regional Plan Assn. Hoover and Vernon's book sets the stage. It concludes that the popular concept of city growth through successive, widening rings of development is an oversimplification. Instead, the authors find that while growth is outward, it is sharply affected by things like transportation, site suitability—and that in the 22-county New York region (which contains more than one urban center) the "rings" of all tend to cut into each other. The second volume explains what pressures govern decisions whether three archetypal industries, garment, publishing and printing and electronics, remain in the central city, disperse to the suburbs, or leave the region. *NEWS continued on p 77*

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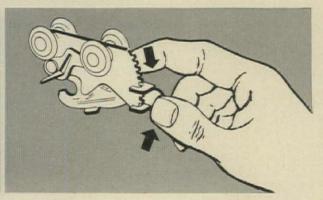
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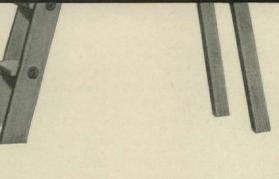
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NEW 900FA KENNAFRAME "Custom" series, prefabricated assembly for 1" to 1³/₄" pocket doors, easily installed by one man in half the usual time. Four screws lock entire unit; simple adjustments for perfect header and jamb alignment. Save time; assure lasting, trouble-free performance. Note ratchet-type adjuster; mere finger-touch permits easy, timesaving alignment. New instant door mounting eliminates millwork. These exclusive features available in pocket and by-passing hardware. Write TODAY for details! Kennatrack Corporation, Elkhart, Indiana. *Pat. Pend.



News

Salesman Sam paints a picture for success

How to be Consistently Successful in Real Estate by Sam G Russell, 196 pp, Prentice Hall, \$4.95.

"Salesman Sam" Russell is perhaps one of the most successful real estate brokers in the country.

As head of the sales force of the D. C. Burns Realty & Trust Co in Denver since 1946, he has sold thousands of used and new houses, has made such a great reputation he is a regular speaker and/or panel member at nearly all NAREB and NAHB convention sessions on merchandising.

In his book (published some time ago) Russell writes as he talks. In fact the book sounds like a compilation of his speeches. In his own clever and entertaining way, Russell gives the reader some cogent points in the art of selling. For example:

"Obnoxious traits in your speech or in your actions will classify you as a Dirty Bird. The man or woman who plans to put confidence in you to the tune of thousands of dollars is quite apt to be supersensitive to a Dirty Bird. Here're 12 kinds of birds they try to avoid: the petty criticizer, the pointed belittler, the casual inconsiderate, the emphatic disliker, the frequent interrupter, the nervous hurry-upper, the evident envier, the sloppy appearer, the eager arguer, the willing defeatist, the gimlet eyed looker and the intimate button holer."

Interspersing his advice with some of his own original verse, Russell also advises his readers to paint pleasant pictures for their prospects. Thus a fence is really a garden wall; a cellar is a lower level; an attic is a storage area and a backyard is a patio area.

The book will not make good salesmen out of poor ones but it can help the man who wants help.

Realty analysis for beginners

CASES IN REAL ESTATE FINANCE, by James C. T. Mao. 115 pp, \$3. University of Michigan.

For mortgage bankers and realtors faced with the task of training new staff members, this book offers ten cases covering the financing of residences, apartment buildings, motels, shopping centers and subdivisions. The volume, intended as a supplement to student texts, maps out situations that can be analyzed from the standpoint of lender, borrower or investor.

Needed: more research on housing

URBAN REAL ESTATE RESEARCH, by David T. Rowlands. 94 pp, \$4. Urban Land Institute, Washington, D.C.

"There is no area dealing with the economics of real estate in which considerably more knowledge is not needed." This observation in Prof David T. Rowlands' monograph is another reminder that one of the nation's key industries has been consistently shortsuited in the vital matter of research. He estimates that from 1946 through 1958 less than \$250,000 a year was spent on realty research.

Prof Rowlands, of the University of Pennsylvania's Wharton School, puts his finger on many areas of neglect. Among them: 1) the effects of price, architecture and population shifts on housing demand, 2) the priorities buyers give to shelter by price ranges, 3) the influence of race on values in multifamily housing, 4) the investment experience of apartment owners, 5) the effects of building and zoning codes, new financing devices and innovations like shopping centers on the housing market.

The monograph is the result of a two-year study co-sponsored by the Urban Land Institute and the NAREB. It lists publications containing significant real estate research from 1946 through 1958. Also outlined are programs now being carried out through such organizations as ACTION, the National Bureau of Economic Research, HHFA, and various universities. The monograph will be brought up to date annually.

How to figure a renewal market

RESIDENTIAL RENEWAL IN THE URBAN CORE, by Chester Rapkin and William G. Grisby. 131 pp, \$3.75. University of Pennsylvania Press.

Its ambitious title notwithstanding, this slender volume is devoted solely to demonstrating ways of finding the market for a central-city residential renewal project. Specifically, it is an exposition of the authors' market study for Philadelphia's Society Hill project.

There is growing recognition of the importance of such studies in judging the economic feasibility of renewal. So the methods used should interest planners and potential sponsors in any city where rental, sales or rehabilitation renewal projects are planned.

ELECTRIC.

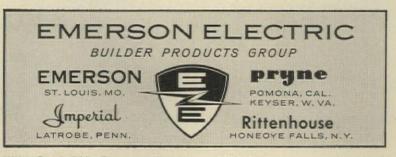


EMERSON

FINISHING TOUCHES

in planned packages save you money!

Here's how! From one quality source you get ventilating fans and hoods, chimes and intercoms, recessed and decorator lighting and electric heating and air conditioning equipment. Just one dependable supplier... Emerson Electric ... is responsible for guaranteeing quality, for billing your order and for shipping. You save not only the hidden costs in time spent ordering from many different suppliers... but you also save money in initial costs because you are an important quantity buyer!



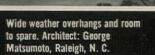
Write Dept. BIO, Emerson Electric • 8100 Florissant • St. Louis 36

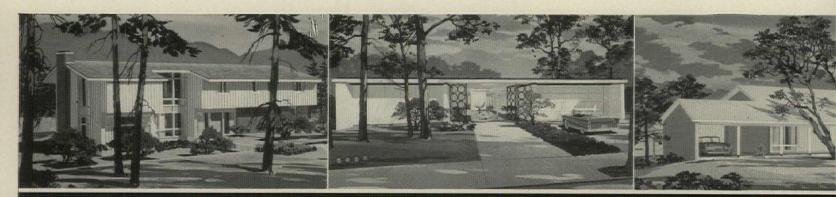


Plan for a small budget, small lot. Architects: Bassetti & Morse, Seattle, Wash. 2-wing plan surrounds the outdoors. Architects: A. Quincy Jones-Frederick E. Emmons, Los Angeles, Calif. Center hall treatment for today's one level. Architects: Satterlee & Smith, Washington, D. C.



3-wing plan on a moderate 70 x 110' site. Architects: Bassetti & Morse, Seattle, Wash. Plan for a vacation home. Architects: Robert A. Little & George F. Dalton & Associates, Cleveland, Ohio





Up-dating the two-story classic. Architects: Bassetti & Morse, Seattle, Wash.

Easy-to-care-for home for 2 adults. Architects: Robert A. Little & George F. Dalton & Associates, Cleveland, Ohio

3 living levels . . . a feeling of bigness. Architect: George Matsumoto, Raleigh, N. C.



The sweep of open space for a small space. Architects: A. Quincy Jones-Frederick E. Emmons, Los Angeles, Calif.

Economy-size home for a young, active family. Architects: Satterlee & Smith, Washington, D. C.

Simply designed, easy-to-care-for lime block home. Architect: George Matsumoto, Raleigh, N. C.









Westinghouse TOTAL ELECTRIC gold medallion home

HEATING - COOLING - LIGHTING - APPLIANCE

WESTINGHOUSE ENLISTS 5 TOP ARCHITECTS TO CREATE EXCITEMENT! CROWDS! SALES! FOR...

TOTAL ELECTRIC gold medallion HOMES

As examples of Total Electric Living, Westinghouse had 5 of America's top architects design 16 homes in a variety of styles, sizes, and prices! Westinghouse is promoting these designs nationally. You can cash in on the tremendous buyer interest by using the plans "as is" ... modifying them ... adapting ideas ... or making *any* home you want "Total Electric!"

It's the BIG IDEA in building today! Consumer earnings and savings are up. So is spending—but not for building! Needed is a big new idea to loosen purse strings. Total Electric Living is just such an idea. *Proof:* in 1959, Total Electric Home openings produced over \$1,000,000 in sales the first 2 weeks . . . and sales have mushroomed since!

These are the homes people will be talking about! Westinghouse planned these 16 designs as a fascinating "Showcase" for Total Electric Living and is backing them with the biggest TV and radio promotion in home-building history.

Build "as is!" Modify! Adapt ideas! You can use the detailed floor plans, blueprints, and specifications available from Westinghouse to suit your needs. (Many builders at the NAHB Show, finding the plans a "gold mine," ordered all 16 sets!)

You can make any home Total Electric . . . any size, any style, any price . . . even the homes you are now building or planning. All that's required is that you include at least electric heating, cooking and water heating.

Find out how you can cash in! Mail the coupon for a free booklet of the 16 home plans. Contact your nearest Westinghouse Distributor for complete details on how you can build a Total Electric Home and share in this Multi-Million Dollar Building Program!

FREE 24-PAGE PLANS BOOK Includes sketches, floor plans, and complete details for all 16 Total Electric Homes designed by 5 top architects.	Westinghouse Electric Corp., Total Electric Home Dept., Box 1212, Mansfield, Ohio GENTLEMEN: Please send me, without cost or obligation, a copy of your Total Electric Plans Book (B-7869) and a copy of your Merchandising Plan (B-7894). I am also interested in more information on: () Built-in Appliances and Cabinets () Micarta Panel Walls and Counter Tops () Electric Heating and Air Conditioning () Light Bulbs and Fluorescent Tubes NAME
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MAIL COUPON NOW!



Lucille Ball and Desi Arnaz, your hosts on the Westinghouse Desilu Playhouse



Betty Furness for Westinghouse

Walter Cronkite for CBS News

9 SOLID MONTHS OF ADVERTISING FOR

TOTAL ELECTRIC gold medallion HOMES

TOTAL ELECTRIC tt.

Westinghouse The 16 homes announced on Westinghouse Desilu Playhouse starting March 18 and continuing through June, reaching 22,000,000 viewers coast-to-coast . . . plus . . .

> 24-page "Spectaculars" bringing all 16 home designs to over 3,000,000 readers in "Better Homes & Gardens Home Building Ideas for 1960" and "New Homes Guide."



Followed by TV and radio sponsorship of the greatest event of the year-the Political Campaigns! Exclusive Westinghouse/CBS coverage of: Democratic Nominating Convention; Republican Nominating Convention; Weekly Campaign Coverage Reports; Election Night Returns. All selling the concept of Total Electric Living . . . making Total Electric Homes the most talked-about, most wanted homes today!

> THE PROMOTION FOR THE IN BUILDING TODAY

PLUS! Multi-million dollar Westinghouse advertising behind the newest electrical products in 10 years!



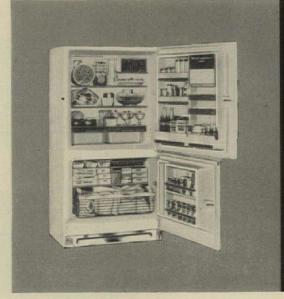




Now, from Westinghouse, comes this exciting new 14 cu. ft. refrigerator with revolutionary pull-out Center Drawer, so easy to use...see into...reach into. Use it as a powerful demonstration in your model homes. Special compartments in the exclusive new Center Drawer keep meats and vegetables fresh for days... even

hamburger stays fresh a full week without freezing. Moreover, this new Cold Injector Westinghouse is Frost-Free throughout. There's no defrosting in the refrigerator...the freezer...or the Center Drawer. Doors open 90 deg. within cabinet width, and there are no coils on the back. In addition to 5 Cabinet colors* and 8 Choose-N-Change Door Panels — 40 combinations in all — there are doors in Coppertex and Brushed Chrome, enabling you to carry out any kitchen color scheme. *Mint Aqua (shown opposite with Westinghouse Heirloom Maple Wood Cabinets), Frosting Pink, Lemon Yellow, Sugar White, Coppertan.

Newest Advance in Home Appliances CENTER DRAWER REFRIGERATOR FROM WESTINGHOUSE

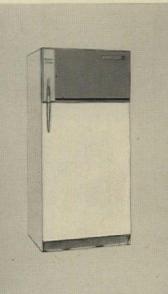


Westinghouse Refrigerators come in all sizes from 9 to 16 cu. ft., and may be installed freestanding, or built-in. Accessory Trim Kits are available for all except the 9 cu. ft. models, for which trim may be made locally. All units have doors that open 90 deg. within cabinet width.

(Left)

14 cu. ft. capacity, including 161 lb. bottommounted home freezer • Cold Injector System • Meat Storage Pan • Twin Porcelain Crispers. Dimensions: 33" w x 65%" h.

(Right) 12.6 cu. ft. capacity, including 101 lb. topmounted home freezer • No coils on back • Cold Injector System • 5 Colors, plus 8 Choose-N-Change Door Panels. Dimensions: 30" w x 641/4" h.



SEE NEXT PAGE for more exciting Westinghouse Built-Ins!

FOR MORE INFORMATION ON REFRIGERATORS, MAIL COUPON ON SECOND PAGE OF THIS SECTION OR WRITE WESTINGHOUSE ELECTRIC CORP., CONTRACT SALES DEPT., MANSFIELD, OHIO.

WESTINGHOUSE BUILT-INS ADD QUALITY











WESTINGHOUSE BUILT-INS ALSO INCLUDE:

Wood and Steel Cabinets Food Waste Disposers Electric Water Heaters Appliance Centers

WESTINGHOUSE MICARTA® IN NEW PANEL WALL





Micarta Panel Wall installation is fast—directly over studding or furring.



Plumb is checked, and the next panel stapled in place.



Panels are tongue-and-groove. A finished wall is up in minutes.

AND SALES-APPEAL TO YOUR HOMES!

A. New oven design with controls on the side! Located on the side, the controls are out of the heat zone, easy to reach and use. Available in built-in or stack-on models, it features famous Westinghouse Serv-Temp Roast-Guard, Built-in Rotisserie and Lift-Off Door.

Compact new range platform has remote controls with 5 marked heat settings plus choice of 1001 heats.

B. Only Dishwasher that guarantees 140° hot water! The hotter the water the cleaner the dishes. Westinghouse Hot Water Booster provides 140° water for wash and final rinse periods. Holds service for 10. Choice of 8 front panels.

C. Complete push-button laundry in 25" wide space! 25" wide Space-Mates fit in kitchen, bathroom or closet. Matching Clothes Dryer installs on top of Laundromat or side by side under a counter. Together they wash and dry 18 lbs. of clothes at same time.

FOR MORE INFORMATION ON BUILT-INS, MAIL COUPON ON SECOND PAGE OF THIS SECTION OR WRITE WESTINGHOUSE ELECTRIC CORP., CONTRACT SALES DEPT., MANSFIELD, OHIO.

MEANS BEAUTIFUL FINISHED WALLS IN MINUTES!



The carpenter makes one stop with new Micarta Panel Wall. Result: finished quality walls that give your homes a readily demonstrable edge over competition! Micarta Panel Wall is a new kind of wall system—16" x 8' tongue-and-groove panels that staple quickly to studding or furring strips. An 8' x 12' wall takes just 40 minutes twing paint or wallpaper

no plaster, puttying, paint, or wallpaper.

And how it helps you sell! Micarta Panel Wall beautifies and dramatizes kitchens, baths, living rooms . . . every room in the house. Stronger than ceramic tile and as durable as Micarta counter tops, it won't crack or chip and needs no maintenance. Micarta Panel Wall keeps its mellow glow without polishing or waxing. There are 7 luxurious colors and 4 rich wood grains to choose from, and matching moldings for all.

New Micarta "Holiday in Color" decorative line—64 new Micarta patterns, colors, and wood grains are arrayed in a spectacular 8-page color chart that includes tips on selection and uses. Millions will see this dramatic new line in 1960. It will pay you to take advantage of this in your plans, too. Check coupon or write.

TURN THE PAGE FOR MORE OF THE NEWEST PRODUCTS FOR ELECTRIC LIVING!

THE PRODUCTS FOR THE

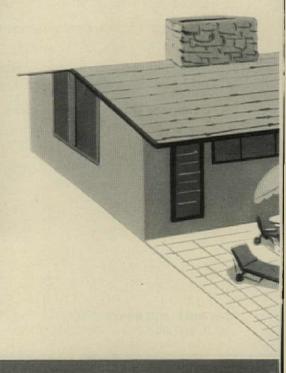
BUILDING TODAY

FOR MORE INFORMATION ON MICARTA, MAIL COUPON ON SECOND PAGE OF THIS SECTION OR WRITE WESTINGHOUSE ELECTRIC CORP., MICARTA DIVISION, HAMPTON, SOUTH CAROLINA.

WESTINGHOUSE ELECTRIC HEATING AND

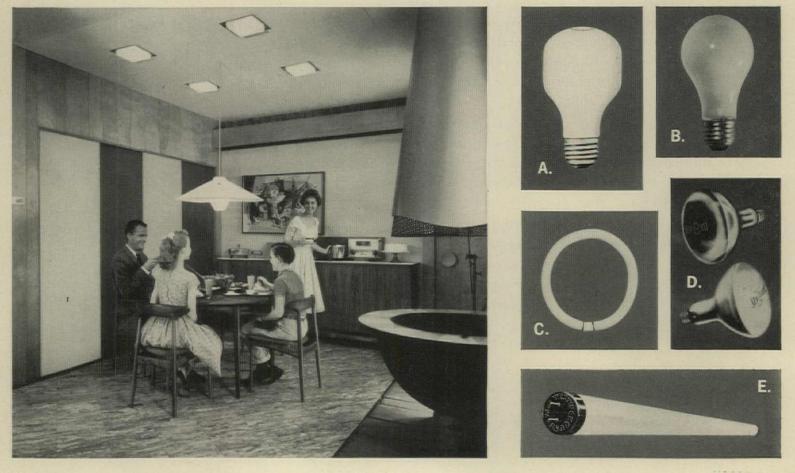


CLEAN, SAFE, QUIET,



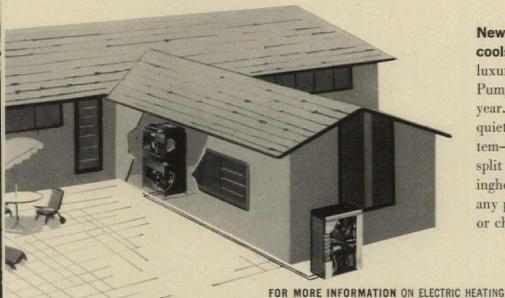
New plug-in baseboard units need no ducts, pipes, little wiring! Here is home heating at its finest! Exclusive Westinghouse Adjust-O-Matic control maintains constant temperature within 2° of setting. A special baffle keeps baseboard surface comfortable to the touch when units are in operation. Low initial cost permits installations in all price homes. Westinghouse baseboard electric heating, coupled with Westinghouse central air conditioning, gives your customers full, year-round climate comfort at a truly moderate price!

WESTINGHOUSE LAMPS BRIGHT NEW IDEAS FOR



COOLING... HEART OF A TOTAL ELECTRIC HOME

EFFICIENT, DEPENDABLE, NO FLAME, NO SOOT, NO COMBUSTION, NO FUEL



New Westinghouse Heat Pump heats and cools! For those who desire the ultimate in luxury living, high-quality Westinghouse Heat Pumps deliver custom comfort every day of the year. Cool or warm air is circulated evenly and quietly throughout the home from a single system-and it's all done automatically. Available in split system or self-contained models, the Westinghouse Heat Pump can be installed just about any place in the home, without sacrificing space or changing building plans.

THE PRODUCTS FOR THE

IN BUILDING TODAY

YOU CAN BE SURE ... IF IT'S Westinghouse

OR AIR CONDITIONING, MAIL COUPON ON SECOND PAGE OF THIS SECTION OR WRITE WESTINGHOUSE ELECTRIC CORP., AIR CONDITIONING DIV., STAUNTON, VA.

BETTER LIVING ELECTRICALLY!



Westinghouse If electrical heating is the heart of a Total Electric TOTAL ELECTRIC Home, light is its personality. Light can be gay and bright, or cozy and inviting. It can be vivid and colorful, or simple and restful. Light sets the mood for a house and enhances its decoration a hundred ways. Shown

here are only 5 Westinghouse lamps, but there are many more for every need-indoors or out.

A. New Shape, new light-millions of tiny filter particles inside this Eye Saving White Bulb provide best light for seeing.

B. Decorate with light-with Beauty Tone[™] Tinted Bulbs. Available in flattering Pink, cool Aqua or delicate Candlelight.

C. Compact Circline fluorescents-ideal general lighting for small hall or bathroom. In 8¼", 12", or 16" diameters.

D. Heat and Sun lamps-a big selling plus for little money. Reflectors are built into lamps.

E. Fluorescents for the home-Deluxe white light of Homeline[™] creates warm atmosphere, blends with incandescent bulbs.

FOR MORE INFORMATION ON LIGHT BULBS AND FLUORESCENT TUBES FOR THE HOME, MAIL COUPON ON SECOND PAGE OF THIS SECTION OR WRITE WESTINGHOUSE LAMP DIVISION, WESTINGHOUSE ELECTRIC CORPORATION, BLOOMFIELD, N. J.



City -

State.

Letters

Progress Report

Over the past several years the homebuilding industry has made tremendous progress. Component construction is today an accepted, almost routine, approach to the building of a very large proportion of new homes. No single force has been more influential in bringing about this progress than House & Home. The technical and professional stature of House & Home has never ceased to grow. Your enthusiasm for advancing principles in the homebuilding industry has always seemed uppermost.

ROBERT F. SCHMITT, builder ex-NAHB research chairman Berea, Ohio,

Industry teamwork

Your editorial [H&H, Feb] on the lack of industry teamwork in selling the mass market is a comprehensive diagnosis of the ills of the housing industry. But what about the cure? As a starter, how about a combined industry research program to develop a profile of the average buying unit that will characterize the new mass market? This profile would help every segment of the industry formulate an overall marketing program. Design requirements could be established, materials standardized, lending criteria set, and sales techniques formulated in a concerted effort to give the consumer a product he needs, wants, can afford, and will buy.

WILLIAM A. BARKSDALE, JR Miller Mfg Co

New Products

We appreciate the story [which mentioned Vistarama windows, H&H, Jan] but wish to make one comment: the cut of our windows (figure E) is printed upside down. BERNADINE DURA

Wabash Screen Door Co

We noted a serious omission in the listing of ceiling tile manufacturers in your January issue. Baldwin-Ehret-Hill Inc of Trenton, N.J., for some years has been making a line of acoustical products which includes fissured and perforated mineral tile; perforated cellulose fiber tile; perforated asbestos board; perforated metal pan system; and acoustical felts.

> GLENN H. COX Eldridge Inc

Mortgage coverage

Of all of your fine issues which it has been my pleasure to see over the past few years, the February 1960 is to be most enthusiastically commended for a splendid, well-informed, conservative, and forward-looking presentation of housing and mortgage financing news. Perhaps a bit short on the finer points of local mortgage market information, but, overall, absolutely outstanding in its factual approach and economic soundness of viewpoint.

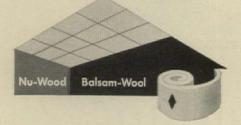
> ROBERT SUTRO, president Ralph C. Sutro Co Los Angeles.

Correction

Ferro Corp's porcelain enamel house was designed by Carl Strandlund and his staff —not by Carl Koch, as reported by H&H (*News*, Nov '59). Ed.

Princeville, Illinois

SELL THESE BASICS AND YOU SELL MORE HOMES!



People want comfort—winter and summer. They want low heating and air-conditioning costs. They want barriers against air infiltration and chilling drafts. You can supply all these features—in full measure—with Balsam-Wool sealed blanket insulations. Today there's a type of Balsam-Wool for every climate...every heating and insulation need. And remember, Balsam-Wool combines *all* these advantages: positive vapor barrier...completely sealed insulation mat...double-bonded liner...special spacer flanges for easy application and to provide needed air spaces!

Basic to quality

Balsam-Wool[®]Sealed Insulation

Reflective Balsam-Wool

Aluminum reflective liners. Standard (1" thick): 16", 20" and 24" widths. Double-thick (2"):16" and 24" widths.

Regular Balsam-Wool

Asphalt-impregnated liners. Standard (1" thick)and Double-thick (2"): 12", 16", 20" and 24" widths.

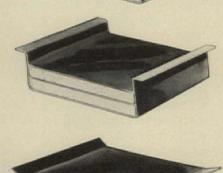
Type E Balsam-Wool

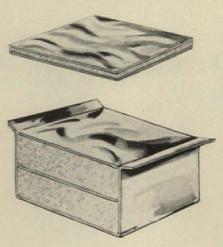
For masonry construction—5%" thick. Available in 12" and 16" widths.

Balsam - Wool Panel Insulation

3%" thickness; reflective liner-vapor barrier. Cut to size: 49" x 8', and rolls 8' x 41'8"—for use in component or modular construction.

Balsam-Wool for Electric Heat Full-thick (3⁵/₈") and Super-thick (5") in 16" and 24" widths, in reflective liners.



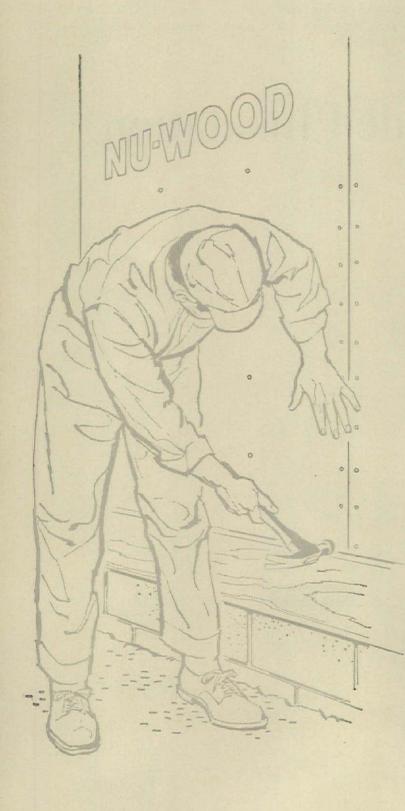


BALSAMWOOL

a basic for structural strength



Nu-Wood[®]Sheathing



NEW—NU-WOOD NAIL-BOND INSULATING SHEATHING

eliminates the need for nailing strips...permits direct application of wood or asbestos siding shingles...meets F.H.A. requirements asphalt-coated on all sides and edges for moistureresistance. Available in big 4' x 8' and 4' x 9' panels.



A COMPLETE SHEATHING LINE

Nu-Wood sheathing costs less to apply because it comes in big sections that cover up to 36 sq. ft. in one operation. Here are additional plus features of the Nu-Wood sheathing line:

- Variety of sizes-2' x 8', 4' x 8' or 4' x 9' panels.
- Big-sheet time-and-material-saving advantages—
 - Rugged strength eliminates costly corner bracing
 - Little waste or messy cleanup with larger panels
 - Marked sheets speed nailing application
 - Cuts easily and cleanly
- Extra insulation—for greater comfort, lower heating and air conditioning costs over ordinary sheathing.
- Sheds water...weather-resistant—danger from moisture damage during construction minimized. Requires no building paper (except with stucco finish).



Now with 4' lengths of Nu-Wood shingle backer, three stud spaces can be covered at once to provide desired deep shadow lines of siding or shingles. Easy to apply. Saves money, adds extra insulation. basic to quality

The Quiet of Nu-Wood®Tile

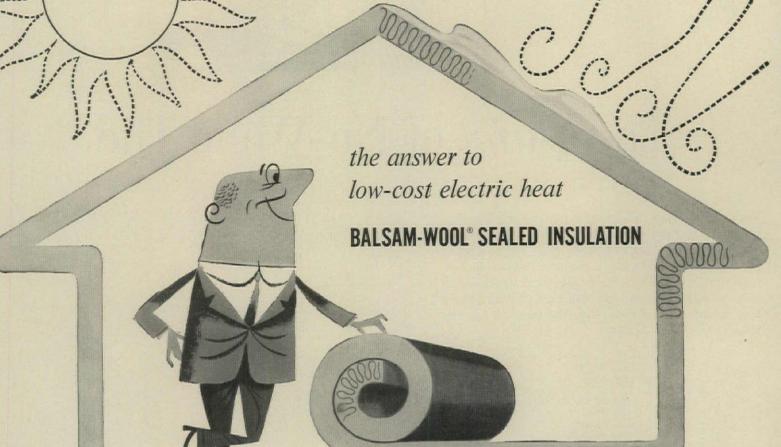
Nu-Wood

Balsam-Wool

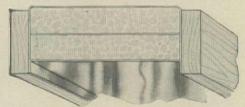
With the complete Nu-Wood acoustical tile line, you can add the powerful basic quality appeal of *quiet* while you provide new style interest for every room. High in noise-quieting efficiency, Nu-Wood acoustical tile now comes in a wide range of beautiful decorator-designed patterns with light-reflective, flame-resistant and cleanable finishes. Tiny acoustical perforations do not mar beauty, yet control sound.



Balsam-Wool Nu-Wood Wood Conversion Company, First National Bank Bldg., St. Paul 1, Minn.



A type for every need in electrically heated homes



Balsam-Wool is available with either reflective aluminum liners or tough asphalt creped liners which completely enclose the insulation mat. Thicknesses range from 1" to 5" and widths fit framing members spaced 16" and 24". The "U" values shown for the following recommended Balsam-Wool products include a correction for framing-member heat losssomething which is usually disregarded, although floor and ceiling joists occupy 10% of thearea and wall studs, plates, etc., occupy 15%.

CEILINGS

CEILINGS	۳۵، ۱۳۰	ALUES
Super-Thick (5")-with Reflective Li	iners .C)49
Full-Thick (3 5/8")-with Reflective Li	iners .C	060
the second s		

WALLS*

Full-Thick (3%'')—with Regular Liners Double-Thick (2'')—with Reflective Liners Double-Thick (2'')—with Regular Liners Standard (1'')—with Reflective Liners .062 .062 .075 075 *With 25/32" Nu-Wood® Insulating Sheathing

FLOORS

Dealers

Double-Thick (2")-with Reflective Liners .051 Standard (1")—with Reflective Liners Double-Thick (2")—with Regular Liners .062 .078 Balsam-Wool Sealed Insulation Sold Only by Lumber Here's why:

- Top Efficiency. There's a big difference in insulation. Balsam-Wool's low thermal conductivity (k) value of .25 makes it one of the finest products on the market. The insulating "U"-value standards for electrically heated houses are adequately met and heat loss is reduced to a minimum.
- 2 Moisture Protection. Electrically heated homes with higher inside humidity require effective insulation vapor barriers. The integral vapor barrier of Balsam-Wool (less than 1 perm) keeps the insulation and construction dry.
- Wind Resistance. Wind penetration reduces in-3 sulation value greatly. The sealed protective liners of Balsam-Wool blanket insulation provide effective wind-sealing.
- Positive Application. Easy to apply, Balsam-Wool stays in place. Its cellulose fibers have no splinter-like spines to cause irritation to workmen. Special flange construction permits fast application of insulation blanket.
- Reflective Liners. Balsam-Wool with polished aluminum-faced liners increases over-all thermoresistance of the construction-especially important in insulated floors.

WOOD CONVERSION COMPANY



First National Bank Building St. Paul 1, Minnesota

This builder saved over 1500 costly man hours with Andersen Strutwall* "We saved better than 1500 man hours...cut installation time substantially, thanks to Andersen Strutwall,* the component that joins window and wall."



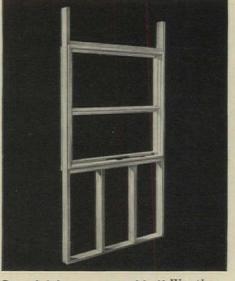
TOSTIN VESTE

Edward F. Fischer, President of Fischer & Frichtel, whose home manufacturing operation has made him one of the biggest U. S. builders. Edward F. Fischer, President of Fischer & Frichtel, St. Louis builder and home manufacturer, says, "The exclusive use of Strutwall in our construction of wall panels produces a yearly savings of over 1500 man hours. That's close to 30 minutes for each window unit ... and you can see, that's big when you consider our volume operation.

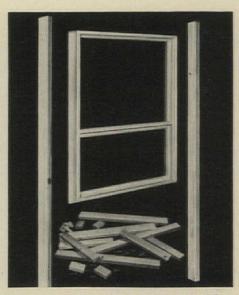
"And Andersen's complete unit eliminates final adjustments and practically wipes out the callback problem."

Since start of operations in 1946, Fischer & Frichtel has organized home building to a mechanized science. Partners John Fischer and Lawrence Frichtel thought they had wrung out every minute of labor waste from this operation. But when they switched to new Andersen Strutwalls, big additional savings were realized. *And* also, Fischer & Frichtel got famous Andersen Window sales appeal at lower-than-ever installed costs.

In 1958 Fischer & Frichtel built their own home manufacturing plant, Concord Homes, to produce manufactured houses for the Fischer & Frichtel Construction Companies, and also to sell homes to other builders.



Completely pre-assembled! Weathertight Strutwall fits better, looks better because all parts shown here are precision nailed and glued by Andersen. Result: Strongest, tightest possible joining of window and wall.

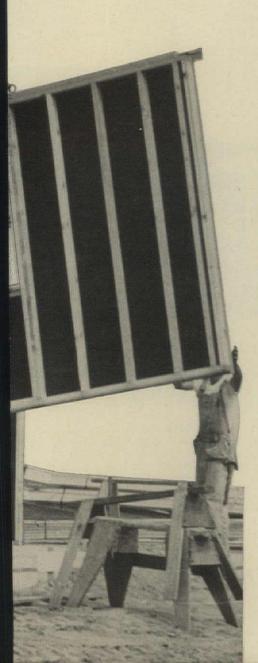


Saves labor! Costs less installed! New Strutwall eliminates cutting, fitting, assembly of all conventional parts shown. Cuts normal installation time... from 3 separate operations to 1, from 22 steps to 7.



Installation within minutes! Fits tighter! At Fischer & Frichtel manufacturing plant, workers cut two load-bearing struts to fit header construction. Then nail Strutwall to adjacent studs to become an integral part of the wall panel. It's that easy!

← One day framing! Crane sets Fischer & Frichtel pre-assembled panels into place while three-man crew ram-jets sills to foundation and nails overlapping headplates. Only one day is needed to erect and frame-in from the slab up.



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Fischer & Frichtel . . . Success story in community building

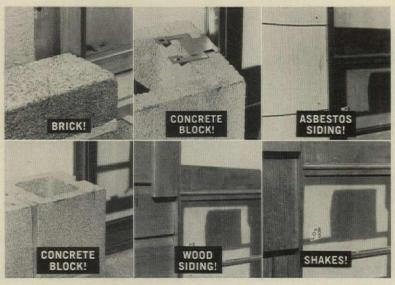
One of the country's largest community builders, the Fischer & Frichtel organization was formed in 1946. Their plant, Concord Homes, is located on the outskirts of St. Louis. Four to six houses are produced a day, depending on need. On the average, Fischer & Frichtel erects 365 of its own homes a year and also takes orders from large and small scale builders. The Fischer & Frichtel success formula: Add to a progressive production technique (1) a flair for design and community planning, and (2) a strong feel for consumer merchandising.

Builder awards received include McCall's Congress on Better Living Award, the House & Home Award of Merit and the Practical Builder Oscar (left) for Community Development.



ANDERSEN CORPORATION . BAYPORT, MINNESOTA

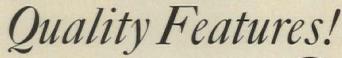






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Volume XVII, No. 4

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APRIL 1960

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ELECTRICAL LIVING IN THE QUALITY HOUSE

- 118 How bigger electrical loads are changing today's house
- 120 How to wire and equip for electrical living
- 134 How to design and build for electrical living
- How utilities help you sell electrical living 139
- 141 Portfolio of Medallion promotion houses

DESIGN

- 102 What to do about the joints in component-built houses
- 155 Good ideas file: design details for carports, indoor-outdoor areas, baths

PROFILE

114 The new president of the Realtors: C. Armel Nutter

INDUSTRY STORY

150 In Seattle, builders have learned that the old house is the key to new-house selling

MORTGAGE MONEY

- 58 Lenders ready new plans to attract pension-fund money
- 55 Signs of smaller FHA, VA discounts appear

NEW WAYS TO BUILD BETTER

- 192 Technology: tests show how much heat a house really needs
- What the leaders are doing 201
- 213 New product reports
- 294 Reviews of new technical literature

NEWS

Labor: will labor law change throttle improved technology? Land: auction brings \$19,000 an acre in California Is the VA home program dead or only sleeping?

47 Index to these and other news reports

DEPARTMENTS

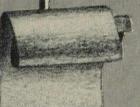
Letters to the editors 88 308 Advertising index

COVER

Photo: Ruth White

COMING NEXT MONTH

House & Home's annual issue on merchandising



Every year the housing industry spends at least \$50 million

(and probably closer to \$100 million)

hiding the joints in drywall



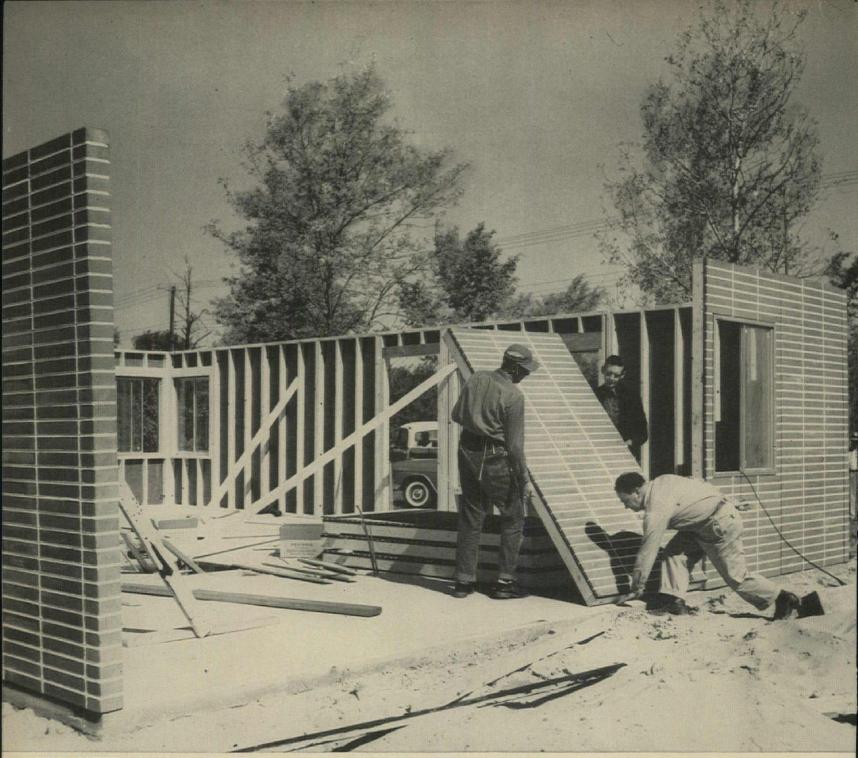
...this expense is nothing compared to the cost of hiding all the joints in tomorrow's component-built houses

Even with today's shop-built wall sections and interior partitions, there is already a real cover-up problem: these walls and partitions are usually longer than the sheet materials you can apply to them, so there is almost always a skin-through joint that has to be handled somehow.

As industrialization progresses to factory-made panels (and most experts agree that maximum economy is impossible without them), the joint problem will change.

Factory-made panels will come on a module—probably 4'—and you will need several of them, fastened together at the joints, to take the place of one of today's big shop-built sections. These factorymade panels will also come complete with interior and exterior skins, so you won't be faced with the problem of skin joints. But you will have a new cover-up problem to handle: what to do about the joint that goes all the way through the wall.

There are two good solutions. First...



SMALL PATTERN of stacked-bond brick, three stretchers wide, lets these modular panels fit into the overall wall pattern.

With either big sheets or panels, you can solve the joint problem by using

THE SMALL-PATTERNED LOOK

The small-patterned look lets you leave the joint exposed because it becomes part of a repetitive small pattern. So there is nothing to hide—the joints disappear into the overall design.

The small-patterned look is not new. You can see it in dozens of traditional materials like brick, shingles, and board and batten. Today it is simulated in panels like the one shown above, and in sheet materials like scored plywood. These "printed" materials give you the appearance of small pieces with the economy of big parts.

The small-patterned look is at home in traditional styles. When you use it with big shop-built sections or modular panels it presents no design problem. It even gives today's industrialized house the appearance of conventional construction. Marvin Rand



SMALL PATTERN that looks like vertical t&g siding gives a well scaled texture to this bedroom and court. Designer: Craig Ellwood.



SMALL PATTERN that looks like random-sized boards is scored into the surface of this prefinished Savannah oak plywood paneling.



SMALL PATTERN of vertical siding that comes from 1-11 plywood is used here in Architect Bruce Abramson's own house.

Warren Reynolds, Infinity



SMALL PATTERN of board and batten is pressed into aluminum sheet. The battens have a practical purpose; they give rigidity to the sheets (see H&H, Oct '58).



CONTEMPORARY PANELIZED LOOK of this Kalamazoo house comes from expression of the joints. Architects: George Nelson & Gordon Chadwick.

With a modular panel, the best way to solve the joint problem is by using

THE PANELIZED LOOK

The panelized look lets you leave the joint exposed because it becomes part of a repetitive big pattern. So there is nothing to hide—the joint is now a major element of decoration.

The panelized look is not new—designers have been using it for centuries In some examples, like the half-timbered English cottage (top of page, opposite) and the 17th century Japanese villa (bottom, opposite), the panelized look comes from the structure itself. But in 18th century French interiors (center, opposite), it was applied to a plain surface, just because designers liked it so much.

The panelized look today belongs to contemporary style and contemporary problems. In the hands of a skilled architect, it can further the development and acceptance of the industrialized house. **HISTORIC PANELIZED LOOK** of this cottage in Sussex, England, comes from exposed structural timbers. Panels are filled with plaster or decorative wood carving.

HISTORIC PANELIZED LOOK of 18th century French mansion (near right) comes from delicate line of wood moldings. Panels were filled with small, painted decorations.

HISTORIC PANELIZED LOOK of 19th century New York mansion (far right) comes from applied moldings. Plaster moldings were used to form panels purely for decorative effect.

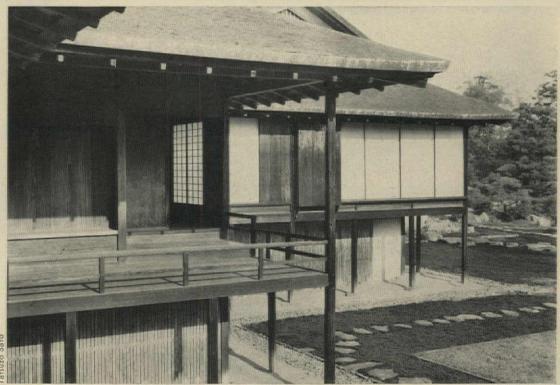
HISTORIC PANELIZED LOOK of this 17th century villa near Kyoto, Japan, comes from structural joints of panels themselves. Most of panels were filled with rice paper.

APRIL 1960









A

For good examples of today's panelized look, turn the page



TRANSLUCENT GLASS PANELS in entrance courtyard of this California house are 2' wide. Architects: Buff, Straub & Hensman.

The panelized look can be handsome outside

It lets you create designs and patterns that express the orderly rhythm of joint treatment. And it lets you get the practical benefits of grouping doors and windows.

The panelized look adapts readily to a very contemporarystyled house (opposite page, bottom) and to very contemporary materials (opposite page, top left). But it also works with such traditional materials as wood (below) or with such traditional lines as that of a Japanese-styled house (opposite page, top right).

In short, the versatile panelized look fits houses with either pitched or flat roofs; houses that are one-story, two-story, or split-level; houses in every part of the country.

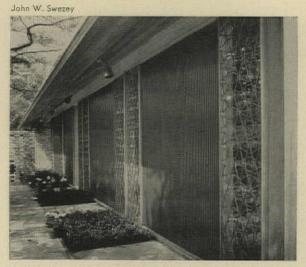
Ben Schnall



VERTICAL-BOARD PANELS are set off by wood joints 4' oc in this New York house. Architects: Roy S. Johnson & J. Stein.

k

Julius Shulman



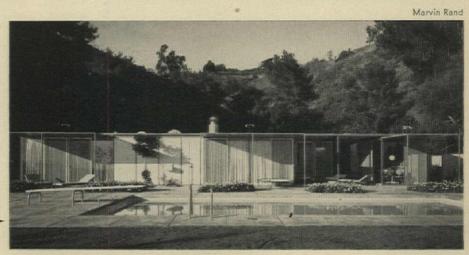
ALUMINUM SIDING PANELS and grilles alternate in Indiana house. Aluminum siding is skin for wood-frame panels; grilles cover fixed glass. Architect: Charles Goodman.

TWO-STORY PANEL effect comes from joints of asbestoscement panels matched to joints of glass panels above in this California house. Architect: Charles Warren Callister.





ASBESTOS-CEMENT PANELS stop part way up wall so windows are tied together in an orderly, practical fashion in this Florida split-level. Architect: Joseph Wilkes.



STEEL-FRAMED PANELS gives this California house its \rightarrow elegant lines. Panels are fixed or sliding glass, or plastic-faced marine plywood. Designer: Craig Ellwood.

109



PANELS SET 3/4" APART on framing painted a contrasting color, give dramatic emphasis to divider. Architects: Cimini & Meric.

The panelized look can be handsome inside

And it adapts to just about every kind of interior finish you can name—drywall, plywood, fiberboard, hardboard, metals, ceramics, and plastics.

The panelized look lets you get handsome interiors and good scale with its decorative joints (photos, above, below, and right). It lets you get practical interiors with joints that do double duty (opposite page, top right) and panels that help acoustics and insulation (opposite page, bottom).

In short, the panelized look can be used in large rooms or in small ones; it can be used in formal areas, or in play areas; it can be used in dramatic, expensive houses, or in good-looking, low-budget ones.

Joseph W. Molitor

PANELS SCORED 2' OC fit their scale to this informal living room in Architect George Matsumoto's own house in Raleigh, N.C. Ceiling beams are notched to take dry wall.



PANELS 8' WIDE are formed by butt-joining 4' sheets to fit scale of this large, formal living area. The structural joint is expressed at 8' centers. Designer: Craig Ellwood.

Julius Shulman



PANELS SET 4" APART ON wall framing work almost like traditional wall paneling in this living-dining room. Plywood panels are vertical grain fir. Architect: Guy Edwards.



PANELS SCORED 16" OC are of drywall; make a simple, unobstrusive pattern in this large family room. Drywall is butt-joined. Architects: George Fred Keck & William Keck.

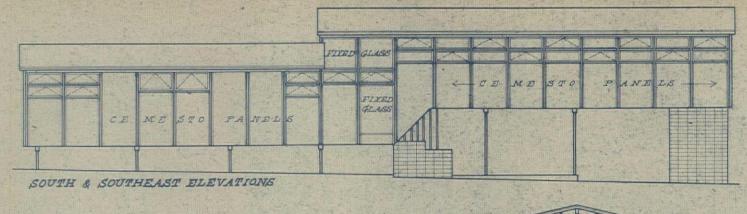


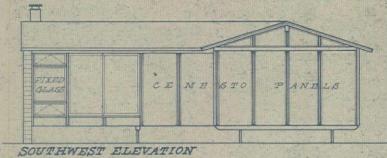
PANELS 2' WIDE are drywall; joint has hardware strip keyed to take knife brackets for adjustable shelves in informal living-dining room. Architects: Buff, Straub & Hensman.

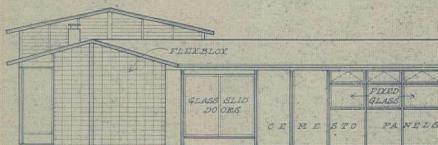


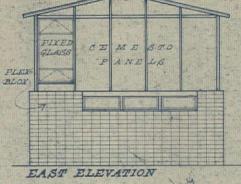
PANELS ARE 32" WIDE in this ceiling because Insulrock decking is that width.

See next page for details of this \$10 per sq ft, completely panelized house









RIPCHEN

CARS OVE

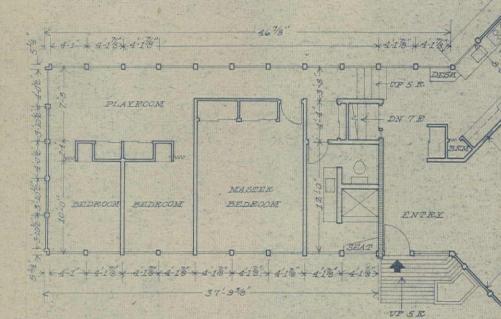
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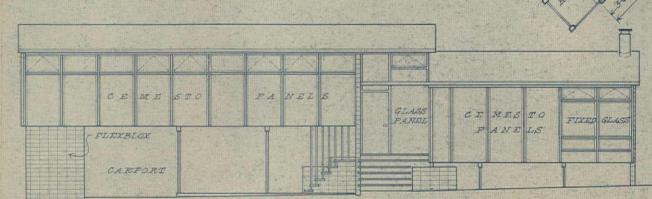
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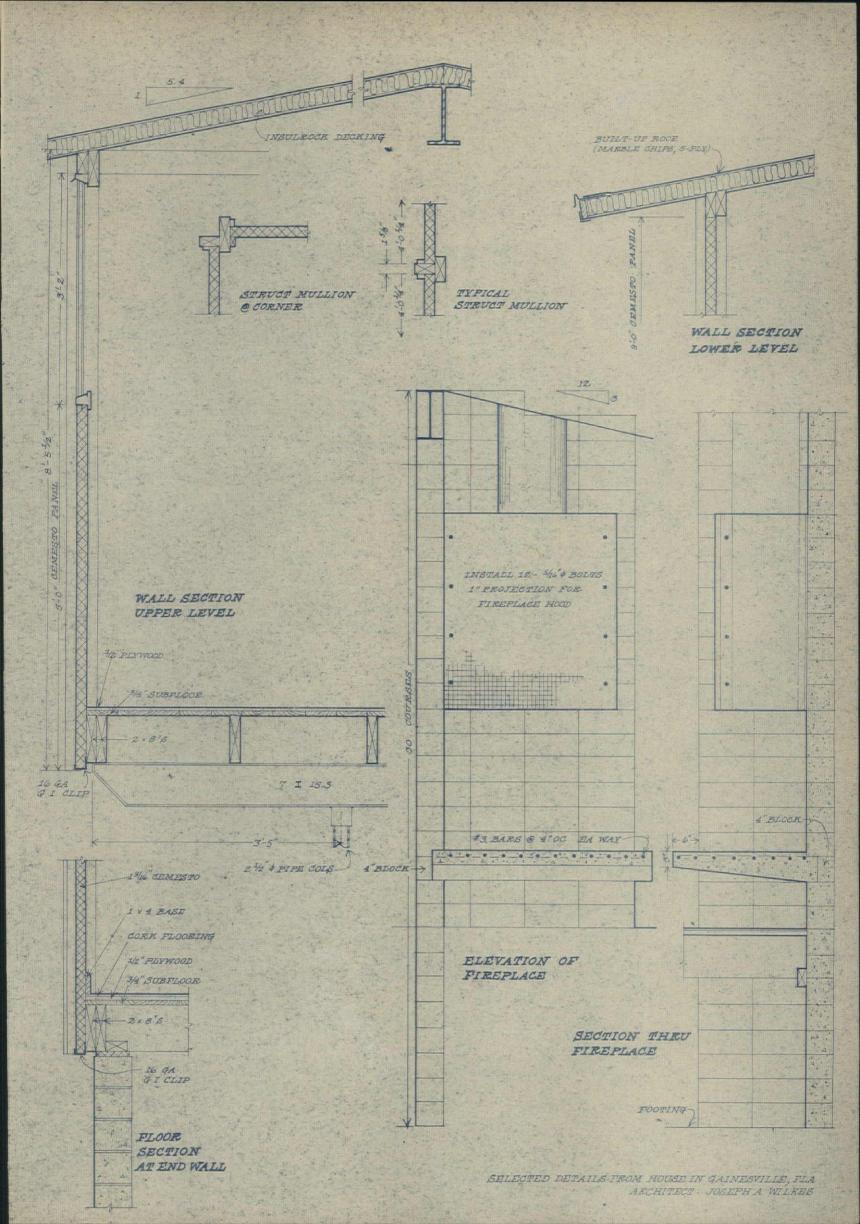
Saunt

NORTHWEST ELEVATION





NORTH & NORTHEAST ELEVATIONS



The Realtors' new president says: NAREB's top goal for 1960 is TRADES TRADES

"Trade-in is the key to selling the quality house and the quality-house market." So says C. Armel Nutter, newlyelected president of the National Association of Real Estate Boards. Nutter is a man of firm opinions and he speaks his mind in a clear, forceful way:

"We feel that new quality houses and better older houses are the most important purchases Americans can make. We want to help people make these important purchases by enabling them to convert the equities they hold in existing houses. To accomplish this, we must have a workable trade-in program —right now."

Nutter is "convinced there can be from three to five trade-in sales behind every \$17,000-to-\$25,000 new-house sale," and he has the facts and figures to prove that trade-in and trade-up work.

Nutter charts what he believes to be the single most important course for the housing industry to follow in the decade ahead when he asserts: "We must tap the savings of people who can afford quality by selling *everybody* on upgrading—by creating neighborhoods and houses they can't help but want to live in."

Nutter is "intensely interested in everything about housing"

He is vitally aware of the realtor's role in housing and of the importance of the housing industry as a whole. That's why a workable trade-in program tied to more quality-house production heads his list of NAREB's goals this year. That's also why he has openly pledged close cooperation with NAHB's new president, Martin Bartling, "to make 1960 the year that builders and realtors work together to solve our common problems and achieve our common goals."

TRADES

Because he is so concerned with the housing industry's future, Nutter is not afraid to take sharp raps at builders and realtors alike for what he terms "backwardness and timidity on the part of many builders and realtors as to what their industry is and where it is going."

"Builders are the biggest bottleneck in the trading program"

"They are just not producing enough quality houses to spur the three to five trades that can result from the sale of a single quality house," Nutter says.

"The savings & loans, the lumber dealers, the bankers, the retailers will not complain if they get the benefits of these three to five sales for every new house sold. But too many builders feel they know how to sell the low-cost market and too few builders feel they know how to build and sell the qualityhouse market.

"So the three to five trades that could follow—with all the accrued benefits to other segments of the industry—fall by the wayside."

C. Armel Nutter

This month HOUSE & HOME presents the second in a series of profiles on the men who hold the top jobs in the housing industry's major trade associations. Here are three other obstacles that Nutter thinks builders are putting in the way of trades:

1. Too few big builders are willing to accept the financial responsibility for trades. "Yet they are in a position to do it, they can and should do it, but they won't take the time to understand how trading works."

2. Too many builders spend too much time worrying about the low-cost market—"a market that doesn't exist any more," says Nutter. "Shelter housing needs were filled years ago. Now there isn't anybody who doesn't want a better house, but there are still plenty of builders who won't believe it and won't build it."

3. Too many builders don't realize they can't sell volume trade-ins without the realtors. "The builder can't and shouldn't—scatter out all over his community taking a house here and a house there in trade. Only the realtor who is used to this kind of dispersal can—and should—do it for him. But builders too often see only the price of the realtor's commission and back away from what could be a mutually profitable liaison." (For the story of a mutually profitable liaison, see p 150.)

But realtors, too, need to learn more about how trades work

"Only one out of every ten realtors understands trades," Nutter says, "and only one out of every 25 realtors really knows how to work trades."

The chief problem, according to Nutter, is that not enough realtors are qualified appraisers. "You have to know a good trade when you see it," he says, "and you have to know enough to keep away from a bad one."

Nutter estimates that only about 30% of NAREB's members make any sales appraisals.

To bolster the ranks of qualified appraisers, Nutter urges realtors who want to work with builders on trades to qualify through membership in either NAREB'S American Institute of Real Estate Appraisers or in the Society of Residential Appraisers. "Our big drive has got to be to turn more realtors into qualified appraisers. Think of how this can put the spur to trades as realtors become more and more expert in judging the worth and possibilities of the older house."

Nutter foresees trading syndicates made up of builder-realtor teams: "FHA's simplified and streamlined trade-in program [H&H, Mar] will help bring these co-op teams about. Much credit for the FHA program. goes to Commissioner Julian Zimmerman who has cooperated to the limit with builders and realtors. We intend to repay his cooperation in kind."

Nutter has just one hobby: "work, and then more work"

He brings to his role as NAREB's new president an energy, intensity, and a diversity of interests that leaves almost everyone but his wife Helen sagging by the sidelines with exhaustion.

"People wonder sometimes how I stand the pace," says Mrs Nutter. "The truth is Armel and I are pretty much alike. We both like people and we both like getting out and doing things."

Nutter himself says, "I've worked all my life and it's a good thing, too. I found out it's what you learn after you think that you know it all that really counts."

Nutter was born in 1900 in Milford. Del. He says his first outstanding success came at the age of 12 when he won a Shetland pony and cart from Curtis Publications for selling more subscriptions to their magazines than anybody else in Delaware. Super-Salesman Nutter went on to graduate from the University of Delaware where he helped pay for his schooling by working in the college dining hall and in his senior year captioned the baseball team.

After graduation—and a two-year stint as cashier with the Bell Telephone Co in Philadelphia—he got a job with a Camden lawyer, Horace F. Nixon, and took night courses at Temple Law School and South Jersey Law School. In 1931 Nutter and his brother Harold opened the Nutter Mortgage Service in Camden and today have offices both there and in Philadelphia. Nutter spends his mornings in Camden, his afternoons in Philadelphia, and lives in Moorestown, N.J., 12 miles east of Camden. In addition to mortgage service, Nutter's



WHEN NUTTER HAD PRESIDENT EISENHOWER'S EAR, he told him about NAREB'S goals for 1960, including its trade-in housing program. At this Washington breakfast meeting, Nutter said that six of every ten families now own their own homes. But "many of these people are eager to trade-up to better houses and would, if more opportunities to trade were available."

office is also a real estate firm, handling appraising and management.

Nutter refers to himself as a "bornjoiner." His name appears often on committee rosters of real estate boards and trade organizations. He has been president of the Camden County Real Estate Board, the New Jersey Assn of Real Estate Boards, the Philadelphia Mortgage Bankers Assn, the Society of Residential Appraisers, and now NAREB.

He has also served on top committees of the MBA, the Philadelphia Board of Realtors, and the Pennsylvania Real Estate Assn, and for the last five years he has been on the executive council of the Realtors Washington Committee.

Nutter, whose adeptness with facts and figures sometimes startles acquaintances, spent four years as treasurer and chairman of NAREB's finance committee. "If I had my way." he says, "every NAREB president would have to serve as treasurer first, so he'd understand the myriad problems involved."

Unlike NAHB, whose presidents are groomed in lesser executive offices and normally advance in escalator-fashion to the president's post, NAREB seeks its presidents through nominations from the floor. Two years ago Nutter came near to winning the presidency, then withdrew from the race and supported his close friend, Walter Graves, to avert a floor fight.

Nutter is a persuasive orator who uses colorful phrases

His speech is spiked with capitalized expressions like "the Big Sell of the Quality House," "the Furious 60s," "the Crucifixion of our Economy on the Cross of Reckless Expansion."

He usually begins a conversation or a platform speech in a controlled, quiet manner, but after a few minutes his voice takes on timbre and intensity. On the platform he will put aside

prepared notes and begin to speak extemporaneously, his voice ringing out across a room, his hands chopping the air in a manner reminiscent of ex-President Truman.

If he is in private conversation with two or three others, he often slams his fist into the palm of his other hand or points his finger at the person to whom he is speaking. At such times his words rush along, tumbling over one another as his mind seems to be racing ahead of his capacity for speech.

At a recent meeting where he shared the platform with, among others, NAHB'S Martin Bartling, Nutter suddenly announced in forceful tones, "NAREB intends to work together

Armel Nutter continued

with Mr Bartling and his group to help builders all over the country on the Big Sell. We want to help them Sell the Quality House—the type of house we believe Should be built and Must be built and Will be built! We are going to make This Decade the Decade of the Furious Sixties—The Decade of the Big Sell of the Quality House."

Replied Bartling a little later: "We would welcome the opportunity to work together in all our common areas because so many of our interests are bound together."

At times Nutter's oratory sounds almost evangelical. He agrees this is due, in part, to his religious interests and beliefs. A member of the Moorestown Methodist Church, Nutter has held church offices just as he has held professional offices. He was president of his church's board of trustees and is the kind of man, as his wife says, "who gets to church on Sunday wherever he is."

His travel schedule is heavy now and promises to get heavier

When Nutter first took office in late January he predicted he would spend no more than "half my time in the job. They tell me it will take more but maybe I can organize it better."

But as more and more realtors, builders, mortgage bankers, and architects hear Armel Nutter speak, he receives more invitations—so he is adding to his already heavy schedule. Now Nutter believes he will travel over 200,000 miles this year—including a scheduled May 25 trip to 15 European countries —four of them behind the Iron Curtain.

But Nutter does find time to spend a few days each month with his wife Helen at "Winderly," their big 14-room house in Moorestown.

The Nutters have been married 31 years. They have four daughters and one son, Armel Jr, who runs the Philadelphia office of the Nutter Mortgage Service. The Nutters have 12 grandchildren and "will probably have more." Their last single daughter will be married this month.

Armel and Helen Nutter are both good dancers and "love to dance when we get the time," says Helen. This year she will make most trips with her husband because "I find these trips of Armel's exciting and because I like to meet new people." When she's home she "runs over to the hospital" and does voluntary work wherever she's needed.

Although Nutter's job as NAREB's president is already proving more exacting than he had anticipated, he believes he's "going to enjoy every minute of this year."

"You know," he says, "I get impatient to get things done. There are so many things we should be doing, like cooperating more closely with all the groups and trade organizations within the housing industry, and I am eager and anxious to get at it. I know that all of us can get twice as much out of combined work as we can individually."

Nutter sees a short-term hope and a long-term opportunity for housing

The hope: some easing of the tight money market. Says Nutter: "I don't agree with Kiplinger that building will drop off in dollar volume-but if it does we are still going to have a shortage in the money field. Because of the comparatively large amounts of money involved, the impact of high interest stands out in sharp relief in real estate transactions. We are concerned with the obstacle high interest rates pose to our citizens as they seek better living conditions. I believe the general level of individual earning power will-in considerable measure-nullify the effects of the tight money market. But tight money is a problem-and it is our problem.

"We have some grounds for hope: One reason is President Eisenhower's recent indication of the probability of a surplus in the federal budget. Another is the possibility that Congress will remove the interest-rate limit on longterm government bonds, thus easing in some measure the flow of funds for residential mortgages. This step can free the Treasury from reliance on shortterm refunding of government obligations, with its severe reduction in the volume of funds that would otherwise be available for home finance."

The opportunity: what Nutter calls "the flight back to the city."

He thinks wide new areas of building and real estate activity will open up in the next decade as the growing scarcity of raw suburban land, its cost to develop, and improvements in mass transportation bring many people back to the city, and keep many others in it.

"It seems clear to me," says Nutter, "that builders and realtors alike will move more and more into multi-family unit construction—including co-ops and rentals. Realtors, particularly, will be doing much more work in the leasing and maintenance of commercial and industrial properties. And builders will be hard at work with urban renewal projects and the rehabilitation of existing blighted neighborhoods."

Nutter will also talk about four more aims this year

1. He wants Fanny May to act as a discount bank for mortgage brokers: "The need for a discount bank is of prime importance to NAREB," Nutter says. "If Fanny May acted as a discount bank instead of purchasing outright, we'd have all the money we need. If I as a mortgage banker wanted to help the builders and we could go to Fanny May as the S&Ls can go to the Home Loan Bank and pledge our assets with recourse, we would have dollar liquidity and a revolving fund of adequate principal to continually reinvest."

NAREB also wants Fanny May to increase the maximum FHA and VA mortgage it will buy to \$20,000 and to make advance standby commitments to buy mortgages on existing housing. Both changes were approved by Congress in the 1959 Housing Act, but have not yet been effected.

Says the NAREB policy statement: FNMA's secondary market operation cannot function effectively unless it is divorced from the HHFA and freed from Treasury control in its public borrowings. Only then can FNMA serve the mortgage needs of the American people in the same manner and with the same effectiveness that the Federal Reserve Board serves commercial banks."

2. He wants capital gains for realtors. Nutter believes that "realtors in the business of taking and selling houses should not be charged or penalized. A realtor should be able to garner lots of houses, form a syndicate, resell the houses, and take capital-gains tax treatment. But all too often realtors fail to obtain capital gains on property held for investment because of the difficulty in overcoming the presumption that all real estate held and sold by dealers is primarily for sale in the ordinary course of business.

"The federal tax code should be amended by establishing definite criteria so capital-gains treatment would be permitted upon the disposition of real estate held by the realtor for his invesment account."

3. He wants realty investment trusts given the same conduit tax treatment now accorded other investment trusts. "Increased equity investment in real estate is vital to the growth of our economy," Nutter asserts. "Real-estate investment trusts let small investors put savings in real estate but federal laws subject these trusts to corporate tax rates which put a disproportionate burden on real estate investments as distinguished from other forms of investment." ' (Investment trusts can pass along their earnings tax-free, and recipients are taxed on their individual incomes.)

4. He wants NAREB members to push new-house selling. His suggested slogan: "Buy a New House—First." Nutter and Martin Bartling both agree that a minimum of 16 million new houses must be built in this decade—providing substandard houses are demolished.

Says Nutter: "I believe our industry can demonstrate its vigor to the benefit of builders and realtors, to the improvement of housing standards, and to the well-being of homebuyers.

"I foresee continued progress in the years ahead because as an industry we will demonstrate that we have the men, the knowledge, and the ability to meet the challenges ahead. My one desire is to see all of us in the housing industry make our leadership purposeful, energetic, and effective in 1960." /END

armel 12, with pony and cart he won for selling most Curtis Publications in all of Delaware

Third Brithday Charles armel Nutter 1903





Captain of the team - 1923 "Nut" in U. of Del. "baseball ringorm



the engaged couple : Armel and Helen Wertsner at Mother Nutter's house.



Captain Nutler - WWI On furlough at Milford



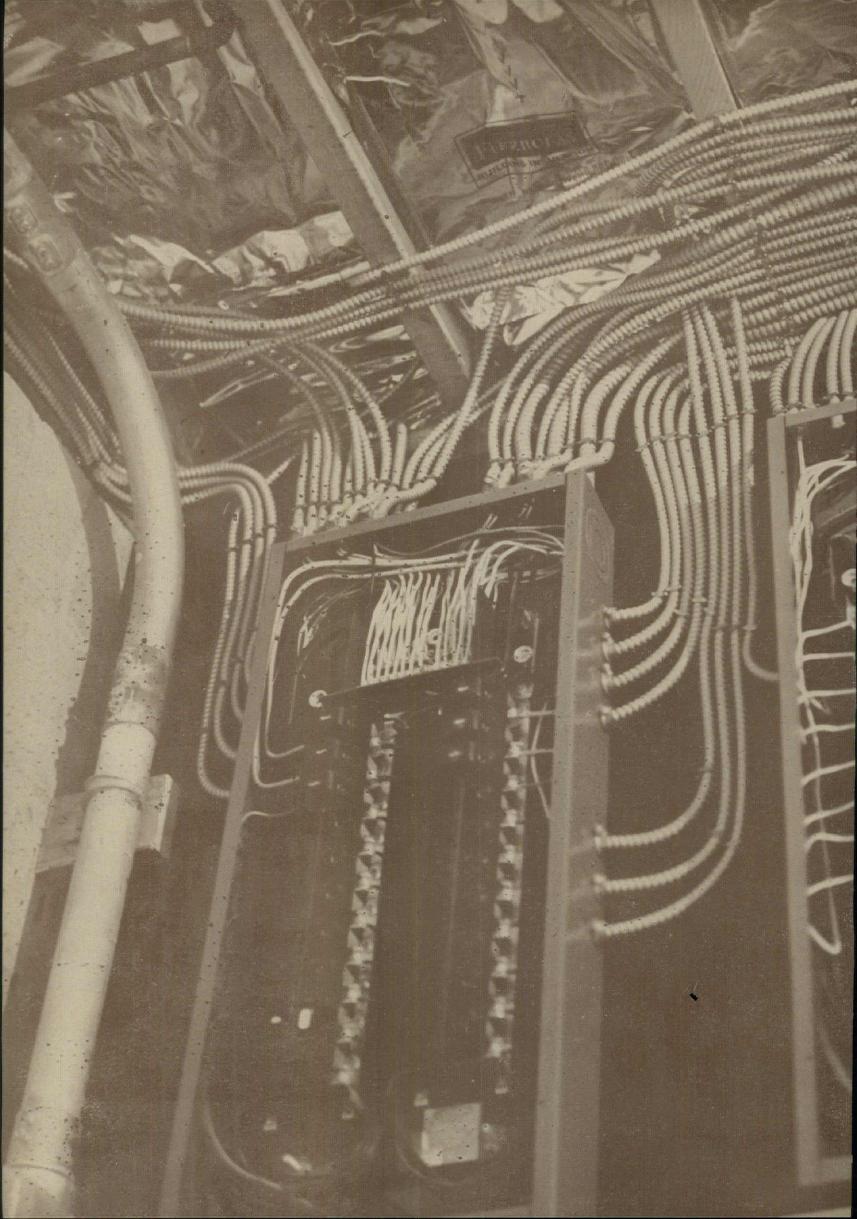
Helen and Armel at daughter, Nancy's wedding reception, 1954



Christmas at "Winderly", 1959. Grandfather and Grandmother Nutter and all but two of the happy brood



The missing two : daughter Pat with husband Ed Cutter in Jokyo, on holiday leave from Okinawa





Electrical living in the quality house

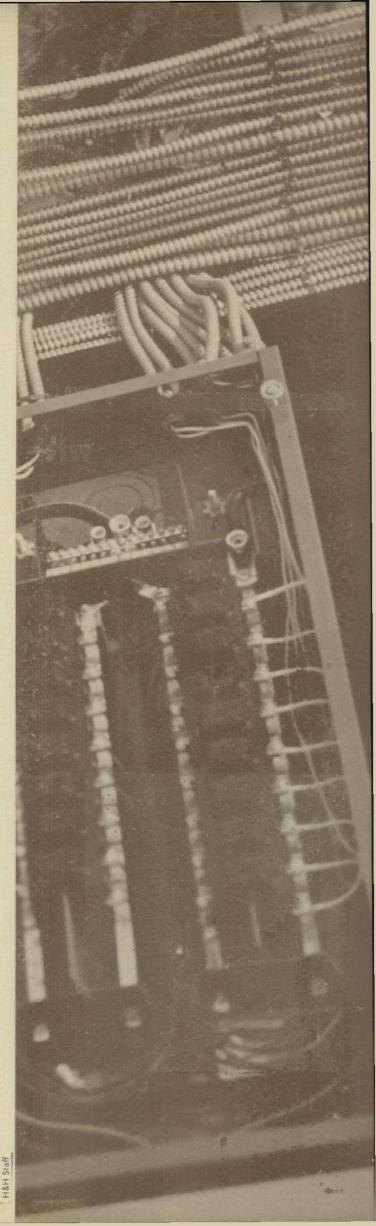
Today's new houses use more than twice as much power as houses built only ten years ago.

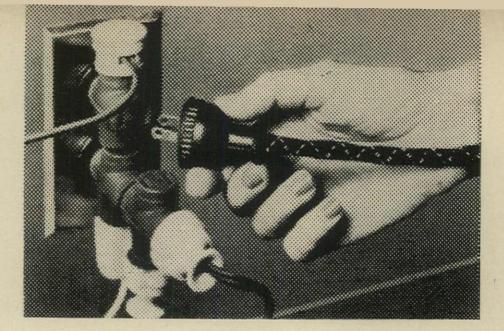
In fact, the power drawn by the average household has been doubling every decade for the past 30 years: from 505 kwh in 1937 to 1,438 kwh in 1947 to 3,164 kwh in 1957. By 1967, the electrical industry expects a load of at least 7,000 kwh per household.

This big change has not been just in the amount of electricity used, but in the way it is used. For example, almost 50% of the electrical consumer products sold last year were products which have come into the volume market only since World War 2—products like air conditioners and television sets. And products now in the industry's laboratories will speed the change: in development are fully automatic kitchens, electro-luminescent lighting, thermoelectric heating and cooling, and other "miracle" appliances.

During the next 20 years, the electric utilities will spend \$32 billion for new plant, will nearly double their capacity. One reason: the growing use of electric heat. Even though a Btu of electricity often costs five times as much as a Btu of natural gas, 600,000 houses already have electric heat and are each using 20,000 kwh a year. By 1970, there will be 4.5 million all-electric houses. And their load *alone* will equal well over half of this year's *total* residential load.

In this fast changing world, electrical equipment and technology are having a constant effect on house design and construction. To give you a fast updating on electrical living and its meaning for the housing industry, HOUSE & HOME devotes the next 30 pages to this important subject.





Electrical living starts with adequate wiring

And wiring that was adequate five years ago is not adequate today.

What are the reasons for this startling change?

1. Today over 100 kinds of electrical household equipment are on the market—and homeowners buy new equipment as fast as it becomes available.

2. Every year, standard appliances are improved (and, generally, increased in rating) to provide higher and higher standards of performance. A few years ago, a 6-lb 550 w iron was standard, today's irons weigh three pounds, are rated at 1,500 w. A few years ago the average electric range was rated at 6,500 w; some new ranges draw up to 15,000 w.

It makes no sense to provide less-than-adequate wiring in a new house—not just because of fast-growing loads—but because:

1. The cost of wiring is only a small part of the cost of a house. Wiring adequate for all present loads and reasonable future loads rarely amounts to more than 2% of total new-house cost.

2. Adequate wiring costs very little more than inadequate wiring. One test house showed that capacity could be increased 180% for only a 21% increase in costs (for details, see H&H, Feb '58).

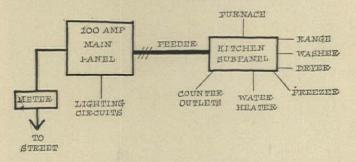
3. Homebuyers are learning that it is worth paying a little more for a house that is adequately wired—are learning that it will cost them \$100 or more after the house is built to add electrical services which the builder could have provided for less than \$20 during construction.

Opposite, you will find 15 rules for providing adequate wiring, and on p 122 you will see the best way to install this adequate wiring at the lowest possible cost.

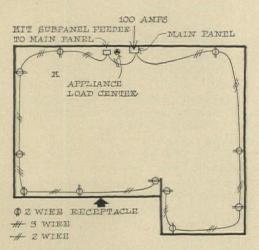


Here are 15 rules for planning adequate wiring

- **1** The best conductor from entrance cap to entrance box is three-wire No. 2 cable.
- 2 The best wire to use is non-metallic sheathed cable—its installed cost averages 15% less than any other cable.

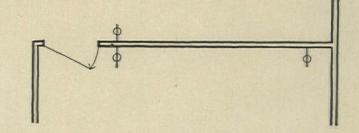


- **3** The best entrance-box size is 100 amp. This is enough for all loads except electric heat in houses up to 3,000 sq ft. If your house is to have electric heat, consult the utility in planning capacity.
- 4 The best distribution panel for most houses is the split-bus type, in which a major appliance circuit and up to five feeders are taken off ahead of the main lighting disconnect. This type of panel eliminates a main switch costing anywhere from \$10 to \$80.
- **5** The best place for the entrance box is as close as possible to the kitchen—the heaviest load center. If the kitchen is in the rear of the house and the entrance box must be in the front, run a three-wire No. 4 feeder to a subpanel instead of running individual lines from the entrance box to the kitchen loads.

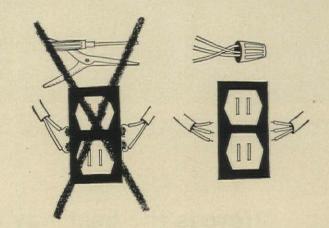


- 6 The best general-purpose wiring layout is a split perimeter loop of three-wire No. 12 cable at the baseboard, with twowire No. 12 tapped in for convenience outlets, ceiling fixtures, and switching (for more details, see p 122). For a 50% increase in the amount of conductor used, three-wire cable will nearly triple capacity, and voltage drop in the line will be cut 75%.
- 7 The best place to run general purpose wiring is in a baseboard. If this proves too expensive, then wiring should be run through walls at base-plug level, not at the ceiling, because the average house has four times as many base plugs as ceiling outlets. (And it saves time and money to pre-drill holes for wiring when the studs are pre-cut.)
- 8 The best size for outlet boxes in three-wire No. 12 circuit is $3\frac{1}{2}x2^{n}x3^{n}$ —this is big enough to prevent crowding.

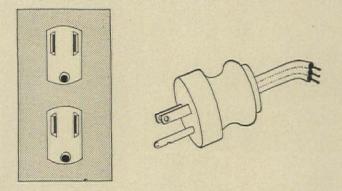
9 The best way to provide for future base plugs is to leave a 2' loop of slack wire between wall outlets.



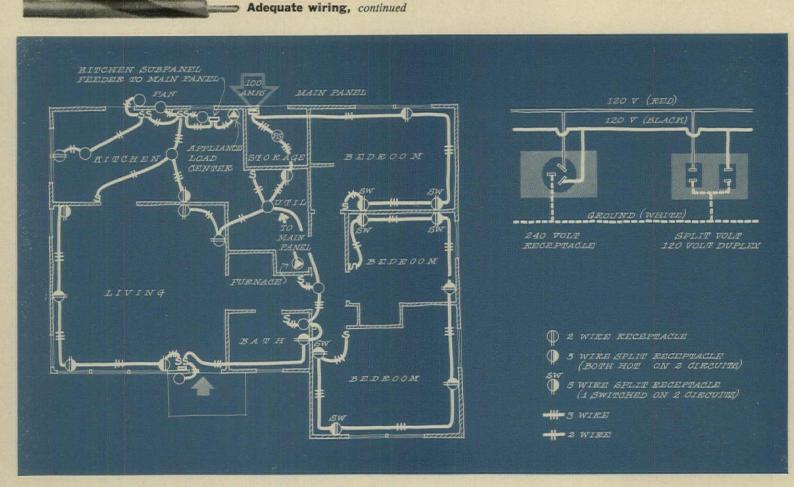
10 The best location for an outlet box is near the end of a wall space, where the receptacle is less likely to be blocked by furniture. Outlets on opposite sides of interior partitions should be back to back, so both can use the same box.



11 The best electrical devices to use are specification grade with pressure-lock connectors which speed wiring jobs (see p 123) and contact both sides of plug blades for cooler operation.

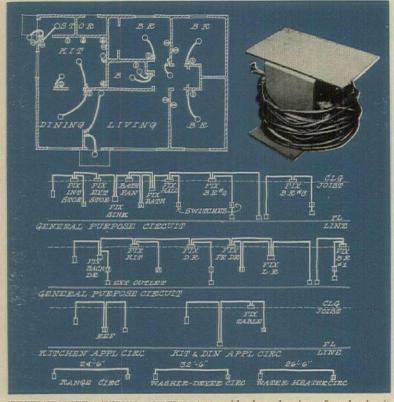


- **12** The best outlets for slab houses and in kitchens, baths, and laundries are grounded outlets (which have three holes instead of two). They prevent the chance of shock in areas where moisture is a problem.
- **13** The best way to wire for small kitchen appliances is to run a length of surface raceway above all counters with outlets every foot or two.
- **14** The best way to provide multiple switching or remote-control switching is to use low voltage (for details, see p 131).
- **15** The best way to wire a well pump is with a separate 220-v circuit; this reduces wire size and adds protection in case of fire. This line also provides a good ground for lightning and should be installed with a lightning arrester.



IN SPLIT PERIMETER LOOP SYSTEM, one three-wire No. 12 circuit serves the bedrooms, another serves the living room. Kitchen and furnace have separate feeders. Either 120 or 240-v is available anywhere on loop (see upper right).

Here is the best way to install adequate wiring



PREFABRICATED WIRING SYSTEM starts with shop drawing of each circuit, scaled from house plan. Bench-wired harnesses (one for each circuit) are coiled around carton, ready for quick installation on site.

It is also the cheapest.

This system uses a three-wire split perimeter loop for general-purpose circuits. In the example shown above, one side of the loop leads from the 100-amp panel through the bedrooms, the other side leads through the storage and utility rooms to the bath and living room. In addition to the loop, there is a separate furnace circuit and a separate feeder to a kitchen subpanel which handles all kitchen loads.

The three-wire loops provide twice as many circuits (and 2.67 times the capacity) for lights and plug-in equipment as conventional two-wire No. 14 wiring. Since each of the three-wire No. 12 cables carries two 20-amp circuits (see upper right of drawing) there are a total of 40-amp or 4,800-w available at each duplex receptacle.

Also, three-wire cable can supply 240-v power for air conditioners, water heaters, and the like. With conventional wiring, installing a 240-v appliance requires rewiring.

In a three-wire system, switched outlets are provided by using one of the hot wires as a switch leg.

Like any other part of the house, wiring can be prefabricated to cut costs

The drawing at left shows a system developed by St Louis Architect Norman Rabb for prefabbing all the wiring runs in a house. Here is how it works:

From an electrical plan of the house, horizontal and vertical distances between fixtures and boxes are scaled off (this takes about two hours for a 1,100 to 1,200 sq ft house). Two feet is added to each wire length to allow for any obstruction that may occur in the field. Working from the scale drawing in the shop, electricians cut off wire lengths, starting from the panel and working towards the end of the circuit. As they cut off the lengths, they install pressure-lock boxes for outlets or lighting fixtures. The complete harness is rolled up around a cardboard carton, with the devices dropped inside; and is ready to be taken to the job.

At the site, the only rough-in work required is 1) notching the plate above boxes to take the wire, 2) panel installation, 3) unrolling the coil above the joists and dropping the devices through the notched plates, and 4) attaching outlet and lighting boxes to studs and joists.

In the example shown in the drawing at left, six harnesses are used. Wiring was run through the ceiling joists, though Rabb's system can be adapted to baseboard wiring.

The NAHB Research House in Knoxville was another important experiment in prefab wiring

In this house, 80% of the wiring was completed off the site. The photo at upper right shows the wiring tree used in the house, which included the service entrance panel, remote-control-relay branch-circuit feeder boxes, and convenience outlets. Wall panels for the house were built with outlet boxes in place and cable leads through the top plate. The only on-site work was connecting the panels to the feeder boxes and the service entrance cable to meter boxes (for details, see H&H, Jan '59).

New equipment and new devices becoming available also cut on-site labor

A notable example: baseboard raceway (center photo, right). It keeps circuits out of the walls, can be installed and inspected at the same time as finished wiring. Raceway makes particular sense in the kitchen and in the master bedroom (which can have as many as 13 plug-in appliances).

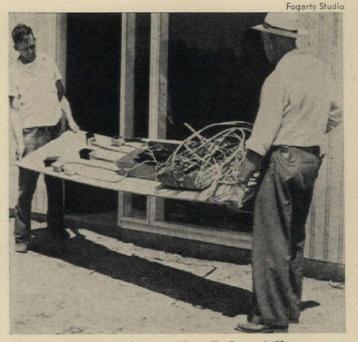
Another big labor saver: pressure-lock devices (lower photo, right). To use them, wire is cut and stripped in one motion with special pliers, then pushed in place. This makes a much faster and tighter connection than screw terminals.

Here is a list of the circuits that electrical living requires

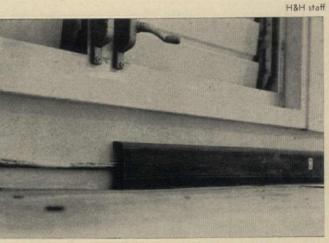
Use	Capacity	Conductor	Voltage
General purpose, two needed (this is the split perimeter loop)	20 amp	3-wire/No. 12	120/240
Water heater	30	3-wire/No. 10	240
Furnace or boiler	20	2-wire/No. 12	120
Attic fan	20	2-wire/No. 12	120
Bath heater	20	2-wire/No. 12	120
Power tools	20	2-wire/No. 12	120
Outdoor lighting	20	3-wire/No. 12	120/240
Central air conditioner (check mfgr)	50	3-wire/No. 16	120/240
Or			
Unit air conditioners (separate circuit for each)	20	2-wire/No. 12	240-under code

In addition:

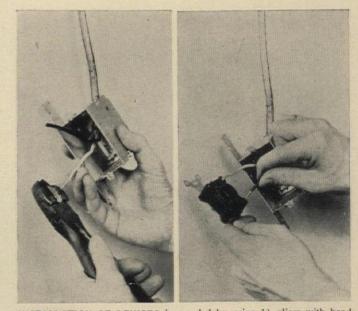
- Kitchens require up to eight separate circuits—for list, see p 129
- Electric heating will require special circuits—see manufacturers specifications and local codes.



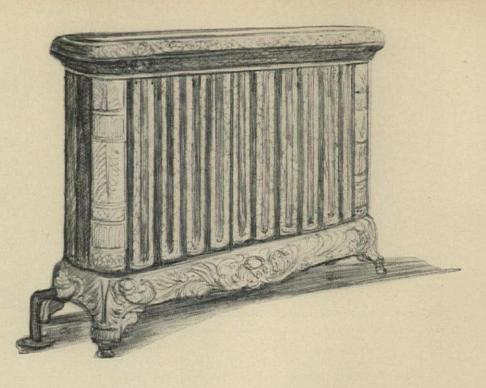
WIRING PACKAGE used in NAHB'S Knoxville Research House was assembled off site, installed during finishing stage of construction. Package included 80% of wiring job; site wiring took only a day.



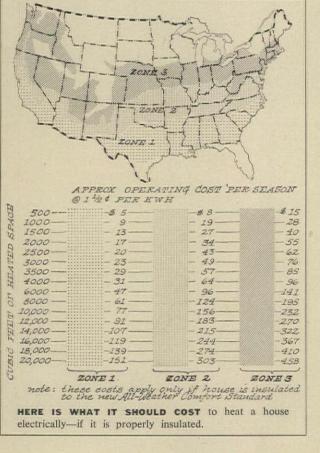
BASEBOARD WIRING used in NAHB'S 1960 Research House in East Lansing (see H&H, Mar) was stapled to finished wall panels, covered with vinyl baseboard.



INSTALLATION OF DEVICES is speeded by using 1) pliers with head that cuts and strips in one motion (photo, left); and 2) pressure-lock receptacles. Wire is simply shoved in to make connection.



Electrical living creates



a fully controlled environment

With electricity you can completely condition the air in a house: you can heat it, cool it, moisten it, dry it, clean and filter it, exhaust or replace it.

For all of these functions except heating, electricity is already the dominant power. The vast majority of all cooling systems are chilled by electrically powered compressers and even those that are not use electrically driven fans to circulate the air. Many humidifiers use electric heaters to put water into the air, and dehumidifiers use electrically chilled coils to take it out. The most efficient filters use electrically charged plates to catch and hold air-borne dirt. And virtually all air handling systems run on electricity.

The main reason electric heating has been slow taking hold has been high operating costs. Even so, electric heating installations have grown by 50% every year since 1955. By 1962 the industry predicts 15% of house starts will have electric heat.

But what about the high cost of electricity?

Forty years ago electric power cost about 12ϕ a kwh. Today half the major utilities have rates as low as $1\frac{1}{2}\phi$. At this price, electricity can compete with other fuels as an economical source of heat, with one big If: the electrically heated house must be designed and built for low heat loss (to see how, see $p \ 134$). Heavy insulation, storm windows and doors, full weatherstripping, and effective vapor barriers are essential. A new industry-approved insulation standard (see $p \ 138$) will assure seasonal heating costs like those in the chart at the left. And the 30% cut in cooling costs resulting from careful design and full insulation will help pay the \$300 to \$400 more per house that better construction will cost.

Here are the four electric radiant systems

They all supply heat alone—no cooling or other conditioning. But they are cheaper than other more complete systems that supply both heat and cooling.

The installed costs of ceiling cable (top drawing, right) range from 50ϕ to 55ϕ per sq ft of living area. Wall-panel units (second from top) cost 75ϕ to 85ϕ per sq ft. Radiant baseboards (third from top) cost 65ϕ to 75ϕ per sq ft. And the electrically heated hot-water baseboard systems (bottom drawing) cost about the same as conventional hot-water systems— 80ϕ to \$1.20 per sq ft.

Ceiling cable spreads heat evenly over the room, and puts no limit on furniture arrangement

It is installed as shown in the drawing at right. Battens under the joists are used as nailing strips for drywall, so no nails can strike the wire accidentally. Since the heat source is at the ceiling, extra heavy insulation is needed to prevent high heat loss.

The National Electrical Manufacturers Assn has suggested a 20' limit for the longest straight run of ceiling cable, to prevent expansion problems. Ceiling cable comes in rated lengths and should not be loaded beyond capacity because of the danger of the drywall calcinating (becoming powdery) at too high temperatures.

New "prefabricated" ceiling-cable systems are now under test. One has the cable inlaid in a drywall panel which is placed between joists and the finish layer of drywall. Another new system uses a paper sheet with copper-foil strips on both sides. When current flows through the copper, it energizes a chemical coating that radiates low-temperature heat into the room. The paper can be used on either ceilings or walls.

Wall panels are recessed under windows,

may also act as convectors

Modern wall-panel units project into the room only an inch or so. Frame boxes for the units (like rough window openings) must be built into the wall when the house is being framed. This extra labor accounts for the higher installed cost of wall units.

NEMA has limited the output of radiant heaters to 1,400 w per sq ft of heater surface, which limits the maximum heat in front of the unit to 325F, well below the ignition point of commonly used fabrics but too hot to touch.

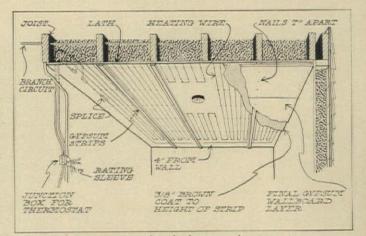
Baseboard heaters are surface-mounted after the wall is finished, are inexpensive to install

With this type of heater, the only work that must be done before the wall is finished is installing the 240-v lead. Baseboard units come in ready-to-install lengths of 2' to 12'. The big advantage claimed for baseboards is that they provide room by room control with radiant-sensing, line-voltage thermostats.

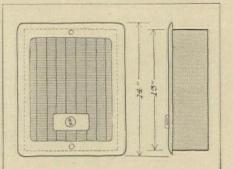
NEMA has set a 194F maximum temperature for the sheet metal inclosure.

Electrically heated hot-water systems work just like other hot-water systems

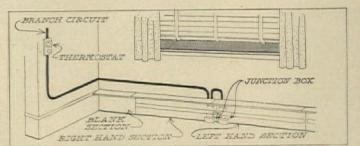
The drawing at the right shows a compact boiler unit with an immersed electric element. This heats water both for the radiant fin-tube baseboard and for domestic hot-water supply. The pressure tank, circulating pump, check valve, and piping are identical with oil- or gas-fired systems. The other hotwater baseboards have the immersion heater right in the fin-tube. The operating costs of an electric hot-water system are comparable with any of the radiant-heat systems described above.



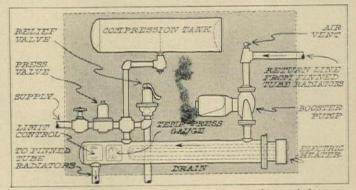
ELECTRIC CEILING CABLE has the lowest equipment cost.



PANEL HEATERS fit in walls or partitions.



RADIANT BASEBOARDS may have built-in or separate thermostats.



ELECTRIC HOT-WATER SYSTEMS may have central or unit heaters.

Here are two systems for full air conditioning

The electric warm-air furnace and the heat pump have one thing in common—they both heat with moving air. And when you heat with moving air, you get three big advantages: 1. The moving air prevents temperature stratification and

big gradients between floor and ceiling.

2. The air moves through a central system where it can be cooled, moistened, dried, and cleaned—as well as heated.

3. The air is drawn from overheated areas (eg, near glass walls), mixed with return air from cooler areas, and the tempered air is recirculated to balance temperatures throughout the house. (Local control can be effected with manual dampers or registers, motor-operated zone controls.)

Electric furnaces use resistance coils to add heat to the circulating air

These heating coils may be located at a central blower unit, in sequence with chilling coils, humidifier, filter section, germicidal lamps, or other accessories (see opposite). The coils are set to come on or drop out in stages—both to give modulated heat and to avoid overloads. With central-coil systems, heating control is usually a central wall thermostat.

Another type of ducted system mounts the coils in a boot just before the room register. This type can use a thermostat for each coil, to get the same room-by-room control as a radiant system.

Outside the heating season, excess moisture is a problem on three days for every day when excess heat is the problem. And an electric furnace in a ducted system offers two ways to reduce humidity in the off season. In spring or fall, a ducted system can bring in fresh outside air and circulate it through the house. Or by reheat-dehumidification, the cooling coils can remove the moisture and the heating coils bring the air back to a comfortable level. In summer, the cooling coils do the dehumidifying.

If the house is built as it should be for electric heat, equipment cost can be kept low. For example, a slightly undersized cooling unit running steadily will do a more efficient job than a larger unit cutting in and out. Also, duct and register sizes can be smaller than in a less well insulated house. To keep heat losses down, ducts should not be run through attics or other uninsulated space.

Heat pumps are reverse-cycle air conditioners that can heat or cool the air

These units work best in moderate climates.

The general specification rule: use a heat pump when cooling loads are bigger than heating loads, and size the unit to do the cooling job. Heat pumps are very efficient (in theory more than 200% efficient) down to about 40F.

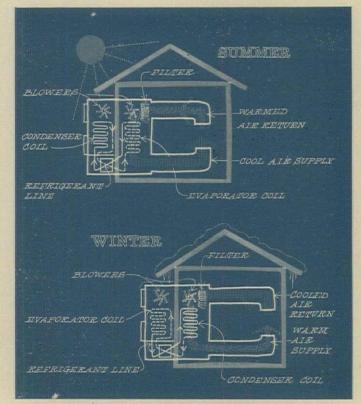
In between 45F and 25F there is still enough moisture in the air to condense on the evaporator coils, so resistance coils, which are mounted in the air supply ducts, must be cut in to keep the house air warm while the unit reverses its cycle to defrost the coils. Below 20F, the major heating load is carried by resistance coils, with the heat pump chiefly acting as a blower and filter unit.

Off season, the heat pump can control humidity by reheat-dehumidification (see H&H, Mar). The upstream side of the indoor coil is used as a cooling element; the downstream side as a heater to restore comfortable temperatures.

In the semi-tropical south, heat pumps should supply one ton of cooling per 600 sq ft of living area. In the north they need give only one ton per 900 sq ft, provided insulation meets the standard on *page 138*. Equipment costs will range from 75¢ to \$2 per sq ft of living area, depending on region, system design, and local practice. Northern operating costs will be about the same as those for a comparable furnace or baseboard unit plus air conditioning. In the south, costs will be somewhat lower than a combination system. TILITER TEMPERING COLL TILITER TEMPERING COLL



ELECTRIC WARM AIR FURNACES can have coils at rooms or far.



HEAT PUMPS take heat from house in summer, from outside in winter.

And here are devices that add to year-round comfort

Air conditioning used to be a synomym for air cooling. But today it means full comfort the year around. And full comfort includes year round moisture control, dirt control, and constant air circulation. To get these extra values, an air conditioning system must have certain accessories:

Filtering systems remove pollen and dirt, cut maintenance

Common flat-pack filters will stop most pollen grains and large dust particles. Electrostatic charged-media filters will catch 98% of all pollen and visible dust particles. Most effective are electronic plate-type filters (like the one diagrammed, right) which will stop 90% of all air-borne dirt, dust, pollen, smoke, and bacteria. Cleanliness at this level can save \$1,000 in maintenance costs over 10 years, can make house cleaning a twice a month job, and can boost heating-cooling efficiency by 30% because filters do not become clogged. Asthma and hay-fever caused by pollen and mold are virtually eliminated and the incidence of airborne infections much reduced. Activated charcoal filters will remove most odors. Germicidal lamps will kill germs not caught by the ionized plates. An electronic filter can be installed for as little as \$250, will use only a kilowatt a day.

A humidifier moistens dry winter air, costs little to operate

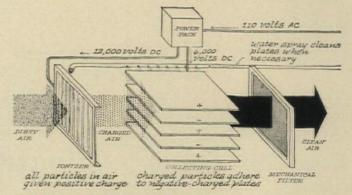
Comfort and health both depend on a moderate relative humidity. In winter, too dry air will cause as many colds as wet cold air. Low humidity also increases static electricity. When outdoor temperatures reach 10F, air in a 10,000 cu ft house will need to pick up 5.6 pints of water an hour to maintain 40% relative humidity at 70F indoors. Family activities (for a family of four) will add only one pint an hour. The other 4.6 pints must be added by a humidifier. The best humidifiers spray or steam water vapor into the circulating air when a room humidistat calls for more moisture. A humidifier and control will add \$100 to the cost of a year-round system, practically nothing to operating costs.

Mechanical ventilation cuts cooling loads, eliminates excess moisture

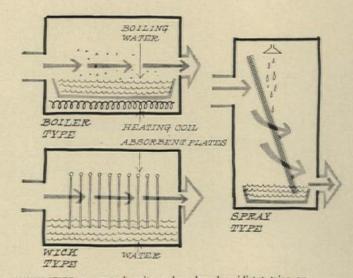
On a hot summer day, attic temperatures can run as high as 130F to 150F. At such times ceilings directly under the attic will register as high as 102F. For \$150, an attic fan will cut the heat above the ceiling by 30° , reduce room temperatures to manageable levels. Cooking dinner can cause a 15° rise in kitchen temperature, a hot shower can add 10° to bathroom temperatures, and both can raise relative humidities to a marked degree. In winter this can add to comfort, but in summer it may make the difference between being comfortable and uncomfortable, as well as adding to the load on the cooling system. The cost for a kitchen and bathroom ventilating system: \$80 to \$100.

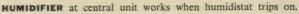
And sensitive heat and moisture controls get the most from the equipment

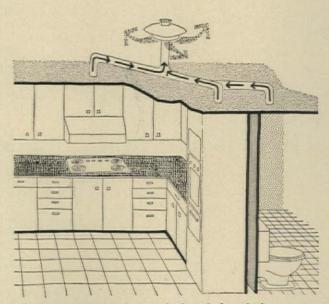
Temperature in most all-electric houses with ducted heating systems can be maintained within a few degrees by one or two wall-mounted thermostats. In most systems that respond to room-by-room control, the range can be cut to 3° —the sensitivity range of most line-voltage thermostats for the room concerned. Where low-voltage thermostats can be used for room-by-room control, the variation in temperature will approach $\frac{1}{2}^{\circ}$, the sensitivity of the device. Moreover, by using low-voltage devices, the controls can be brought together in a single central panel where temperature and humidity can be read and adjusted. Costs vary with the number of controls but low-voltage systems need only simple bell wiring. Climate control centers cost about \$75.



ELECTRONIC FILTER keeps indoor air almost completely pure.

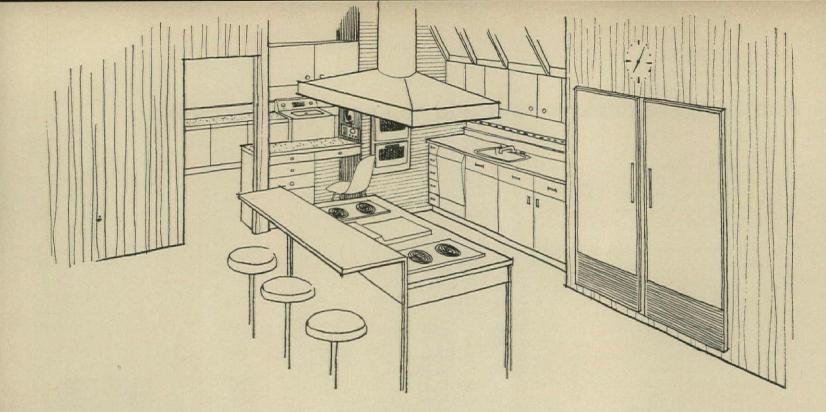




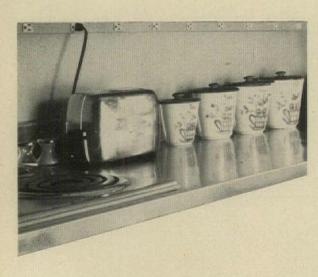


SINGLE VENT FAN can draw moist hot air from bath, range, oven.

continued



Electrical living offers more kitchen convenience



Because of all you can do with electricity in a kitchen, the biggest part of a house's electrical load—up to 80% of the total house wattage—is drawn by kitchen appliances (see table opposite).

And because electricity offers such convenient power (and appliance makers are so inventive) the future—even the near future will find more and more power being used to cook, store, and prepare food, to clean up afterwards, and to make the whole process more comfortable and convenient.

To use the possibilities offered by today's appliances calls for a separate kitchen load center to handle at least six major appliance circuits—range-oven, dishwasher-disposer-refrigerator, freezer, washer-ironer, dryer, and water heater—one or two convenience outlet circuits, and a lighting circuit. All are wired as three-wire lines, used as either one 240-v or two 120-v circuits.

All these circuits should be protected by a circuit breaker panel mounted in or near the kitchen, so the housewife does not have to hunt for a fuse box in a dark basement or garage.

Here is how to wire for kitchen convenience:

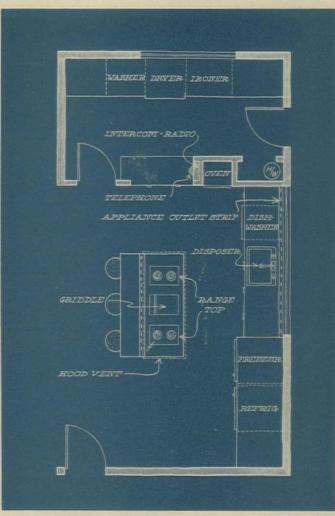
The electrical load should be organized the way the housewife will use it. Most kitchen experts talk in terms of work centers—planning, storing, mixing, cooking, serving, clean-up, and laundry. Each center makes its own electrical demands:

1 Planning center has the lightest draw. It is usually a well lighted desk area, close to telephone, intercom master station, climate center (with heating, cooling, filtering, and humidity controls). The area is served by part of one convenience

outlet circuit and by the low-voltage wiring for the intercom and climate center.

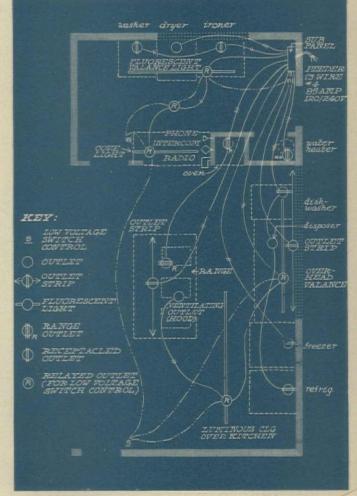
2 Storage center uses separate circuits for freezer and refrigerator. The separate freezer circuit protects stored foods from power failures that might be caused by other appliances on the same circuit. There are not likely to be any hotweather overloads in the all-electric air-conditioned house, so power surges will occur only when the equipment cycles on. The power demand of the refrigeration appliances is the most predictable load in the house.

- 3 Mixing center works off the convenience outlet loop. Motorpowered appliances like mixers, blenders, etc, draw relatively light loads—150 to 200 w—but small cooking appliances draw up to 1,500 w. Two cooking appliances in use at the same time may overload one 120-v circuit. However, one circuit will give more than enough current to handle mixing and serving.
- 4 Cooking center alone can use enough watts to heat a house. Double oven and a high-speed cooktop can add up to 15,000 w. This calls for a separate three-wire No. 6 circuit fused to handle 50 amp.
- **5** Clean-up creates a second major load. Heating water may take up to 4,500 w and operating a dishwasher and disposer will take 2,100 more. Dishwashers and disposers usually run on 120-v circuits, and can be supplied, if convenient, by the second side of the refrigerator loop. Water heaters take 240-v, require a separate circuit.
- 6 Laundry center forms the third major load. As the chart (below) shows, a dryer needs 4,500 w, a washer 700 w. A hand iron draws 1,500 w, an ironer 1,600 w. The dryer needs a three-wire No. 6 circuit fused for 30 amp; the other appliances can be taken off one side of a three-wire No. 12 circuit.
- 7 Kitchen needs more light than any other room in the house. It is usually in use for several hours every day. Wiring should provide for special area lighting, either from adequate ceiling fixtures or a luminous ceiling. A 1,000 w of lighting is not too much to figure on. It can be supplied by one side of a three-wire No. 12 loop.



PLAN OF KITCHEN shows the many different loads in this area.

Here are wa	ttage	s needed	
for typical l	ritche	n uses	
Major appliances	Circuit		
Range & oven	14,000	3-wire No. 6, 50-amp,	120-240-v
Dishwasher	1,300		
Disposer		3-wire No. 12, 20-amp, 1	120-240-v
Refrigerator	300		
Freezer	400	2-wire No. 12, 20-amp, 1	120-v
Washer	700		
Ironer	1,600	2-wire No. 12, 20-amp, 1	120-V
Dryer (std speed)	4,500	3-wire No. 10, 30-amp,	240-v
Water heater 2	,500-4,500	consult your utility	
Small appliances			
Ventilating hood	150		
Mixer	200		
Blender	200	0 wine ble 10 00	100
Toaster	750	2-wire No. 12, 20-amp,	120-0
Waffle iron	1,100		
Intercom-radio	100		
Rotisserie	1,500		
Deep fat fryer	1,300	2 mine No. 12 00	100
Electric frying pan	1,100	2-wire No. 12, 20-amp,	120+1
Hand iron	1,500		
Lighting	1,000	2-wire No. 12, 20-amp,	120-v
Total	37.000	watte	



WIRING PLAN of same kitchen shows how loads should be handled



Electrical living provides versatile, dramatic light

Good lighting starts at the planning stage—with the layout of circuits, switching, and outlet and fixture positions. When it is well planned, lighting can make indoor and outdoor areas as usable at night as they are by day—and often more exciting.

Below and on the opposite page are the basic rules for developing both convenience lighting and accent lighting for dramatic and decorative effects.

Outdoor lighting doubles outdoor living time



OUTDOOR LIGHTING like this can double a homeowner's use of terraces and wardens. Soffit lights help light the terrace, portable fixtures highlight the shrubbery.

Half the value of a patio or terrace is lost unless it is lighted for evening use. And much of the beauty of a flower garden is wasted if it cannot be seen at night.

The first step in lighting outdoor space is to provide overall lighting, usually from the roof of the house or a tall tree. If the roof is low, the light should be shielded to minimize "blinding" persons facing the light.

Used alone, overall lighting gives a flat effect so . .

The second step in lighting outdoor space is to add spots of light, below eye level, to give definition and depth to the area. These lights should silhouette or illuminate shrubs and flowers, walls and fences. These fixtures are wired back to the house with underground feeder cable (buried about 1') which can be pulled up and placed in new areas at will.

At the time the outdoor lighting circuits are planned, it makes sense to locate weatherproof convenience outlets for portable lights as well as small appliances and electric lawn-mowers. They should be placed 15' oc along walls facing the patio, be 18'' above grade, and be controlled by switches inside the house.

All outdoor lighting should be on a separate three-wire, No. 12, 120/240-v circuit from the main panel.

Indoor lighting should be both useful and decorative

The first thing to plan

is the overall convenience lighting

A high level of general lighting is essential in kitchens, bathrooms, dressing rooms, workshops, and laundries. This lighting should generally be built in—in the form of a luminous ceiling, or wall brackets, or valance light—and should bear directly on counters and work surfaces.

In living areas, convenience light should usually be built in as valance or cornice lighting on the window walls, so that the furniture placement in the room works the same with artificial lighting as it does with natural daylight coming in through the windows.

You can get detailed, room-by-room recommendations on light levels (and the number and type of fixtures needed to reach these levels) by writing to the American Home Lighting Institute, 360 North Michigan Avenue, Chicago 1.

Accent lighting must also be carefully planned to be effective

Many types of lamps can be used for accenting—spotlights in the ceiling, concealed lights, wall brackets, and portable lamps. And you can use them many ways. Here are just a few of the tricks of the lighting expert's trade:

1. Accent lighting can highlight a strong design or decorative feature, like a fireplace, wall divider, or painting.

Accent light can, in itself, create a point of interest.
 Accent lighting can make a small room look bigger.
 The technique: cast a "wash" of light over the long wall.

(Conversely, soffit or cove lighting, which bounces light off the edges of the ceiling, makes a room look smaller.) 4. Accent lighting can prevent windows from acting as

black mirrors at night. The basic trick: use an outside soffit light shining down over the window.

5. Accent lighting below eye level (eg, lighting a floorlevel planter box) can create the same kind of restful atmosphere as a fireplace.

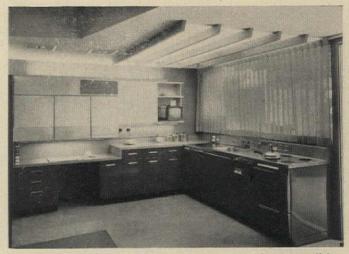
Remote-control systems can provide flexible switching at modest extra cost

With low-voltage remote-control switching you can 1) control lights all over the house from one point (usually, the master bedroom) and 2) control any given light from two or more different switch positions with a minimum of No. 12 wire. The extra cost for this control in an average size house: from \$50 to \$100.

The drawing at right shows how these systems work: The power circuit is wired with No. 12 wire, but all of the wiring between outlets and switches is bellwire, carrying only 24-v current. Bellwire circuits actuate relays at the lights and receptacles, and the relays make or break the 120-v circuit.

In the drawing 90% of the No. 12 wire conductor is eliminated in the three- and four-way switch control. The saving in wire and labor is, at least today, more than absorbed by the extra cost for relays.

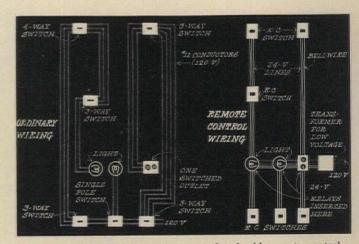
Two other quality switching systems are available: 1) dimmers for lighting in the living and dining room, and 2) time switches for turning on and off outdoor lighting.



LUMINOUS CEILING of fluorescents behind plastic gives strong light.



ACCENT LIGHTING is used in ceiling, walls, and bookshelves.



MULTIPLE SWITCHING CIRCUITS are reduced with remote control.

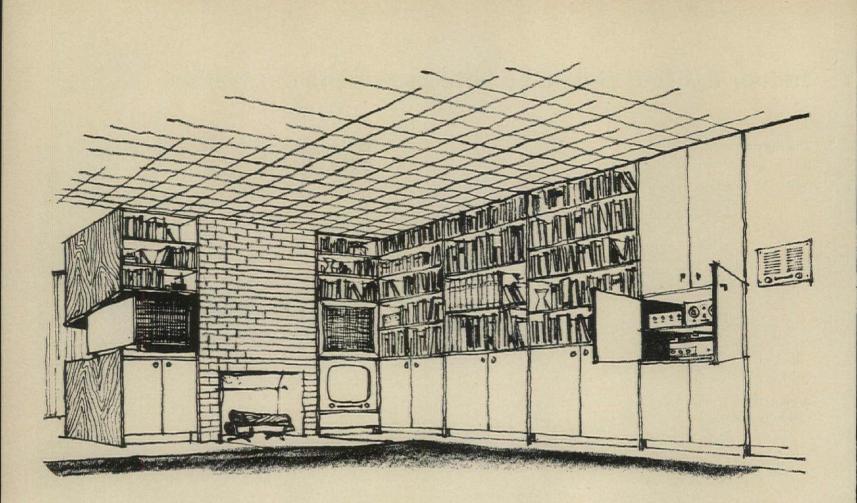
Street lighting can make a project safer, more appealing to buyers

Usually, builders have no direct control over street lighting—systems are usually planned to municipal specifications and installed by the local utility.

But, for most developments, it makes sense for a builder to work with the utility and local officials to get street lighting in character with the area. Every year, new poles (of laminated wood, aluminum, and other materials) and new luminaries come on the market—and if a builder can upgrade the quality and design being used, he will upgrade his development. And in some areas it is possible to get the utility to put the electrical service underground (see p 133).

It is worth the effort—for to most buyers good streetlighting is an asset.

continued



Electrical living can include many special attractions

In an adequately wired and well planned house, the possible uses of electricity are limited only by the imagination of designers and engineers.

With equipment available on dealers' shelves, you can offer clients and buyers complete home entertainment systems. You can offer devices that make the chores around the house much easier. And, if the budget permits, you can add just-plain-luxurious extras.

And the devices listed below are just the beginning. You can expect manufacturers to bring out more and more products to make the good life better—and you can expect that buyers and clients will want them.

Here are ten attractions you can include right now:

- Direct communication to any part of the house. An intercom system can: 1) send and receive from any point in the house; 2) reproduce background music with high fidelity; 3) receive FM or AM radio; 4) serve as a fire alarm; 5) serve as a burglar alarm; 6) serve as a baby sitter by monitoring the nursery. For more on intercoms and high fidelity see H&H, June '59.
- 2 Music where and how you like it. A minimum stereo highfidelity center can be installed for \$200 to \$300. Speakers can be built into a fireplace wall or storage wall, and tuner, player, tape deck, preamplifier, and amplifiers can be built into any other wall of the room. Through the intercom it can provide music in any room in the house.

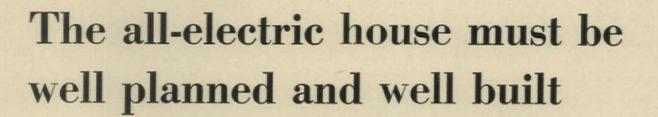
- **3** Telephones almost within arms reach. Concealed telephone wiring, installed when the walls are open: 1) eliminates bellwire along the baseboard; 2) permits more phones; 3) lets homeowners relocate phones at will; 4) adds to house resale value. The phone company usually installs concealed wire at a nominal cost—usually \$15 to \$30—that the builder can absorb or pass on to the homebuyer. Outlets are placed in all rooms, back-to-back in adjacent rooms. Most concealed systems use four phones: one in living room, kitchen, master bedroom, and family room. The living room phone is often on a jack, can be moved to a patio outlet at will.
- **4** Television as a complete built-in. Closed-circuit TV for watching the baby or answering the door can be built-in for as little as \$700. Regular television can be built-in with the high-fidelity equipment. To keep houses looking neat, aerials can be concealed in attic space, or a master aerial can serve a whole subdivision. One new system uses a printed circuit on a big sheet stapled to roof rafters in attic space. A master aerial for a subdivision will cost about \$100 per house, less than the big aerials homeowners buy in weak signal areas.
- **5** Pushbutton garage-door operator. Most garage-door operators consist of three units: a transmitter in the automobile, a receiver in the garage, and a motor for operating the door. Pushing the button on the transmitter at distances up to 100' from the garage will open the door.
- 6 Built-in vacuum systems to clean every room of the house. Lightweight tubing with flexible corner joints runs from a powerful suction machine in the basement to wall inlets in every room. The homeowner simply turns on the system at a main switch and then plugs the cleaner base into a convenient wall inlet. In one system, dirt, dust, and scrub water is sucked into a separation tank that cleans the air and sends dirt-laden water down the drain.
- 7 Snowmelting cable to clear drives and walks at the flick of a switch. Equipment for the average driveway would cost about \$100. In Chicago, annual operating costs would be around \$10. (This gives 156 hours of melting for an average snowfall of 134 hours in the year).
- 8 Pushbuttons to control the flow and temperature of water at the sink and tub. At a touch, the buttons provide hot, two warms, and cold water at full or medium flow. Buttons, on a low-voltage circuit, control valves at or near the water heater. Water is mixed to temperature at the heater so only one supply line is needed to the outlet.
- **9** *Time controls that almost take over gardening.* Automatic sprinkler systems work off a master control unit that gives uniform watering times of 5 to 30 minutes on any desired schedule, day or night, daily or every third day, etc. The automatic timer trips electric valves in the water lines. Timers can also be used for cleaning and filtering swimming pools on a schedule.
- 10 And underground utility lines. In flat, treeless areas (except where trenching costs are prohibitive) putting wires underground is highly desirable and economically practical. For example, Chicago's Commonwealth Edison (a leading exponent of underground wiring) will install it when the builder meets these conditions: he must 1) have a curvilinear street layout that will allow at least 12 houses per transformer; 2) build in relatively flat land and rock-free soil; 3) site at least 24 houses side-by-side in progression; 4) install 100-amp service and at least two 240-v appliances per house; 5) do his own trenching and backfilling (Com Ed will defray up to \$100 a house if the builder puts in electric heat); 6) make house hookups at same time service lines are laid.



continued







A house planned for electrical living must be well oriented, well ventilated, and well insulated. If it is not, many of the advantages of electrical living will be lost to high operating costs.

There is, however, nothing unique about good design for electrical living. Every idea that helps a house work economically with electric heat and with air conditioning will help cut heating costs with any kind of heating system and will help keep a non-air-conditioned house cool.

Here are the basic rules for good orientation

The big windows in today's houses can let out a lot of heat in winter, let in a lot of heat in summer. So the right orientation is important to both comfort and economy.

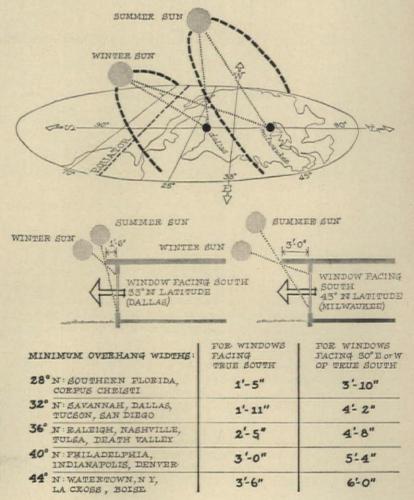
If at all possible, houses should be sited so the big glass areas face south. North windows admit none of the sun's heat, are especially cold in winter. East and west windows boost air conditioning loads in summer and seldom get enough winter sun to help in heating. And even big overhangs can't keep sun off east or west windows.

If you must use windows on the east or west, keep them high in the wall so that, with an overhang, only the lowest sunrays will hit them. In summer, by 4 PM, a 3' west overhang will shade only the top third of a wall—but a high window, right up under the header, would be shaded until 5 PM.

Overhangs can be sized to shade the house from summer sun but let in winter sun to help in heating the house (for details, see drawings at right).

When the site keeps you from using a north-south orientation, or when the best view is to the west, you can use other sun control devices to supplement overhangs. One of the best: planting, especially deciduous trees which shade the windows and the roof in summer but shed their leaves to let in winter sun. Other helpful devices: fences, trellises with plant vines, and the old-fashioned louvered shutter moved inside the house (for convenience).

OVERHANGS SHOULD BE SIZED to help block summer sun, let in winter sun. The farther north a house is, the bigger its overhangs have to be, because the summer sun is more nearly overhead in the south than in the north (see top drawing, right). But in the north, overhangs that are too big block off helpful winter sun for much of the day (see lower drawing). Windows that face 30° off true south need trees or trellises, as well as big overhangs, to help shade in summer, but this orientation will let the house get low-to-horizon sun to help winter heating. Recommended overhang depths are shown in the table, right.



RIGHT

Hedrich Blessing

Here are the basic rules for good moisture control

There are two main methods for controlling moisture in a house. For effective control, they should be used together.

One way to control moisture is by ventilation:

Attics should always be ventilated by vents in the ridge, eaves, or gables, or by exhaust fans, or both.

Crawl spaces should be ventilated with at least four openings, one near each corner of the building, placed as high above grade as possible. (Attic and crawl-space vents should be fixed open all year. If protected by screens and louvers, they should be sized to have adequate net free area.)

Baths and appliances should be vented directly outdoors by blower units.

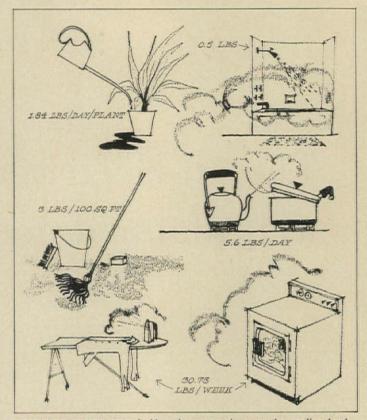
The other way to control moisture is with vapor barriers:

Vapor barriers keep outdoor vapor from entering the house and indoor vapor from entering walls or ceilings. They may be part of the insulation or separate membranes. Vapor barriers can be: metal foil, asphalt or polyethylene coated kraft paper, two layers of kraft paper with asphalt between, or polyethylene sheets.

Vapor barriers must not be broken. Openings around pipes must be sealed and any tears repaired.

In houses that require winter heating, vapor barriers always belong on the side of the insulation that is warm in winter—that is, toward the interior of the house.

Vapor barriers must always be used under a slab, no matter how the house is heated. For more details on vapor barrier location, see drawings at top, opposite.



MOISTURE GENERATED inside a house can increase the cooling load by 25% to 30%. Ventilation removes both heat and moisture.

Here are the basic rules for good insulation

The old 6-4-2 standard for insulation is out. These standard thickness of certain kinds of insulation will do a good job. But experts are now agreed that insulation should be specified on the basis of performance—not thickness in inches. (This is the most important point in the All-Weather Comfort Standard—the industry's new performance standard—on p 138. It gives maximum allowable heat losses and the required thermal ratings for insulation.)

A house should be closed in and reasonably weathertight before insulation is installed, for any moisture in the insulation will make it ineffective.

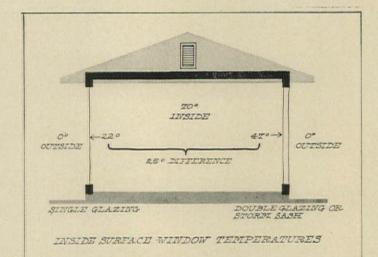
All electrical conduits, piping, and ductwork should be in place before the house is insulated.

The fastenings of insulation should be no further than 6" apart.

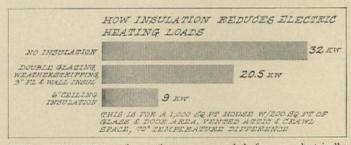
Storm doors and double glazing should be used in cold climates (drawing at right). Even double glazing has six to seven times as much heat loss as an insulated wall. And some experts recommend that to hold the heat loss down the window areas in electrically heated houses should be less than 25% of the gross wall area.

Windows and doors should be calked and weatherstripped, to reduce air infiltration and drafts to a minimum and to cut heating costs. And when packaged door or window units are fitted into a rough opening, any gaps should be filled with insulation.

Insulation should be used in ceilings and roofs, in walls, under floors over unheated space, and around concrete slabs on grade. For details on how to place insulation throughout, see opposite.



VALUE OF DOUBLE GLAZING is shown in this diagram. With single glazing, indoor areas near windows are too cold to be usable.



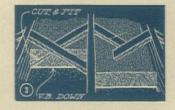
FULL INSULATION reduces the power needed for an electrically heated 1,000 sq ft house by almost 72% (from 32 kw to 9 kw).

Here is where you should use insulation

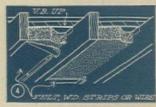
These drawings show you where insulation is needed and where you should use vapor barriers. The recommendations are valid for a house heated with any fuel.

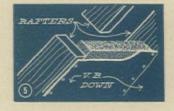
- Insulate and vapor-protect every stud space. Vapor barriers should be continuous over studs.
- 2 Space fasteners no more than 6" oc. The drawing shows flanges of insulation nailed to face of studs, but drywall applicators may prefer them nailed to sides instead. With foil or foil-faced insulation, always leave an air space between the foil and the adjacent surface.
- **3** Cut and fit insulation around bridging in both floors and ceilings.
- **4** With insulation in a ceiling over an unheated area, use either vaporpermeable asphalt felt, wood strips, or wire mesh to hold the insulation in place between the joists.
- **5** With a low-pitched roof and a finished ceiling, put insulation between the ceiling joists, with a vent space between it and the finished roof as shown. With a structural ceiling and rigid insulation, the finish roofing can lie directly on the insulation, without a vent space.
- **6** With a flat roof, be sure there is adequate ventilation above the ceiling insulation.
- 7 Use wire mesh or wood strips to hold insulation in place in floors over unheated (or excavated) areas.
- **8** Use two vapor barriers in a crawl space. One goes in the floor, on the room-side of the insulation. The other goes on the ground, as a separate membrane.
- 9 With electric heat in walls or ceiling, use not less than 2" of insulation around the edges of a slab and extend it back under the slab 18" to 24" where possible.
- **10** With electric heat in the floor use the same 2" perimeter insulation described in No. 9. Also, use 3" of insulating concrete for the first layer of the slab. After this layer is poured and set, heating elements are put in place and covered with a regular 2" concrete wearing floor.
- **11** Remember to insulate between pipes. You can wedge the insulation and vapor barrier behind the pipes (a) or cut the insulation in half, wedge half behind pipes, half in front (b).
- **12** Insulate between the ends of floor joists. With 10" and 12" floor joists, you would have a strip of heat loss almost 1' wide all around the house if you omit insulation at this vital point.



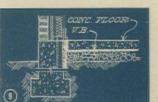




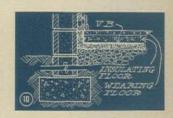










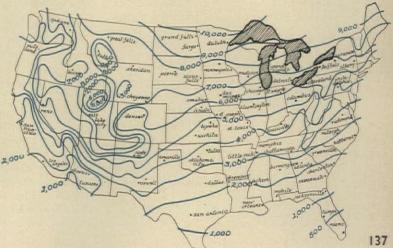




This map will help you figure heat losses

Find your location on the map and you will know the approximate number of degree days for your particular area. With this information, you can use Table 1 in the All-Weather Comfort Standard (see next page) to find the maximum heat loss values for which you should be designing and building.

The number of degree days for each day is figured by subtracting the average temperature for the day from 65F. (If the average is 30F, the number of degree days for that one day is 35). The daily totals are added to get the annual total, shown on the map at right. Miami, for example, has 2,0° an average of only 500 degree days a year, while Minneapolis averages 8,000 yearly.



continued

Here are the important points in the All-Weather Comfort Standard for electrically heated and air-conditioned homes

The purpose of the standard is to encourage good insulation practice so the homeowner will benefit from:

- 1. Lower first cost of both heating and cooling equipment.
 - 2. Lower operating cost for both heating and cooling.
 - 3. Greater comfort during both heating and cooling seasons.

The objective of the standard is to establish:

- 1. Recommended heat-loss values for electrically heated homes.
- 2. Recommended maximum summer heat gain for air conditioned homes.
- 3. Responsibility for insulation quality and application.

Here are the recommended heat-loss values for electrically heated homes

When based on an infiltration rate of one air change per hour, the heat-loss values in Table 1, which are expressed in Btuh per sq ft of floor area of the space to be heated (measured to the outside of the exterior wall), will generally be achieved with the U values recommended in Table 2.

IADLE I.	Recommended maximum	
Degree days	Btuh/sq ft	Watt-hr/sq ft
over 8,000	40	11.7
7,001 to 8,000		11.3
6,000 to 7,000	35	10.3
5,001 to 6,000		9,4
3,001 to 5,000	30	8.8
under 3,001 .		8.2
(calculated in	Recommended thermal	•
(calculated in		•
(calculated in in the curren	accordance with the met t ASHRAE guide)	•
(calculated in in the curren Building secti	accordance with the met t ASHRAE guide)	hod described ue, (Btuh/sq ft/°F)
(calculated in in the curren Building secti Ceiling	accordance with the met t ASHRAE guide) ion U val	hod described ue, (Btuh/sq ft/°F) 0.05
(calculated in in the curren Building sect Ceiling Frame walls	accordance with the met t ASHRAE guide) ion U val	hod described ue, (Btuh/sq ft/°F) 0.05 0.07
(calculated in in the curren Building secti Ceiling Frame walls Masonry wall	accordance with the met t ASHRAE guide) ion U val	hod described 0.05 0.07 0.12

These values should perhaps be lower in severe climates, or when ceiling heat is used, or when glass areas are more than 20% to 25% of the gross wall area.

Weatherstripping, double glazing, and storm doors should be used as required to meet the heat-loss values in Table 1.

Here are other recommendations in the standard:

Infiltration, natural and mechanical ventilation, vapor barrier and slab-on-grade heat-loss considerations should meet the requirements of FHA-MPS.

Wall, ceiling, or floor sections between fully and partially heated spaces (such as garages, recreation rooms) should be insulated when the temperature difference between them is expected to be more than 20F.

Fireplaces should be provided with tight fitting dampers.

Here is the recommended maximum summer heat gain for air-conditioned homes:

The total calculated heat gain of all spaces to be cooled to the comfort level should not exceed 25 Btuh per sq ft of floor area of this space, measured to the outside of exterior walls. Calculations for this should be made from data contained in the current ASHRAE guide.

Glass areas should be shaded by trees or overhangs in order to minimize effect of the sun.

The recommended maximum heat-gain value of 25 Btuh per sq ft can be achieved with the performance values recommended in Table 2, when glass areas are shaded.

Who is responsible for

insulation quality and application?

The insulation manufacturer shall be responsible for the quality of material and, when required, shall certify to its performance when installed in accordance with his application standards.

The applicator shall be responsible for installing the material in accordance with the manufacturer's recommendations and shall certify that the material has been so installed.

Can the All-Weather Comfort Standard be made to work?

Its sponsors think so: they point to recent action by the National Mineral Wool Assn, the first trade association to implement the standard. Users of mineral wool insulation will now be able to tell whether the product is in line with the Standard's recommendations, because the NMWA members intend to specify and identify their products with the appropriate "R" number. This shows the installed performance of each insulation, and fits the standard this way:

Building section	R	number	U	value
Ceilings		R 19		0.05
Walls		R 11		0.07
Floors over vented spaces		R 13		0.07

This means that if a builder needs a 0.05 U factor for a ceiling he should specify insulation rated R 19.

These companies and organizations have already accepted the standard

American Electric Power Co Appalachian Power Co Arkansas Power & Light Co Barrett Div, Allied Chemical Corp Certain-Teed Product Corp Cleveland Electric Illuminating Co Commonwealth Edison Co Detroit Edison Co Forty Eight Insulation Inc Indiana & Michigan Electric Co Johns-Manville Sales Corp Kentucky Power Co Kingsport Utilities Minnesota & Ontario Paper Co National Gypsum Co. National Mineral Wool Assn Ohio Power Co Owens-Corning Fiberglas Corp Rock Wool Insulating Co Tennessee Product & Chemical Corp Texas Rockwool Div, Premium Brand Tex-Ark & Rockwool Corp Union Electric Co US Mineral Wool Co Wheeling Electric Co Edwin L. Wiegand Co Wood Conversion Co



If you build for electrical living, utilities will go all-out to help you

Electric power companies are spending millions of dollars this year to help homebuilders sell "Live Better Electrically Medallion" houses. For a description of the assistance you can get under the utilities' Gold Medallion and Bronze Medallion programs, see the next two pages.

And for a look at five Medallion-winning houses, see p 142.



Interior display sign was furnished by Union Electric for M-C Construction Co's Gold Medallion model in St Louis.





Lighting and wiring features are explained in this display prepared by Dallas Power & Light for Fox & Jacobs' sales office.

Electrical system is explained to visitors by a representative of Connecticut Light & Power at Anderlot Construction's model house in Cheshire, Conn.

Here is the kind of help Medallion builders get

The help that Dallas Power & Light gives is typical. Here, for example, is a list of the services it provided during the building and the opening of Progress Homes (shown on the previous page and built by W.J. Chambers and Gus Melde):

1. It first made it easier for all builders to offer total-electric houses by reducing its winter residential rate for electrically heated homes from 1.65ϕ to 1.25ϕ per kwh.

2. It helped the builders figure heating and cooling requirements and wiring plans to qualify their houses as Gold Medallion homes. (The \$19,450 to \$23,000 houses include electric ranges, ovens, disposers, washers, dryers, dishwashers, refrigerator-freezers, various minor appliances, heat pumps, adequate wiring, and many lighting fixtures.)

3. It helped organize a display of materials and appliances in one of the builders' six furnished models.

4. It furnished weatherproof directional signs.

5. It furnished yard lights for each of the six models.

6. It shared the cost of large site signs (shown on the previous page) with the builders and two suppliers.

7. It ran its own large-space ads in both Dallas newspapers and used spot announcements on seven radio stations to promote the tract during opening week.

8. It helped design and pay for 10,000 brochures which the builders gave to visitors.

9. It provided demonstrations in the model homes during opening week.

10. It provided illuminated house numbers (with Gold Medallion insignia) and gold car keys for all buyers.

And the utility worked closely with major suppliers to help the builders from the start of planning to completion of each house. Result: Builders Chambers and Melde have sold 50 houses of 71 planned and count the Medallion program an unqualified success.



Home Economist Jo Dobbins of Virginia Electric & Power prepares kitchen and lighting plans for Richmond builders.





Newspaper ads like this, on a \$50,000 contest, are part of Southern California Edison's Medallion promotion program for builders.

Builder Representative B. K. Campbell Jr of Virginia Electric & Power calculates the heat loss for Holly Glen Estates' electric heat system in Richmond.

Not every Gold Medallion builder gets as much help as Chambers and Melde. But some get even more. Some utilities give a builder \$100 or more per house if he puts in electric heat. And one company—Georgia Power—pays for adequate wiring (by any qualified electric contractor) up to and including the service entrance of an electrically heated house. This saves the builder about \$200 in wiring costs. Two other big southern utilities—Alabama Power Co and Mississippi Power Co—were planning to put similar wiring plans into effect April 1.

Builders of all kinds of houses can get in on the benefits of the Medallion program

Development houses, custom-built houses, and apartments in all price classes can qualify two ways under Edison Electric Institute's "Live Better Electrically" program:

1. A house qualifies for a Bronze Medallion if it has 100amp entrance service, about 20 wiring circuits, lighting that meets American Home Lighting Institute standards, and three or four major appliances. (Some variation exists across the US, permitted by EEI and National Electric Manufacturers Assn, which has become the policing agent for the utilities' program.) Utilities' promotional support for such houses usually includes cooperative advertising, demonstrations of electrical equipment in models, and sometimes small cash awards.

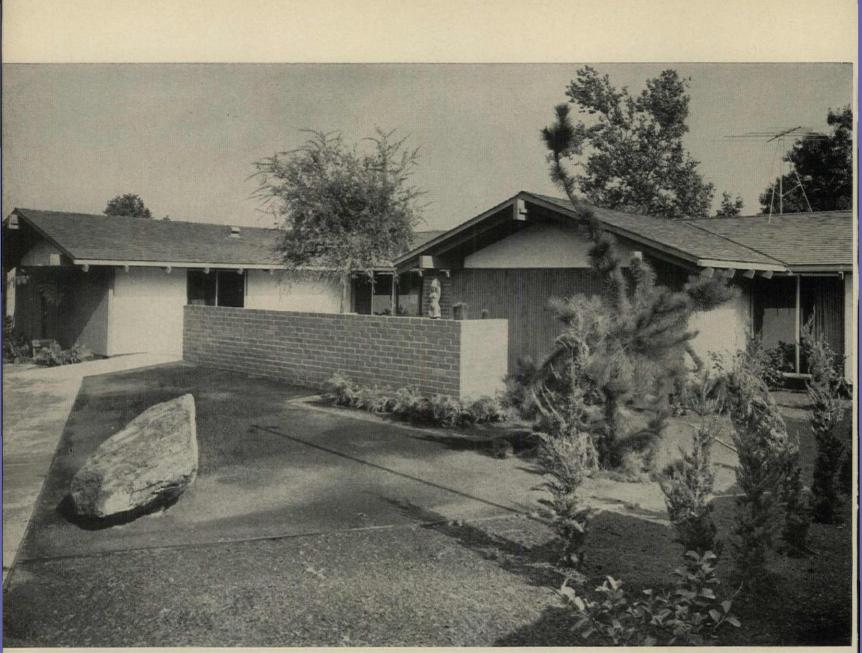
2. A house qualifies for a Gold Medallion—and all-out promotional support—if it has all a Bronze Medallion house has plus electric heat (resistance or heat pump), electric hot water, and about seven major appliances.

Nearly 100,000 Medallion homes have been built in the past two years, most bearing the bronze insignia (set in sidewalk or outside wall). This year another 100,000 or more will be built. A higher percentage than ever before will be all-electric houses and apartments meeting Gold Medallion standards.

Utilities are putting more emphasis than ever on all-electric houses for two reasons:

1. They are a huge source of power-company profits. For example: GE estimates that an all-electric Gold Medallion house uses about 25,000 kwh (national average for all households: 3,600 kwh).

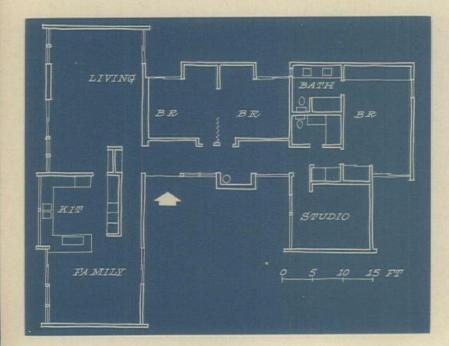
2. They help a utility balance its year-round load. The recent spread of air conditioning has unbalanced loads by leading to summertime peaks in the use of electricity and idle generating capacity in the winter. Ten years ago this was a problem in no more than half a dozen states; by 1962, it is expected to be a problem in most states.



RANCH HOUSE has two front wings, the one at left for family room and kitchen, the one at right for a studio.

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This house is a showcase for electrical equipment



To launch its Gold Medallion program in a striking way, Southern California Edison Co co-sponsored this house (with the Building Contractors Assn) at the Los Angeles Fair.

Both the builders and the electric industry in Los Angeles gained from the joint venture. Thousands visited the well furnished model which was filled with electrical equipment including a range, oven, refrigerator-freezer, garbage disposer, dishwasher, barbeque, washer-dryer combination, central vacuum system, an intercom system, hot-water heater, heat pump, 200-amp entrance service, low-voltage switching system, a wide variety of lighting fixtures, and minor appliances.

After the fair, the 1,985 sq ft house was bought by Architect Harlan Pedersen, moved (in three sections) 40 miles to its present site in Sierra Madre, Calif.

FLOOR PLAN puts living area in one wing, bedrooms in another. House has three bedrooms plus a studio that can double as a fourth.

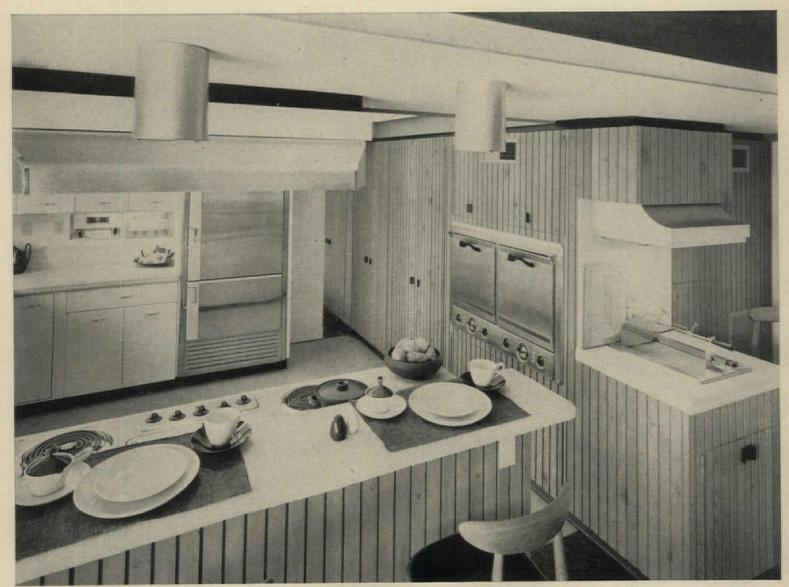
Photos: Fadlerfoto



REAR LIVING ROOM, 24'x16', features a dramatic fireplace wall and brick slab floor. Valance and spot lighting are both used.



MASTER BATH has a valance light over the tiled vanity and lavatories, plus accent lighting. Both baths have ceiling fans.

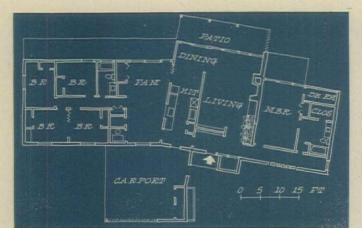


BRIGHTLY LIGHTED KITCHEN has a 10'x8' luminous ceiling with dimmers plus dropped spots over breakfast bar. View is from family room.



BRICK HOUSE has 2,418 sq ft plus carport, sold for \$30,800 including a \$5,800 lot in Dallas. Bronze Medallion house is air conditioned.

This house is wired for family privacy



In this 88' house, the master bedroom is 56' from the four children's bedrooms-and buffered from them by the living room, family room, and kitchen (plan at left and pictures of bedrooms below). Yet the parents can feel close to their children at any time. Reason: the house has an intercom system and remote-control lighting-both controlled from the master bedroom.

Says Builder Dave Fox: "We don't consider good wiring a luxury, particularly in a \$30,000 house like this."

Fox also points out that built-ins like desks, bookcases, and cabinets are popular features that help sell houses-"particularly when the built-ins are properly lighted."

This is one of many "Flair" models built by Fox & Jacobs.



and loudspeaker. Master switch in room controls all wiring in house.

FLOOR PLAN (left) puts living areas in center, bedrooms at both sides.



MASTER BEDROOM has six lighting outlets plus jacks for phone, TV, CHILDREN'S BEDROOMS, divided by folding door, have luminous switches, two-way intercom speakers, indirect lighting over built-in desks.



HALL 24' long across front of house is lighted by day by six slit windows, at night by 9' fluorescent valance lights, upper right.



KITCHEN, viewed from dining room, has built-in oven, range, hood, dishwasher, disposer, and blender. Counter lights are at work height.



LIVING ROOM is well lighted on both sides by valance lights which can be dimmed. Planting area has both a skylight and pendant lamp.

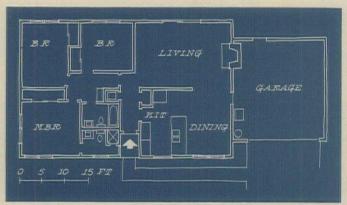


COVERED TERRACE off living and dining rooms at rear of house is lighted by two spots. Speaker jack is between sliding doors.



RANCH looks larger than its 1,200 sq ft because of attached two-car garage, 4'-wide overhang, and hip roof with ridge extension.

This well equipped model is a best-seller



And Conejo Valley Development Co plays up its Bronze Medallion standing to convince prospects of the quality offered in this \$15,000 house. Price includes built-in range and oven, garbage disposer, and clothes dryer, as well as 100-amp entrance service, 20 wiring circuits, and extensive lighting. The models opened last fall, quickly sold out (250 units in the first section). Result: Harris Goldberg is bringing out new models this month with even more electrical equipment and expects to sell 1,000 houses this year in his two tracts in Thousand Oaks, Calif.

FLOOR PLAN (left) divides house almost equally between living room, dining room, and kitchen at right, three bedrooms and two baths at left.



REAR LIVING ROOM has a fireplace and sliding glass doors opening to terrace. This view of 20'x13' room is from entrance hall.

KITCHEN AND DINING ROOM (left) are separated by this breakfast bar. Pendant lamps and recessed lights brighten both rooms.



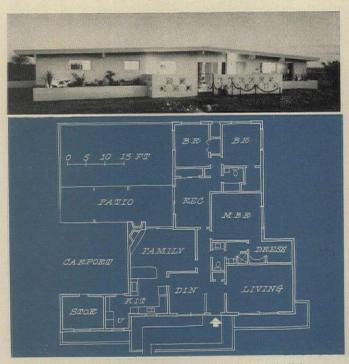


LUMINOUS CEILING AND RECESSED SPOTS light this fully equipped kitchen. View is from family room at rear of house.

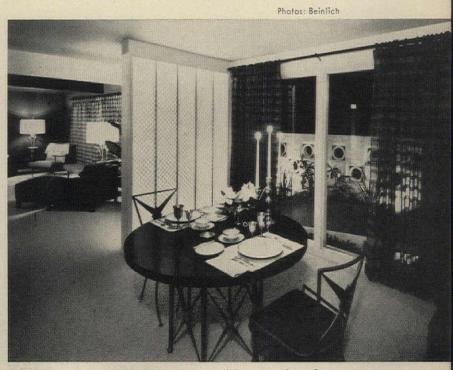
This "house of light" draws nighttime crowds

and all design

Although this showcase model was open only at night, it drew over 20,000 visitors when Phoenix Builder Ard Hoyt put it on display. Hoyt found that "it's easy to draw prospects at night when you give them something new in lighting to see." The Gold Medallion house includes radiant heat, air conditioning, several major appliances, and a wide range of lighting features including luminous ceilings in kitchen and baths, several pin-point spots, and extensive yard lighting. Result: Hoyt quickly sold the house at \$45,000, is still making sales to people who want the features it offered.



"T" PLAN HOUSE has three bedrooms, two baths, and six living areas —living room, family room, playroom, hobby room, dining room, kitchen.



LUMINOUS "WALL OF LIGHT" separates dining room from foyer. Beyond foyer is living room with valance lighting and table lamps.



L-SHAPED HOUSE is nearly solid wall in front, nearly all glass at rear where the living room faces the Gulf of Mexico.

This house is wired to make it seem larger



SQUARE KITCHEN, seen from dining area, groups appliances on two sides, each well lighted. Door beyond leads to entrance foyer.

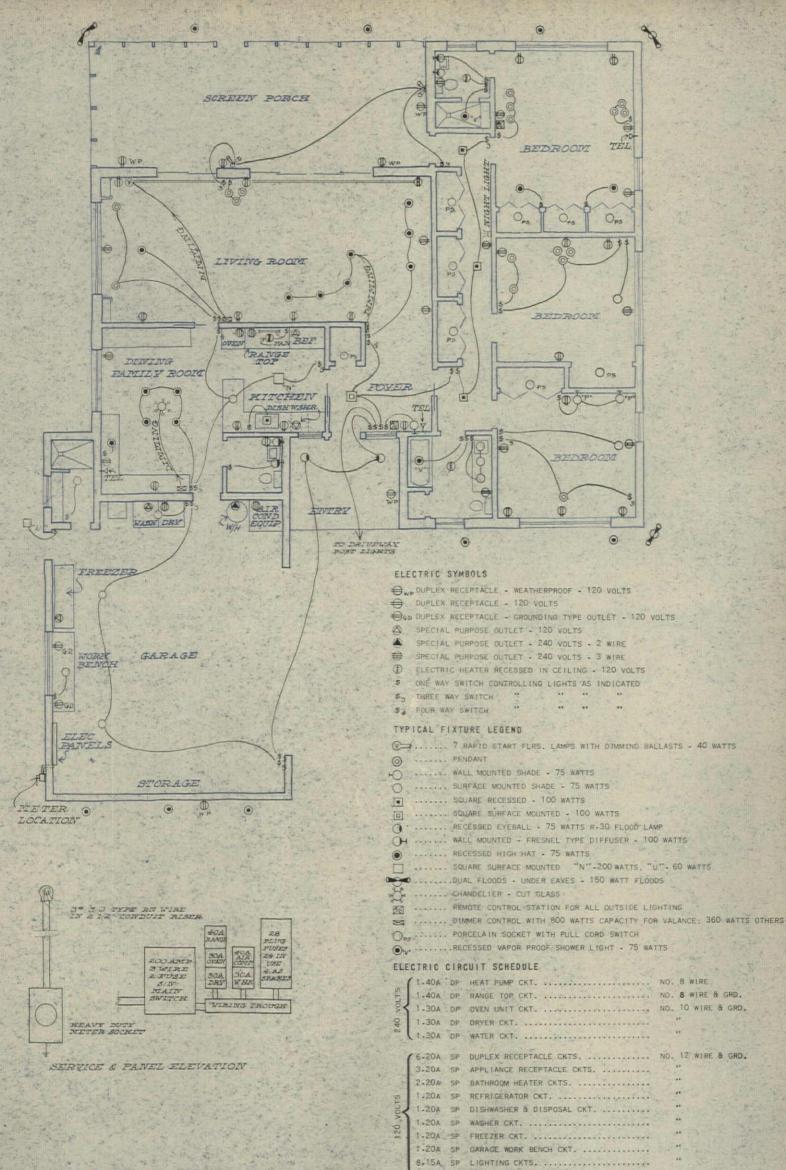
So says its builder, William R. Brodie, who believes that "adequate wiring and lighting makes rooms seem larger and lets a family use more of its living space to better effect."

This \$45,000 Belleair Shores house rated a Gold Medallion from Florida Power Corp for its heat-pump system, seven major appliances, 92 lighting fixtures, and 200-amp, 33-circuit wiring. The wiring and lighting was planned with the buyer, includes dimmers for living room valance and dining room lights, plus recessed, pendant, and surfacemounted fixtures. "The \$2,000 cost," says Brodie, "is not too much when you consider the cost of furnishings and how much handsomer furniture looks when properly lighted."

The wiring diagram opposite shows layout of lighting fixtures, appliances, and convenience outlets. /END



DINING ROOM has hanging fixture as well as dimmer spots over table, plus a recessed spot over the built-in desk in one corner of room.



4 SPARES - FUTURE LAWN PUMP. SWIMMING, POOL, ETC.

Pacific Anglal Surveys Inc

In Seattle, builders have learned that "the old house is the key to new-house selling"

So ...

They put their new house selling in the hands of a realtor

They pay him a 5% commission

They depend on his person-to-person selling rather than on razzle-dazzle promotions

This sales formula works so well that nine out of ten Seattle builders use it.

Says Builder Don Potter: "We started building one-at-a-time only six years ago. Now we're doing 125 houses a year and a \$2 million gross. Realtor Howard Parker made us what we are."

To find how the Seattle sales formula works, I visited a score of builders, then took a close look at the three realty firms that last year sold more than half of Seattle's new houses. The "Big Three" (see opposite page): 1) MacPherson's Inc, 2) Picture Floor Plans Inc (Howard Parker), 3) John L. Scott.

It was Scott who first told me what dozens of Seattle builders and realtors later confirmed: "We have found that you must treat the *old* house and the *new* house as *one market*, if you want to sell the maximum number of *new* houses." Builders and realtors gave me the two reasons (opposite) for this sales rule.

Reported by Carl Norcross

1. Many prospects who start out to buy an old house

can-and should-be sold a new one

This is a very important factor in the Seattle sales picture. Scott told me: "Probably half our new-house sales are to people who first asked us to find them an old house." Howard Parker puts the figure at one-third.

So Seattle salesmen are free to sell both old and new houses. When a prospect says he wants an old house, the salesman begins by showing the best old houses he has. If he cannot find an old house that suits the prospect, or if he feels sure that a new house would fit a family's needs better, he can usually persuade the prospect to look at one or more new houses. Thus, many buyers who at first were dead set against a new house end up buying one. (Realtors make almost the same commission on old and new house sales: 6% for the old, 5% for the new.)

This method of selling is good for the builder because more prospects see his houses, good for the buyer because he sees a wider variety of houses, and good for the realtor because he has more prospects and more houses to sell.

2. Many prospects who start out to buy a new house

must first sell their old one

Says 50-house Builder Ellsworth Lovell: "Fifty percent of our deals hinge on selling the old house." Says 400-house Builder Jack Morrison: "One-third of all my sales are contingent on the buyer being able to sell his old house."

So trade-in is a key to new-house selling in Seattle. But it is the realtor—not the builder—who takes the risk. Says Builder Lovell: "I never even see the old house, much less discuss its value. The realtor handles everything." Says Builder Morrison: "When the same realtor is handling both sales, he works like mad to sell both old and new."

The usual system in Seattle: a guaranteed trade (if the realtor fails to sell the old house before the buyer takes title to the new house, the realtor takes over the old house at a previously agreed-upon price).

Does the realtor ever take a loss on a trade-in? Seldom. "We won't accept a deal unless we know it is okay and we can sell the old house at a certain price," explains Parker. "But once we've signed, we push. For example, we put the used house on our 'hot buy' list and everyone works to sell it. And in our sales contests, we award extra points on these houses-maybe three times as many."

of new-house sales involve a trade-in) sell 95% of trade-in The MacPhersons (who have one branch office where 70%of new-house sales involve a trade-in) sells 95% of trade-in houses while they're still occupied.

Seattle realty salesmen are experienced, well trained, well paid—they earn from \$10,000 to \$50,000 a year. And they get results: The MacPherson's salesmen, for example, make 39% of their sales the first time out with a customer.

To get results like these, Seattle realtors practice familar and proven sales methods—plus some innovations of their own. Some of these innovations are big sales management ideas (eg, the roving salesman). Others are little sales tips (eg, what to say to prospects on the phone). But whether they are big ideas (see p 152) or little tips (see p 153) they are innovations that many realtors and builders all around the country could borrow with benefit.

continued



THE MACPHERSONS-Bill (left), Murdock.



HOWARD PARKER of Picture Floor Plans.



THE SCOTTS-John (right) and Lennox.

Here are the top men in Seattle's "Big Three" realty firms

The three firms headed by the men pictured above sold roughly 60% of Seattle's new houses last year, according to one of their spokesmen (Dana Brown, Picture Floor Plans).

Brothers Bill and Murdock MacPherson grossed \$34 million—sold 969 new houses, 1,464 old houses. They have seven offices and 99 employees.

Howard Parker's Picture Floor Plans Inc grossed \$26 million—sold 950 new houses, 1,050 old houses. Parker has six offices.

John L. Scott and his son Lennox grossed \$11.5 million sold 200 new houses and 200 old houses. They have four offices, specialize in houses priced over \$25,000.

The bigger the Big Three get, the better their sales formula works for builders. Why? Because it is their high volume built up by selling both old and new houses—that attracts good salesmen and permits the hiring of experts (on land, financing, sales training) who provide the services builders need.

Here are ten sales ideas-

some for realtors, some for builders, some for both:

1. Let every salesman sell any house anywhere in town. Parker and the MacPhersons have roving salesmen who are free to pick up prospects in one subdivision and take them to any number of other subdivisions until they find the house they want. (Other salesmen are stationed in model houses.)

The rover's method: he parks in a strategic spot and watches for people who look at houses without going into them. Then he introduces himself and tries to find out if they are likely prospects. If they are—and if he can't interest them in a house in his subdivision—he drives them to other subdivisions.

Once the salesman gets a couple into the car with him, he has an opportunity to find out what they are looking for, to win their confidence, and perhaps to drive them out farther than they had intended to go. Scores of subdivisions on the fringes of Seattle have been successful because salesmen talked people into "taking 15 minutes to see something you'll like."

"This mobility is one of our salesmen's greatest assets," says Murdock MacPherson. "But it also demands more from them because they have to be familiar with the houses of at least half a dozen builders, plus scores of old houses."

"There's another angle, too," says Howard Parker. "Many people don't really know what they want when they start looking for a house. If a salesman is free to take them to any number of houses in any area, style, or price class, he can help them decide what they want."

How do builders feel about having prospects steered from their houses to a competitor's? One builder put it this way: "I don't care what my realtor does as long as he sells enough of my houses. Sure, his salesmen may steer some people away from my subdivision to the next guy's. Or he may sometimes advertise a competitor's house and not mine. But it works the other way, too."

2. Use the buddy system. All three firms assign a sponsor (a salesman or a branch-office manager) to each builder client. The sponsor works closely with the builder on all his problems. He has a direct interest in his builder's success because, whether or not he sells a house, he gets an override (up to 10% of his firm's commission) on every sale of the builder's houses.

Here is the way sales commissions are split in Seattle

Take the 5% commission on a \$15,000 new house, for example. Of the \$750 commission, 10% (\$75) goes to the salesman (or branch manager) who "sponsors" the builder (item 2, above), whether or not he makes the sale. Of the balance (\$675), half (\$337.50) goes to the salesman making the sale and half to the firm. If the salesman making the sale also sponsors the builder, he gets \$337.50 plus \$75.

One firm splits its commission evenly with the salesman making the sale; he then pays 5% of his share to the builder's sponsor. Example: on a \$15,000 house, the salesman gets \$375, then pays out \$18.75 to the sponsor.

On old-house sales, the firm and salesman split the 6% commission evenly. If a salesman originates a lead but someone else in his firm sells the house, he gets a handler's fee. The sponsor's duties: he makes sure that the model house (if there is one) is ready for weekend traffic, that signs are up, and that ads are in the papers; he sees that other salesmen are familiar with the builder and his houses; and he sees that the builder gets all the services (see p 154) he is entitled to and all the help he needs in running his business.

For example, if a builder wants help in setting up an accounting system, or needs advice on purchasing, or is having trouble finding a good subcontractor, he talks to his sponsor. The sponsor takes the problem to the realtor's central office and there's always someone in the organization who can come up with a good answer. What's more, two or three sponsors often arrange for their builders to meet and talk over common problems.

3. Break your big team into little teams. Seattle's Big Three decentralize through branch offices. Among them they have 17 offices. Their idea: to stay close to builders (who like being part of a relatively small branch-office operation) and prospects; and to provide close supervision of salesmen. Each office is run by a branch manager who handles sales meetings, prepares classified advertising copy, and schedules salesmen's time (at open houses, for night work, and for other jobs).

4. Bear down on basic training. Parker employs a training specialist, Dana Brown, to conduct classes for new salesmen. New men are then sent to a branch office for onthe-job training by the office manager. All Parker salesmen attend weekly sales meetings and go on sales caravans to learn the features of new subdivisions.

5. Keep your salesmen posted on the market. The Mac-Phersons and Parker issue weekly "hot buy" lists which tip off salesmen on the best old-house listings, "contingency" houses that must be sold before a family can buy a new house, the best buys in new houses, etc. The MacPhersons alone pour out 50,000 sheets of information a month. Both firms also have private teleprinter networks to up-date branch offices on market developments.

6. Spell it all out in a sales training manual. The Mac-Phersons supply their salesmen with a manual so packed with practical advice it could serve as a textbook for realtors and builders anywhere. Samples: "Find out why the prospect is looking for a new house . . . Show what prospects want to see . . . Make each room mean something during your trip through the house . . . Glamorize what's good . . . Be frank about what's bad—point out the faults because the prospect will see them himself if you don't and a minor flaw then becomes a major objection . . . Don't underestimate costs—if you say taxes are 'about \$200' and they turn out to be \$240, the buyer loses faith in you."

7. Put the facts at the salesman's fingertips. All three firms provide their salesmen with looseleaf sales books that include subdivision layouts, floor plans and elevations, house and lot prices, and financing data. So, no matter where they are selling, the salesmen are never at a loss for the facts and figures buyers want.

8. Give your salesmen an incentive to sell a house before it's finished. Example: Although Parker and the Mac-Phersons are members of a multiple-listing service in Seattle's North End, they do not list a new house until it is completed. This gives their salesmen a time advantage and a strong reason to push the sale of houses before they are finished. (Both firms say they sell about 90% of their own exclusives.)

Incidentally, well over half the new houses sold last year by Seattle's Big Three were sold while they were still under construction or even before they were started. For example,



TYPICAL BRANCH OFFICES of Seattle realtors are designed to attract passersby. Left to right: branches of MacPherson, Scott, Parker.

<image>

SELLING FROM AN UNFINISHED HOUSE. Parker Realty Salesman Tom Hawley describes to prospects how house will look and live when complete. *Left:* Hawley (wearing hat) points out advantages of

floor plan, also answers couple's questions' about minor changes. *Center:* Hawley tells husband how easily basement bath and recreation room can be finished. *Right:* back in office, Hawley closes sale.

Builder Jack Spillane's new subdivision, like most others in Seattle, had no model house. But 21 of his houses (\$14,650 to \$18,000) were sold before the first one was finished. Says one of his buyers, Dr. Clifford Foster, a University of Washington instructor: "When we bought our house, only the foundation was in. It was like building our own home."

9. Move the buyer in before his mortgage is processed or as soon as his house is finished. Under this arrangement conceived by Seattle's realtors—the buyer pays the builder a daily rental (usually \$3) for the 30 to 45 days it takes to clear his mortgage. Sales benefit: there's less chance of losing a prospect who needs a house in a hurry. Other benefits: instead of standing idle, the house is heated, maintained, and protected from vandalism. Remarks Builder Jack Morrison: "One per cent of my profit comes from these rentals."

What if a buyer can't qualify? That happens so seldom it is no problem. Says Morrison: "My realtor's salesmen are so good at qualifying buyers that in ten years I've never lost a customer who had moved into one of my houses."

10. Use advertising to get prospects to phone or visit your office—not to get them to a house or a development. "We use the ads as beginners," explains Parker. "Once we get prospects on the phone or in our car, we can sell

them any of hundreds of houses in any section of town."

Here are four tips

for realtors' and builders' salesmen:

1. Watch the house-for-sale ads placed by homeowners. They are a fruitful source of leads—if a man is selling his old house, he is apt to be in the market for a new one. In one Seattle realty firm, salesmen arrive at branch offices by seven o'clock on weekend mornings. Their first job: comb the classified ads, and call the advertisers. Another firm has a man in the main office who checks all house-for-sale ads,

2. Don't say too much on the phone. Phone calls answering ads (source of 40% of the MacPhersons' sales) are handled with skill. Says one salesman: "The trick is to know when to stop talking. I tell the caller only enough to interest him in the house. Then I try to make an appointment to show it. If the advertised house isn't what he wants, I get a chance to show him other houses." 3. Sell a raw new neighborhood by showing prospects an established one. Says one Seattle branch manager: "Most homebuyers shop first for a desirable neighborhood. But neighborhoods in which houses and streets are still being built don't look desirable. So we start out by showing prospects one of a builder's older neighborhoods and pointing out its best features. Then we take them to the new area where he is working."

4. Sell the benefits all the time. Says Bill MacPherson: "Try to paint a word picture for the customer. Show him what the house will mean to him in terms of better living. And talk up the advantages of everything from a quality water heater (low maintenance and long life) to a cul-de-sac street (safety for kids because there is no through traffic)."

Extras are an important part of the package

the builders get from their realtors

For a 5% realtor's commission, a Seattle builder gets not only professional selling but also a string of services that free him from almost all problems except actual construction. For example:

Realtors solve the builder's land problem. They option raw land for the builders to buy (the builder pays a 10% commission on the sales price); buy raw land and resell it to the builder; develop lots and sell them to builders (price: the FHA valuation); and put the builders in touch with lot owners who want a house on their property.

"Our builders know they can get a deed from us today and start building tomorrow," says Lennox Scott. Says Builder Jack Morrison: "I develop about half my land. But I can't find land fast enough, so I buy half my lots from my realtors."

When it comes to land, realtors have the big picture, are quick to buy in salable locations. Because they operate all over town, they know the direction the town is moving. And because they work with lenders every day (see below), they know the land that lenders like.

Last year, for example, Parker bought 128 lots in Bothel, some 20 miles from downtown Seattle. No one had built a new house there for 20 years. Parker urged Builder Jack Spillane to buy 21 of the lots "and see how they go." They went fast. Parker sold Spillane's 21 houses at the foundation stage, and Spillane has now bought and is building on the rest of the lots.

Realtors solve the builder's money problem—get both his construction and mortgage financing. In fact, most Seattle builders never see a lender except when he inspects their houses.

The Big Three realty firms know their lenders well because they are the lenders' biggest customers. George Weiland, Parker's closing-office manager, points out: "We handle up to 2,000 loans a year and work with practically all the local lending institutions, so we know their requirements."

The lenders like working with realtors.

Says Steve Anderson of the Lincoln First Federal s&L: "We'd rather deal with a good realtor than directly with a builder."

Says Al Carlson of Carlson Mortgage Co: "The builderrealtor team is a good thing . . . The realtors here are capable, competent, and good salesmen. The success of new areas like Bellevue (where Parker alone sold 125 new houses last year) can be attributed largely to the realtors, and we like to have mortgages in successful areas like that."

Says Garth Marston of Washington Federal s&L: "We like to work with these realtors. They sell many houses under construction, and this makes it easier for the builder and for us." *Realtors give the builder market advice*—suggest the type of house, the style, price, and location that will sell best. Each firm supplies its branch managers with up-to-date lists of houses sold in their areas, also confers with him daily on market conditions. Managers pass this information along to their builders.

"Right now, Seattle has \$20,000 splits coming out of its ears," Murdock MacPherson told me a few months ago, "so we keep our builders from putting up any more."

Says Builder Jack Morrison: "The MacPhersons tell me when there is a shortage of four-bedroom houses, basement houses, hillside houses, or \$14,000 houses—just to name a few examples. This helps me decide what to build."

Realtors help the builder get better design. Says Scott "We always tell our builders to get an architect. We'll find them a good one if they ask us to."

Reports Salesman Jack McIntosh: "One of our builders was doing only six or eight houses a year. We helped him get a new architect and worked with him on every detail. He developed such a good house we were able to sell 55 in three weeks. Now he's ready for a new tract and he'll probably build 200 houses this year."

Realtors urge the builder to use better products in his houses. Says Realtor Parker: "We have to sell the house, so we want good products in it." Says Builder Don Potter: "Parker's salesmen influenced us to use French doors to the patio and sliding glass doors in the house. They sold us on kitchen built-ins and a dishwasher. They sold us on laminated plastic or ceramic tile countertops instead of linoleum, on a garage instead of a carport, on a good central warm-air system instead of a wall furnace. We've turned our smaller model into a luxury house."

Realtors help the builder buy products at a good price. Example: Scott gets all his builders to install ranges, ovens, and dishwashers by the same manufacturer. Result: the manufacturer bases its price on a big-volume order. Says Scott: "Even my small builders get these appliances at the same price as Bell & Valdez (at over 600 houses a year, one of Seattle's biggest builders)."

Realtors advertise the builder's houses. But Seattle realtors don't do much advertising (or merchandising) compared to builders and realtors in other cities. And most of what they do is in the classified sections. Says Parker (who spends only $\frac{1}{2}$ % of his \$26 million gross on advertising): "If one of my builders wants to know how much advertising I will do for him, I tell him I may not do any. I just promise to sell his houses." Parker also says he has a rough rule of thumb for advertising outlays: "I spend \$110 to \$125 per month per salesman (he has 73 salesmen)."

Seattle's builders are enthusiastic about the job their realtors do for them

Says 80-house Builder Bill Murphy: "The realtor takes a great load off my back . . . my biggest problem is to keep enough houses ready for them to sell."

Says 130-house Builder Jim Rigby: "In the summer, the MacPhersons sell a house a day for me. Yet I need no office and I have time for building apartments and motels."

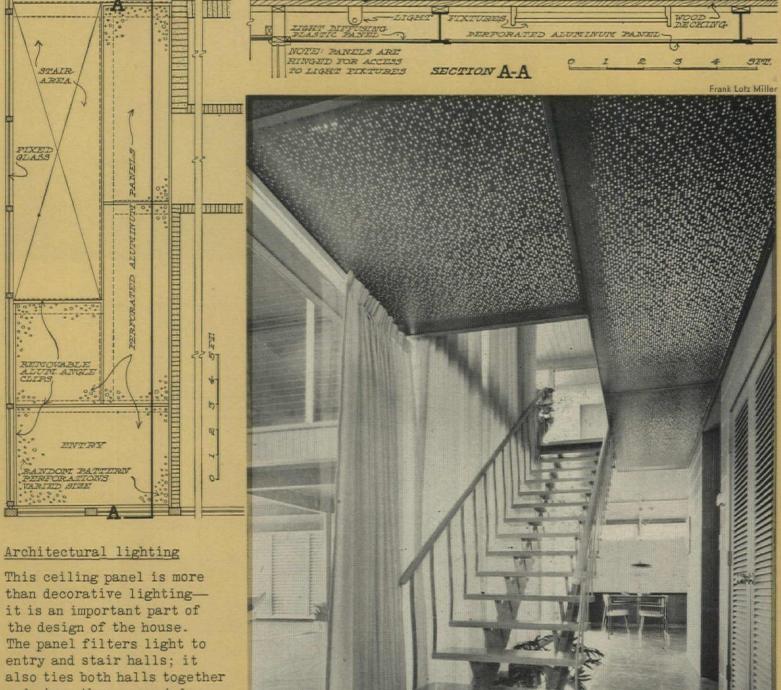
Says 75-house Builder Bob Munger: "My overhead is reduced to almost nothing. I don't need an office. I work out of my own house and I keep my own books except for having a bookkeeper two hours a week."

Says 40-house Builder Don MacDonald (who also builds apartments): "I have a broker's license myself and I know what it costs to sell houses. I use both Scott and the Mac-Phersons, and I know they earn every cent of the 5% commission."

Adds 50-house Builder Ellsworth Lovell: "Five per cent looks big to a builder, but if he knows his costs he knows that selling his own houses is expensive." /END

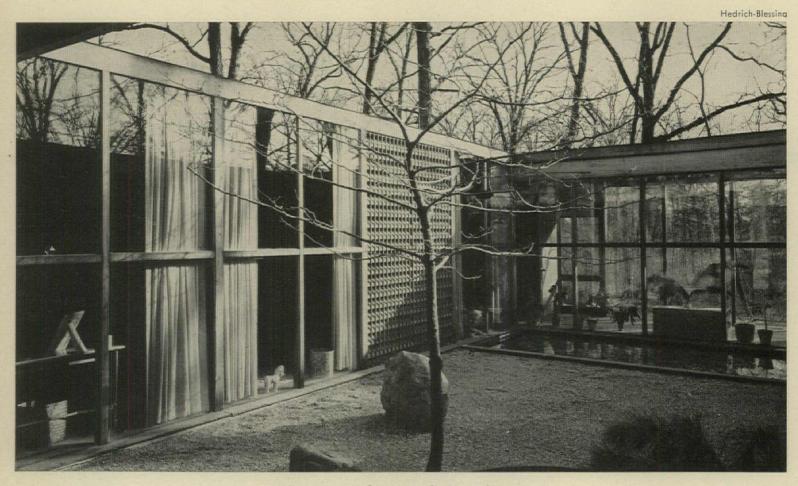
This is the second in HOUSE & HOME's new series of selected details from contemporary houses.

Good Ideas File



also ties both halls together and gives them a special character. Plastic panels behind the anodized gunmetal-grey aluminum panels eliminate glare. Architect: William Ricciuti. House is in New Orleans.

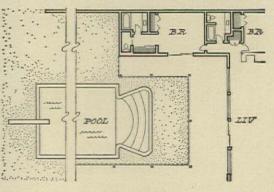
Good Ideas File—Indoor-outdoor living



Garden court for a private view

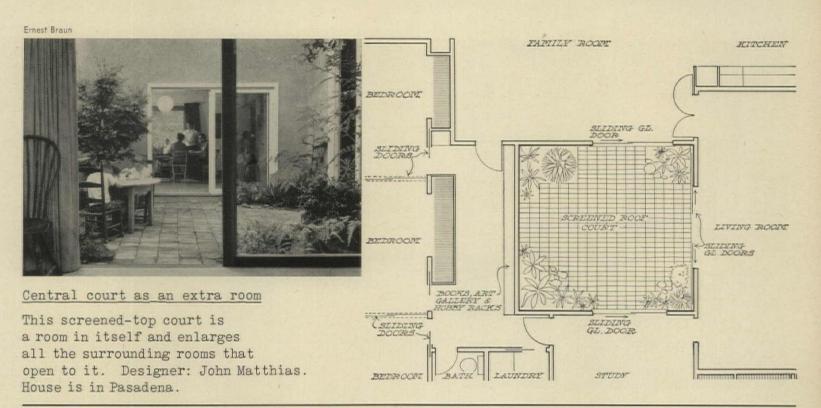
This garden court is enclosed on three sides by the house; so it creates a private outdoor world all year around. The fourth side is a house-high brick wall, with an access door to the lot. All three walls of the house facing the court are mostly glass. Architects: Schweiker & Elting. In Illinois.

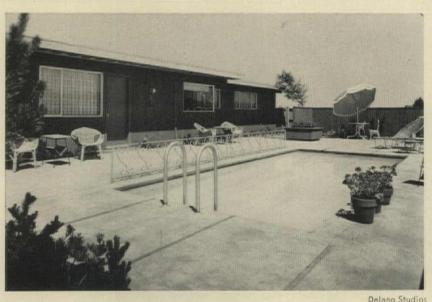




Private pool and patio

House and brick-walled yard give this pool and patio complete privacy. The house's flat roof extends out to provide shelter for the ll' wide terrace that opens off the living room. The concrete-floored terrace makes a U-shape around one end of the pool. Architects: Blanton & Cole. House is in Tucson.





Swimming pool in a big terrace

The fenced-in backyard of this house is a huge terrace built around a swimming pool. The terrace is concrete, with areas left open for planting. Builders: Clifford Orth Construction Co. House is in Portland.

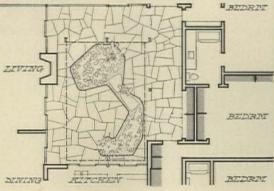
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Terrace as an outdoor room

Wide overhang and concrete paving are roof and floor for this terrace; storage wall and raised planting box act as walls. Builders: Bell & Valdez. House in Seattle.

Court for a U-shaped house

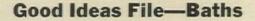
The plan of the house makes a natural enclosure for this court. The fourth wall of sliding glass opens to make the court a part of the rest of the site. The court's floor is radiant heated for winter use. Architect: Arthur T. Brown. House is in Tucson.

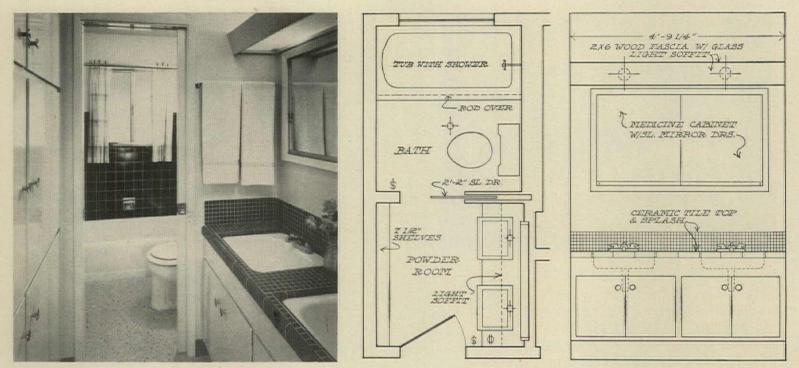




Frank Gaynor continued

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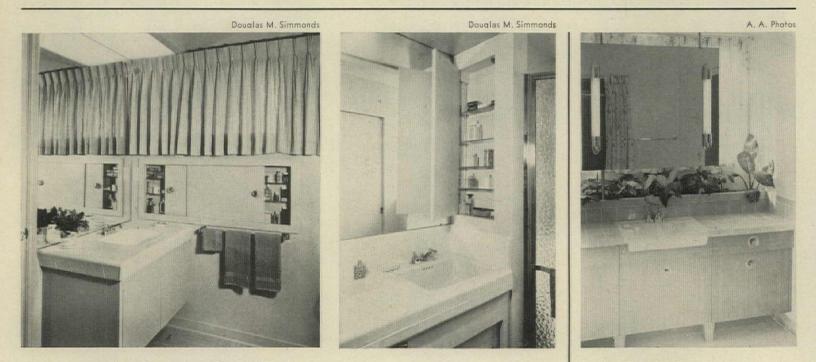




Morley Baer

Ample storage and lighting

Undercounter cabinets and one whole wall of shelf space give this bath a bonus in storage. The shallow wall shelves are extra-convenient for storing towels, soap, and other items. The lighting soffit runs the length of the vanity, with translucent glass to cut glare. Builders: Mackay Engineered Homes. House is in San Jose, Calif.

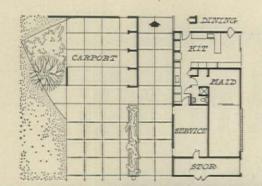


New location for medicine cabinets

In two new houses by Schwartz-Yedor, the cabinets are set into the walls between the studs. Moving the medicine cabinets to a side wall means you can put a large, luxury-touch mirror over the vanity, and makes the cabinets easier to use. Architects: George Vernon Russell (left, photo); John C. Lindsay (right, photo). Houses are in Beverly Hills.

A touch of planting

Even the simplest bath has room for a small planter over the vanity counter. Bathroom humidity gives plants needed moisture. Builder: John R. Worthman. House is in Fort Wayne.

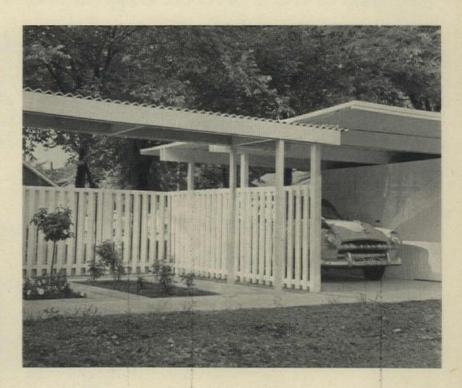




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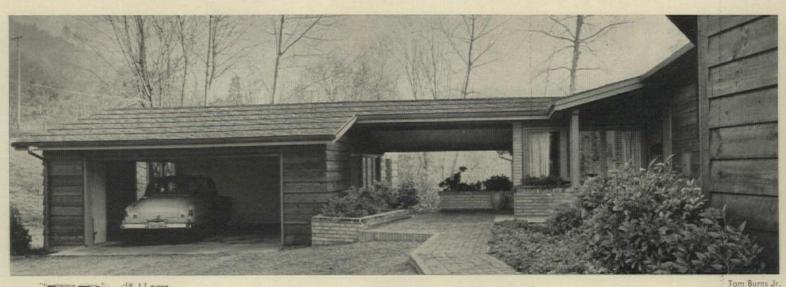
Storage separates entry from carport

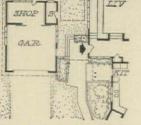
A 24' long storage wall (center of photo) separates this carport from the 12' wide entrance walk and gives the house a sheltered entryway. Walk is lighted by openings in the roof. Architect: Ward Thomas. House is in Atherton, Calif.



Simple court adds interest to carport

The slat-fenced court makes a pleasant, private outdoor place between carport and house (out of photo, left). The semi-open fence breaks the street-view. Roofed walk leads directly to the house. Corrugated roof of walk adds a decorative touch. Carport has one whole wall for storage (far right). Architect: Joseph F. Savin. House is in Detroit.





House, entryway, and garage are under one roof

This low-pitched roof makes the house seem bigger because it ties garage and house together. The garage is 14' from the house, to provide plenty of room for the wide, brick-paved entryway. Architect: John E. Stafford. House is in Grants Pass, Ore. /END

Reduce heating and air conditioning

losses with NORTON'S

COM-A-DOOR series 800 door closer

Norton's Com-A-Door rack-and-pinion construction assures positive control of combination and jalousie doors, where losses can be the greatest.

The cutaway of the Com-A-Door shows how opening and closing are controlled by the hydraulic fluid. The powerful spring assures closing and positive latching.

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Starting here

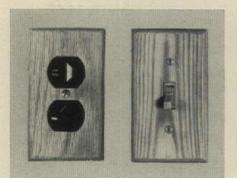
New products



Twin appliances for builder kitchens are Youngstown's new 24" oven-range and undercounter dishwasher. Ovenrange can be installed as a built-in unit or as separate range top and under-

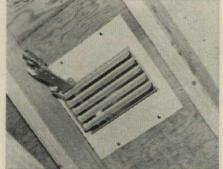
counter oven, comes in custom or deluxe models. Dishwasher takes ten place settings in two racks; top one rotates. Youngstown Kitchens, Warren, Ohio.

For details, check No. 1 on coupon, p 304



Wood switch plates are made to match paneling in all popular woods: pine, mahogany, cherry, birch, walnut, red and white oak. Teak, rosewood, cypress, etc, are available on special order. Single and gang plates for switches and plug taps come in any combination. Single plates: 75¢ retail. Superior Panel Plate Co, Chicago.

For details, check No. 2 on coupon, p 304



Automatic ventilators react to temperature changes. As thermometer falls a bellows device closes the louvers, seals heat in attic or crawl space. When temperature rises again, vents open to allow air circulation. Thermvents for gable, roof, soffit, crawlspace, and chimney installations are available. Zerhan Industries, Detroit.

For details, check No. 3 on coupon, p 304

And on the following pages

Technology

Tests will show how much heat a house really needs. . . . Better way to make tile fields work. . . . New way to pour concrete pipe in place. . . . Andy Place tests new foundation and floor. . . . see page 192

What the leaders are doing

Six smart ways to display a new line of models. . . . Seven more ways to cut costs. . . . How to keep buyers from bothering you about changes. . . .

see page 201

Publications

Design ideas with all types of hardboard. . . . Catalogs of lighting fixtures. laminated wood products, molded doors. ... Resilient floor installation. . .

see page 294

More

New products

New rig cuts truss in four minutes. . . . Ducted systems for electric heat. . Product news in electrical fittings, fixtures, appliances. . . . New ideas in kitchens, baths, wall finishes. . . .

see page 213

Two ways to say quality Your prospects can tell a great deal about a home-and its builder-by the level of quality they see used on the exterior. That's one of the reasons so many fine new homes feature cedar shingle roofs and cedar shake walls. <u>Cedar says quality</u>. Those three, long-lasting layers of cedar shingles on the roof... the unmistakable thickness of a double-coursed cedar shake wall... make a lasting impression on quality-conscious customers. This is the season to put the quality of genuine cedar on your selling team!

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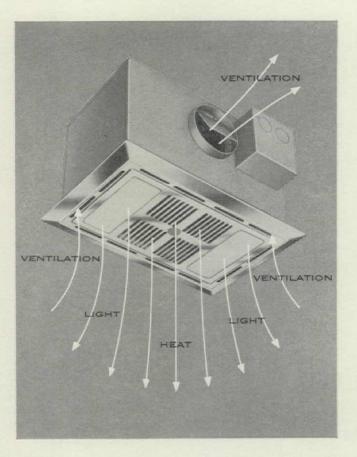
have stressed quality in the house . . . a real plus factor that swings many a sale. To you it means dealing with just one dependable supplier who is always ready to furnish expert planning assistance, merchandising aid, and quick delivery of the highest-quality appliances ... yet available to you in a package deal at a package price. Investigate!



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

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Nothing arouses comment . . . and envy . . . like real marble. In such good taste everywhere in your home, yet so practical. And – surprisingly – Vermont Markwa tile is actually lower in cost than many other quality materials. Isn't it worth looking into the possibility of using real marble tile in *your* home? We'll be happy to send you complete details and the name of a nearby Markwa tile dealer.

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Removes cooking odors, grease and smoke without ducts or vents

Now you can offer all prospective home buyers the comforting assurance of grease-and-odor-free kitchens -thanks to this new no-duct range hood, specially designed and mass produced . . . and priced low enough for your lowest-cost homes!

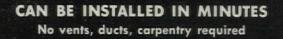
There's nothing to take up cabinet or shelf space. And, because there's no expensive duct work or installation . . . no tinsmith, no carpentry, no holes in the wall . . . the NAUTILUS NO-DUCT HOOD costs less than the total cost of conventional units.

Using a special Activated Charcoal Filter-plus a Grease Filter-the NAUTILUS NO-DUCT HOOD removes cooking odors, fumes, grease and smoke, recirculates pure, fresh air. No stains or smudge, no clean-up jobs!

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Custom Model also available in 24", 30", 33", 36", 39", 40", 42" and 48" lengths, in 3 copper finishes, plus stainless steel and GE "mix-or-match" colors.





Screw hood to cabinet-and the job's all done

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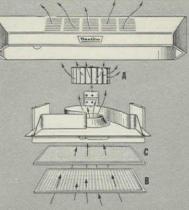
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Uses same air purifying principle as Submarine Nautilus. The NAUTILUS NO-DUCT HOOD eliminates odors and air contaminants with an Activated Charcoal Filter—the same scientific principle that enabled the atomic submarine Nautilus to stay under water two months without new supplies of fresh air.



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Armstrong sheet Vinyl Corlon also allows you to offer individually styled floors at very little extra cost. Striking custom effects can be created with Armstrong Decorator Inlays—vinyl strips and special shapes that can be used to give any floor a completely individual look. Or you can flash sheet floors up the base of the wall, eliminating dirt-catching corners to make the homemaker's cleaning tasks even easier. You'll also find that the freedom of design with sheet vinyl floors provides an inexpensive way to vary the interiors of tract homes. Each home buyer will appreciate this beautifully styled, inexpensive "difference" that sets his room interiors apart from those of his neighbors'.

Basic Technical Data: Recommended uses: above grade (Decoresq with Hydrocord Back can also be used on and below grade); durability: excellent; ease of maintenance: superior; gauge: .070"; designs and colors: Mosaic, Terrazzo, and Decoresq, over 30 colors; approximate installed price per sq. ft.: 55–60¢. For expert flooring advice, contact the Architectural-Builder Consultant at your nearest Armstrong District Office. He can also pro-

vide you with a complete selection of valuable sales helps. Call him or write direct to Armstrong Cork Company, 304 Sixth Street, Lancaster, Pennsylvania.



Note striking custom design made from vinyl strips and Armstrong Decorator Inlays. Floor is Armstrong Vinyl Corlon, Mosaic style 6515.



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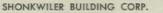
This outstanding promotion showed the people of Denver all the latest new home designs and ideas-and sold lots of homes. 24 of the 31 participating builders used Armstrong Vinyl Floors, both sheet and tile, in their models. The local Armstrong Architectural-Builder Consultant provided them with selling ideas, displays, and a variety of promotional materials.







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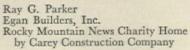
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K. C. Ensor Construction Company Behrentes Construction Company Sharr—Dell Builders Lull Homes by Bob Lull



Trunk & Strauss Construction Company Ray Glebe, Inc.



SHEET VINYL CORLON . LINOLEUM . EXCELON (Vinyl-Asbestos) TILE . CUSTOM CORLON and OPALESQ (Homogeneous Vinyl) TILES . LINOTILE . RUBBER TILE . CORK TILE . CUSTOM VINYL CORK TILE . ASPHALT TILE





VIRDEN light ideas" in action

... in the Total Electric Home



... "Electrifying" exterior beauty



... Adding beauty and easing tasks in work areas

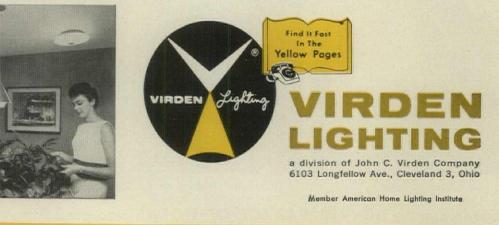
... Accenting and glamourizing focal points

CEI Total Electric Home is located in Mentor, Ohio. Builder: P. W. Reynolds

These are but a few examples of the unusual and exciting charm created with Virden fixtures in the Total Electric Home.

What has been accomplished here can easily be done in any home. "the light idea" by Virden presents unlimited possibilities possibilities limited only by the imagination —to make homes more liveable, loveable ... exciting and practical!

For more ideas you can use, write Dept. HH-4 for a free copy of the Virden Lighting Catalog featuring "the light ideas."



SUBSIDIARIES: LIGHTING DYNAMICS, INC., LOS ANGELES, CALIF. AND DALLAS, TEXAS; JOHN C. VIRDEN, LTD., TORONTO, ONTARIO

Now! At last! Specifying insulation to fit the job is as easy as

Air-conditioning experts, electric heating experts, utility experts, insulation experts ... all agree on

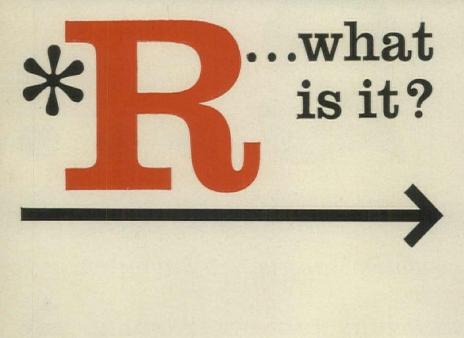
THE NEW ALL-WEATHER COMFORT STANDARD

How to specify the insulation performance you want:

For superior comfort and economy, for electric heating or for airconditioning—specify the new All-Weather Comfort Standard:

ALL-WEATHER COMFORT STANDARD

BUILDING SECTION	REQUIRED INSTALLED RESISTANCE	RECOMMENDED FIBERGLAST INSULATION
Ceilings	R*=19	R=19 (Super thick) R=19S (Full thick, Foil-enclosed, ceilings, summer)
Walls	R=11	R=11 (Full thick) R=11S (Medium, Foil-faced)
Floors (over vented crawl space)	R=13	R=13 (Full thick) R=13S (Medium, Foil-faced)



R is a new way of stating the installed performance of insulation regardless of the direction of heat flow. The higher the R the lower the heating and cooling costs; the greater the comfort.

R indicates the required installed resistance by number, making it easy to get the proper product performance for the job.

R is a simplified guide to enable you to specify the right insulation.

How to be sure you get the performance you specify:



Here's how the R on the package above helps you be sure. For ceilings, the installed resistance recommended in the new All-Weather Comfort Standard calls for an R=19. The

label on Fiberglas Building Insulation packages prominently displays the installed performance of the product by its R value.

More than ever, it makes sense to specify Owens-Corning Fiberglas Insulation

When you buy Fiberglas Insulation you know what you're getting. Now packages are marked with the R number that indicates the installed resistance of their contents. Along with its certified thermal performance, Fiberglas Insulation is light

THE OWENS-CORNING FIBERGLAS INSULATION LINE		
Building section	Installed resistance and appropriate Fiberglas Product	
For ceilings	<pre>the function for the function for t</pre>	
For walls	ttR=11 (Full thick) ttR=11S (Medium Foil-faced) R=8 (Medium) R=8S (Minimum Foil-faced) R=7 (Minimum)	
For Floors (Over vented crawl space)	ttR=13 (Full thick) ttR=13S (Medium, Foil-faced) R=9 (Medium) R=7 (Minimum) ttAll Weather Comfort Standard Products	

in weight, easy to handle, requires little storage space and installs quickly. And Owens-Corning Fiberglas is the name your customers know and prefer on insulation . . . a name people associate with the best new homes.



Still America's No. 1 new home building and merchandising program.

For the complete story on the new standards and on Fiberglas full line of insulation, call your nearest Owens-Corning Fiberglas office, or write: Owens-Corning Fiberglas Corporation, Box 67-D, Toledo 1, Ohio.

IBERGLAS T. M. REG. U. S. PAT. OFF.

OWENS-CORNING

THERMADOR

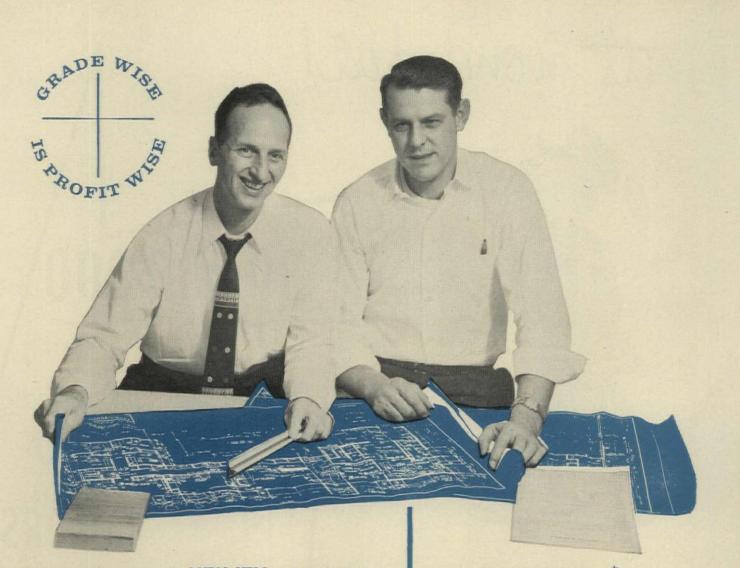
More Quality Features!



Bilt-in electric cooking top with 4 fast-heating elements and giant middle griddle. Many styles, choice of 2 to 6 elements. "Masterpiece" bilt-in electric oven with integral exhaust. Also, horizontal double ovens, bi-level ovens, single ovens. Warming drawer illustrated. Truly bilt-in "Masterpiece" refrigerator-freezer, 14.2 cu. ft. (10.2 cu. ft. automatic defrost refrigerator, separate 4.0 cu. ft. freezer).

Some of Thermador's outstanding sales features include: widest selection of oven models, from most deluxe to most economical • largest variety of cooking tops • complete color selection — Daffodil Yellow, Canyon Copper, Desert Pink, Turquoise, Sugar White and Lifetime Stainless Steel to match all decors • largest usable oven space (almost 6500 cu. in.) • exclusive air-cooled door in non-window models • easiest installation (45 min. less time needed) • least service required (ask your serviceman) • award-winning design.

Reference de la construir de l	Originator of the Bilt-in Range
--	---------------------------------



"We specify and use UTILITY grade West Coast framing lumber for quality construction. Properly used, it saves \$200.00 on every job," report builders Lyons and McDonell.

Here is a building partnership which has discovered a short cut to bigger profit with "Utility" grade West Coast dimension and boards. Lyons and McDonell's solid reputation for quality construction has never varied, yet these progressive builders have achieved lower total job costs regularly by using "Utility" grade lumber in specified applications.*

You, too, will find "Utility" grade is a money-maker for One and Two Living Unit-construction. And you will have the plus-value of the consistent quality of West Coast lumber.

When used in accordance with FHA Minimum Property Standards for One and Two Living Units, FHA Bulletin No. 300.

WEST COAST LUMBERMEN'S ASSOCIATION

1410 S. W. Morrison Street, Portland 5, Oregon

CHECK THESE USES

for "Utility" grade West Coast

Lumber (In accordance with FHA Minimum Property Standards): RAFTERS FOR LIGHT ROOFING (Roof slope over 3 in 12) (Weighing less than 4 lbs. per sq. ft. in place) Douglas Fir West Coast Hemlock Size Spacing Maximum Span 2x6 16" o.c. 9'-8" 200 14' 4'' Spacing 16" o.c. 16" o.c. 16" o.c. Maximum Span 9'-8" 14'-4" 19'-8" 2×8 2x10 FLAT ROOF JOISTS supporting finished ceiling (Roof slope 3 in 12 or less) 7'-8" 11'-6" 15'-8" 18'-2" 16" o.c. 16" o.c. 16" o.c. 16" o.c. 2x6 2x8 2×10 2×12 CEILING JOISTS (no attic storage) 16" o.c. 16" o.c. 11'-8" 17'-6" 2×6 2×8 30 lb. live load* FLOOR JOISTS 40 Ib

 2x6
 16" o.c.
 7'.2"
 6'.4

 2x8
 16" o.c.
 10'.8"
 9'.6

 2x10
 16" o.c.
 14'.8"
 13'.0

 2x12
 16" o.c.
 17'.0"
 15'.4"

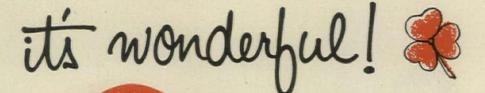
 *sleeping rooms only
 *other than sleeping rooms
 15'.4"

BOARDS. Ample strength and satisfactory coverage make "Utility" boards a primary material for sub-floors, wall sheathing and solid roof boarding in permanent construction. This grade is widely used for light concrete forms.

GET THE TECHNICAL FACTS

Write today for your copy of "Where to Use Utility Grade."







WONDERFUL WHAT SUCH AN AD CAN DO FOR YOU!

No matter where you live, Lennox advertising goes. With full page, 4-color ads in the Post, Life, Reader's Digest and numerous other national magazines, Lennox sets the stage for you to sell more Lennox-equipped homes . . .

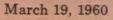
more easily . . . at better prices. People WANT homes with the indoor comfort that only Lennox can provide!

Lennox also helps you when you are building. Your local Lennox Comfort Craftsman deals directly with your nearest of the 6 Lennox factories. Thus you are assured the finest heating and air conditioning systems, delivered promptly to mesh with your own construction time-table. You get fast, cost-cutting installation by factory-trained experts. All this at prices that make sense to your bookkeeper AND your sales manager!

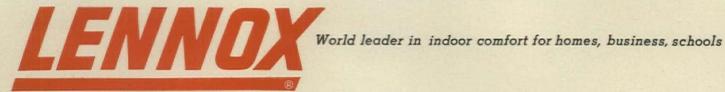
Your Lennox Comfort Craftsman is listed in your Yellow Pages. Wonderful day . . . for both of you . . . when you call him!

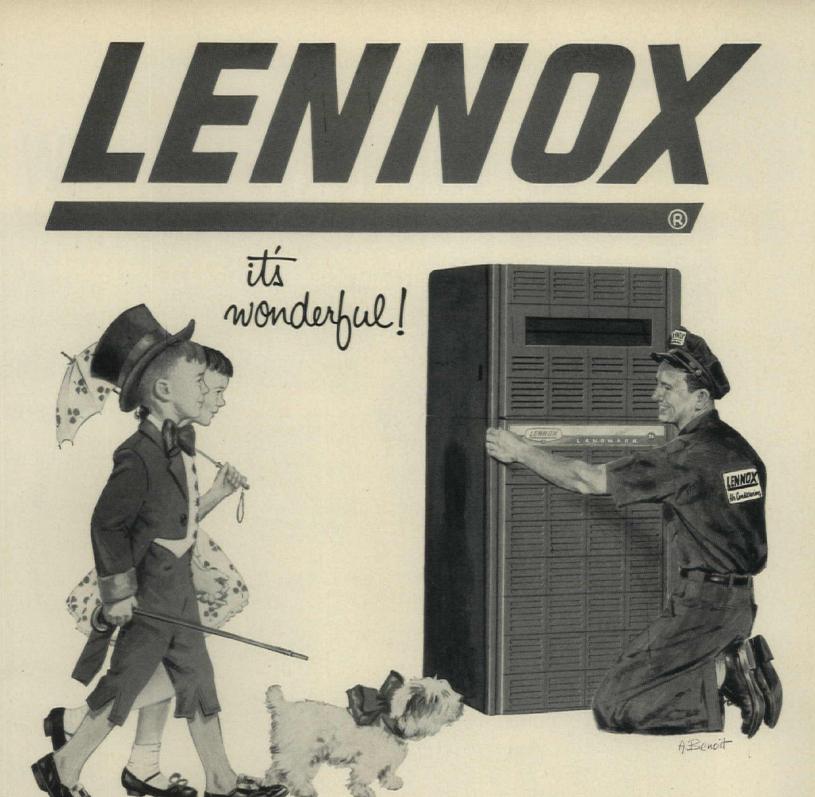
30,000,000 PEOPLE (many of them YOUR prospects) SAW THIS AD

COLORS



The Saturday Evening





The "laddy-buck" and his "colleen" really have the *luck of the Irish*—not just on St. Patrick's Day but every day. They live in a home blessed with Lennox heating and air conditioning. Only Lennox quality equipment brings you fresh, clean air *quietly*—heated or cooled—humidity controlled—as outside weather dictates.

Lennox quality equipment is always installed by a Lennox Comfort Crafts-

man, factory trained to custom design and install a comfort system for your home . . . and at less cost than you would expect to pay. Call him for a free survey. His name is in the Yellow Pages. Lennox, world leader in indoor comfort for homes, business, schools.

Send for FREE booklet," How to Select Your Heating and Air Conditioning System," Lennox Industries, 214 S. 12th Avenue, Marshalltown, Iowa.

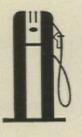


ANNOUNCING THE NEW

America's lowest priced* pickup truck !



up to 30 mpg!



Totally new for total savings! Ford's new Falcon Ranchero delivers up to 30 miles on a gallon, yet its new 90-hp Six is geared to do a real job! There are lower costs for oil, tires, brakes, parts...nearly everything!

lowest priced*pickup!



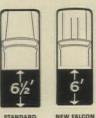
The Falcon Ranchero is priced from \$89 to \$210 under competitive ½-ton pickups!* And that's just the start of your savings. Single-Unit construction saves on maintenance... it's tighter, quieter, with main underbody members zinc-coated against rust and corrosion. See your Ford dealer!

Jased on latest available manufacturers' suggested retail delivered prices with comparable standard equipment.

FORD Falcon RANCHERO



big 6-foot box!



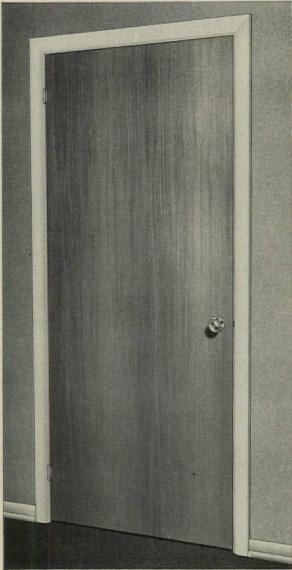
Load capacity is more than ample for most pickup hauls—nearly $7\frac{1}{2}$ feet of load length with tailgate flat. And thanks to the low loading height, loading and unloading is faster, easier!

- Up to 30 miles on a single gallon of gas
- Up to 4000 miles between oil changes
- Diamond Lustre finish needs no waxing
- Low loading height
- Instant-lock tailgate opens, closes with a single, one-hand motion
- Roomy comfort for three passengers
- Styled to capture admiration

FORD TRUCKS COST LESS

LESS TO BUY...LESS TO RUN...BUILT TO LAST LONGER, TOO!

Compare the QUALITY and COST ... You'll Use ... **READY HUNG DOORS!**



READY HUNG DOOR INTERIOR & EXTERIOR UNITS (Interior shown) Fit any construction – any wall thickness. Lock nailed header joint. Machine-made trim mitres. Selfaligning "Magic Circle" Hinges-matching lock & strike plate.

Quality, Economy, Beauty, Efficiency . . . all in a single precision-engineered package. That's what you get when you use Ready Hung Doors. Completely assembled door-with frame trimmed on both sides and hardware installed, arrives in perfect condition. Easily installed in less than 20 minutes. Adjustable jambs for any wall thickness. Styles for every need . . . priced to save you money.







Magic Circle Hinges with matching lock and strike plate, add exclusive charm and sales appeal to every home...at no extra cost. Remember - you save on labor - you gain in

quality. Look into it today ... we're certain you'll choose Ready Hung Doors too!

READY HUNG DOORS ARE MADE BY THESE LEADING WHOLESALERS

0

AKRON, OHIO Dayton-Akron Sash & Door Co. ALBANY, N. Y. Iroquois Milliwork Corp. BiLLINGS, MONT. Building Service, Inc. BIRMINGHAM, ALA. National Woodworks, Inc. BOSTON, MASS. A. W. Hastings & Co., Inc. Somerville, Mass. BUFFALO, N. Y.

BUFFALO, N. Y. The Whitmer-Jackson Co. CHARLOTTE, N. C. Miller Millwork Corp. CHICAGO, ILL. Morgan Sash & Door Co. CINCINNATI, OHIO Acute Sash & Door Co. CLEVELANO, OHIO The Whitmer-Jackson Co. DAYTON OHIO The Whitmer-Jackson Co. DAYTON, OHIO Dayton-Akron Sash & Door Co. DECATUR, ILL. Morgan Sash & Door Co.

FLINT, MICH.
Flint Sash & Door Co.
GRAND RAPIDS, MICH.
Porter-Hadley Co.
GREAT FALLS, MONT.
Building Service, Inc.
GREENVILLE, S. C.
Southern Sash & Door Co., Inc.
HOUSTON, TEXAS
Southwest Sash & Door Co.
HUNTINGTON, W. VA.
Iron City Sash & Door Co.
INDIANAPOLIS, IND.
Midland Bldg. Industries, Inc.

NORTHA INSTOWN, PA. n City Sash & Door Co Torne Gity Sash & Door Co. KANSAS CITY, MO. Rust Sash & Door Co. LOS ANGELES, CAL. Ready Hung Door Mig. Co. Burbanh, Calif. MARION, IND. General Millwork Corp. MASSILLON, OHIO The Whitmer-Jackson Co. NEW YORK, N. Y. Bailey-Whalen Co. West Orange, N. J. OAKLAN Ready H PITTSBU PORTLAN ROCHES The Wh SAGINAW, MICH. Flint Sash & Door Co.

MPTON, MASS.	ST. LOUIS, MO. Imse-Schilling Sash & Do
D, CAL. lung Door Mfg. Co.	ST. PAUL, MINN. Minnesota Wood Specialt St. Paul Park, Minn.
JRGH, PA. y Sash & Door Co.	SEATTLE, WASH. Building Products Wholes
ND, ME. lastings & Co., Inc. TER, N. Y.	SPRINGFIELD, MO. Southern Supply Co.
itmer-Jackson Co.	SYRACUSE, N. Y.

READY HUNG DOOR **BY-PASSING** UNITS

Two-Point bolt suspension of track insures trouble free operation - eliminates bent tracks, loose suspension screws, 90% of door hanger adjustment. Special header-jamb eliminates need for rough blocking.

PAT. NO. 2893049

READY HUNG DOOR BI-FOLD UNITS

No tracks top or bottom to bind or limit opening; leaving entire opening 100% usable. Unique spring-controlled folding action that's smooth, easy, automatic, completely silent. Self-aligning "Magic Circle" hinges No unsightly hardware in view on EITHER side.

PAT. PEND



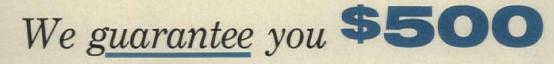


CRHD Coro. TOLEDO, OHIO

nse-Schilling Sash & Door Co.	Allen A. Smith Company
I. PAUL, MINN.	CANADA:
innesota Wood Specialties, Inc.	KINGSTON, ONT.
. Paul Park, Minn.	C. Lloyd & Son Ltd.
EATTLE, WASH.	OTTAWA, ONT.
ailding Products Wholesale, Inc.	C. Lloyd & Son Ltd.
PRINGFIELD, MO.	TORONTO, ONT.
outhern Supply Co.	C. Lloyd & Son Ltd.
rRACUSE, N. Y.	WINGHAM, ONT.
oquois Door Co.	C. Lloyd & Son Ltd.
READY HUNG DOOR CORP.	FORT WORTH 2. TEXAS



HOME BUILDING CORPORATION



EXTRA Profit

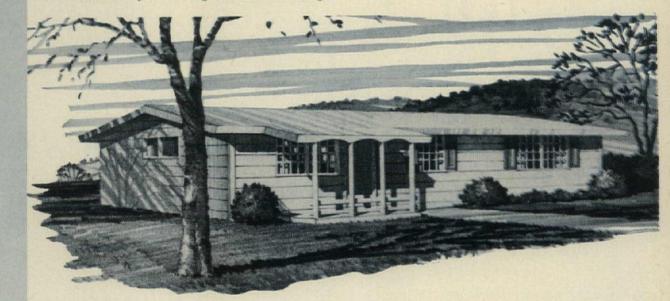
on every HBC home you sell!

INTERESTED?

HERE ARE THE FACTS:

Every HBC home is a complete package, erected on your foundation by our own skilled crews in less than two days... at a *guaranteed* firm price you can't match by \$500.

You get superior construction, with nationally-advertised, quality materials throughout. All you do is bring in and hook up utilities, clean up, and touch up painting . . . and your HBC home is ready for immediate occupancy. No extra architect fees. No costly construction delays. No extra sales cost by dealing direct with factory. No long interim financing.



HBC HOMES BECOME REAL ESTATE FAST

- Completely prefinished ceilings, walls
- · Heat ducts in place
- Water heater and furnace installed
- All bath and kitchen fixtures installed
- Hardware in place
- Oak floors, mahogany doors and trim installed and finished
- Sliding aluminum windows and trim installed and finished



 Heavy duty insulation plus many more features all installed, ready to use

For complete information – MAIL THIS COUPON TODAY

If you operate within 500 miles of Sedalia, Missouri, we invite you to inspect our factory and stay overnight in our HBC guest home. Study our product and prices. We will prove that you can make \$500 extra profit per house with HBC homes.



Choose from a wide range of 2, 3 and 4-bedroom contemporary and traditional homes, including the popular colonial models.

NEAL O. REYBURN, PRESIDENT HOME BUILDING CORPORATION SEDALIA, MISSOURI

PLEASE RUSH DETAILED INFORMATION ON HBC HOMES.
 I'D LIKE TO TAKE A CLOSE LOOK AT HBC HOMES

IN SEDALIA-THE MOST CONVENIENT

NAME_

CITY.

COMPANY___

STREET ADDRESS.

ZONE STATE



A good roofer and a good builder agree on Bird Wind Seal Shingles. Left, George W. Gyekis, roofer, with William Marra, builder and developer.





for quick sell,

build with good brand names

That's what MARRA of Pittsburgh does: he installs BIRD WIND SEAL roofs

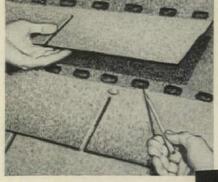
ONE OF PENNSYLVANIA'S MOST SUCCESSFUL BUILDERS, William Marra gives these four good reasons for installing Bird Wind Seal roofs on his houses:

1. Although we pay a slight premium for them, they save us money by eliminating callbacks to correct raised or blown-off shingles.

2. We have better customer relations by having less complaints.

3. We can include the Bird Wind Seal Shingles in the list of national brand products used in our houses. Result: easier selling.

4. And, most important, we can in truth state we are giving more quality per dollar spent for roofing by using Bird Wind Seal Shingles.



- powerful seals spaced for drainage
- proved to hold in 125 MPH hurricanes
- lay fast in the usual way
- no pulling apart or turning
- long lasting double-surfaced construction
- advertised to your customers in The Saturday Evening Post



HOUSE & HOME

BIRD & SON, INC.

E. Walpole, Mass. • Chicago, Ill. • Shreveport, La. • Charleston, S. C.

186



NEW VESTA BUILT-INS DESIGNED TO CHARM **EVERY PROSPECT!**



SUPERB STYLING! Giant 24" or standard 16" double-oven.



SHALLOW COOK-TOP only 23/4" deep. Allows extra drawers underneath! A quick sale . . . so close to the heart (and pocketbook) of every man who builds 'on spec.'

The beauty, convenience and salessparkle of Vesta gas or electric builtins bring the "oooohs" and "ahhhhs" that sell homes faster!

Magnificence in every inch! Four beautiful porcelain enamel finishes or handsome stainless steel.

For full details, see your Vesta dealer or distributor now . . . or mail the handy coupon.

SAVE UP TO 25% LABOR COSTS

- NEW! Tilt-in oven installs faster! NEW! Push-in frame always fits flush!
- NEW! Square-fit cook-top no curves to cut!

GAS OR ELECTRIC!



It's Easy To Apply This Labor-Saving ALUMINUM SOFFIT

3 MORE BUILDING PRODUCTS FROM QSM'S COMPLETE LINE (QSM stands behind every one!)



GALVANIZED ALUMINUM AND BUILDING SHAPES



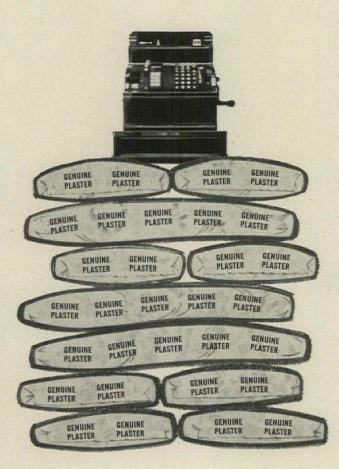


This new QSM aluminum soffit is light, flexible, and easy to install. Corrugated for easy handling; rolled for easy application. Saves time and money on the job.

Perforated with 1/8-inch holes to open 14% of its surface for ventilation; needs no soffit louvers. Etched and prime coated for easy painting.

Available with or without perforations to use for room dividers, shading screens, carports, or decorative applications on home or commercial jobs. In 100-foot rolls of 12, 18, 24, and 36-inch widths.





"PLASTER AND PROFITS"

The house that stands unsold represents a costly investment to its builder, gradually absorbing expected profits in a continuing cycle of interest payments on construction loans.

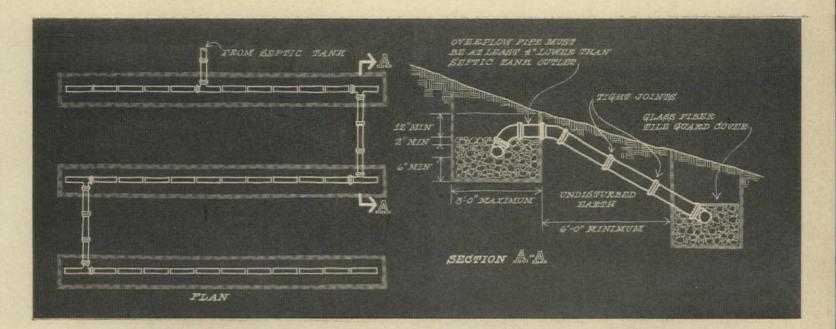
Genuine Lath and Plaster adds more than quality and eye appeal to the house you build...IT ADDS SALES APPEAL!

The argument in favor of walls and ceilings with fire resistance, ease of decoration, permanence and control of the transmission of unwanted noises gives the "plastered" house a strong edge over its less substantially built competitor.

Look to lath and plaster construction...there are new ideas to go along with the old...and for you, all spell "profit."

NATIONAL BUREAU FOR LATHING & PLASTERING, INC., 311 Tower Bidg., 1401 K St., N. W., Wash. 5, D.C.





Here is a new way to make tile fields work better and last longer

This new tile-field system for septic-tank disposal is called serial distribution by its designer, the US Public Health Service. It makes maximum use of an absorption field by ponding effluent to the full depth of the gravel fill in each trench before the liquid flows into the next trench.

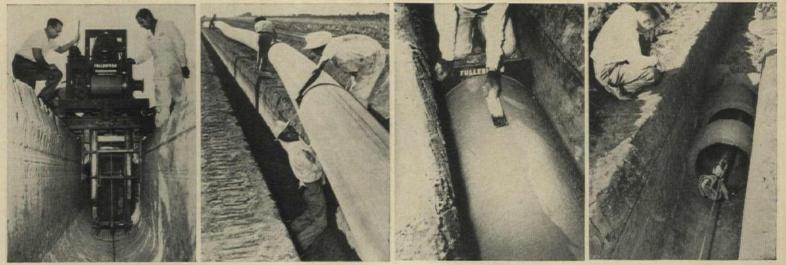
Here are serial distribution's three main advantages:

1. It minimizes the problem caused by soils that have variable absorption rates, because it forces each trench to absorb

effluent to its fullest capacity before more soil is used.

2. It is well suited to sloping ground, which, in the usual parallel system, can lead to overloading of one trench and failure of the system before its full capacity is used.

3. It saves money—because it needs no distribution boxes or long runs of enclosed pipe to connect boxes and trenches. Design and construction procedures for serial distribution follow FHA's Manual of Septic Tank Practice.



1. Form machine is set in trench.

2. Inflatable form is blown up.

3. Machine screeds pipe to shape.

4. Deflated tube is withdrawn.

Here is a new way to pour concrete pipe in place

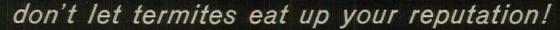
With this new system, you can pour 8' to 12' of concrete pipe per minute at a continuous rate.

The system—developed by the Fullerform Continuous Pipe Corp of Phoenix—is now used for pouring irrigation pipe. But it could be used for sewers. Its key: a 300' rubber and fabric tube that serves as the inner form for the pipe.

Here is how it works: 1) a machine that places and forms concrete pipe is set in a trench with a curved bottom (left photo); 2) one end of the inflatable tube is passed through bulkheads at either end of the machine; 3) the tube is inflated with air at a pressure of 3 psi (left center); 4) drawn by a winch, the machine starts forward and raises the tube slightly;

5) the moving machine (its hopper filled by ready-mix trucks) forces concrete under the tube and screeds the top side of the pipe to shape (right center); 6) after two hours, the concrete is stiff enough for the tube to be deflated and withdrawn (right). The finished pipe is allowed to set for seven days before backfilling. No reinforcing is needed with small diameter pipe.

Up to 600' of pipe can be poured without interruption (two tubes are used). Fullerform tubes have been developed in lengths ranging from 50' to 300'. They can be used to lay pipe ranging in diameter from 12" to 48". Fullerform is working on a machine and inflatable forms to lay 60'' pipe.





PROTECT NEW CONSTRUCTION WITH CHLORDANE SOIL PRE-TREATMENT

THE TERMITE APPETITE—Termites do 100 million dollars worth of damage to homes every year. There are termites in every state, and every type of construction is vulnerable to attack. No matter where or how well you build, termites can undermine your reputation for quality homes. They can ruin a prize housing project in just a few years time.

ONLY SOIL TREATMENT KILLS TERMITES—The termite problem has been recognized in the new FHA Minimum Property Standards, which specify several different methods of protecting new housing. Of these methods, only chemical soil treatment, or "pre-treatment" actually kills termites. Other methods merely deter them, temporarily. Pre-treatment forms an impervious chemical barrier in the soil that kills termites year after year.

CHLORDANE BEST—Chlordane insecticide is preferred for pre-treatment because it has a longer record of residual effectiveness and safety than any other recommended insecticide. Applications of Chlordane made fourteen years ago are still 100% effective today. Chlordane is also economical, and easier to apply.

ADDED SALES APPEAL—Pre-treatment usually costs less than 1% of a home's price, but adds substantially to the value. Your pest control operator has special materials that will help you promote it as a selling feature.

CONSULT A PEST CONTROL OPERATOR—A professional pest control operator can give you a complete, troublefree, packaged pre-treatment service. He will coordinate Chlordane application with your building schedule, and save you time and money. Call one of the Pest Control Operators in your area today for complete information !

ONLY CHLORDANE IS	MAIL THIS COUPON TODAY FOR INFORMATIVE PRE-TREATMENT BROCHURE!
1 ALKALI STABLE remains effective in alkaline soils	VELSICOL CHEMICAL CORPORATIO 330 East Grand Ave., Chicago 11, III. III. International representative: Velsicol International Corp., C.A., P.O. Box 1687, Nassau, Bahamas, B.W.I.
2 NON-CRYSTALLINE combines with every particle of soil	Please send me your termite brochure for builders and architects, 501 PRE-TREATMENT PRE-TREATMENT Nume Nume
CHLORDANE	New Chlordane color- sound film shows pra- treatment at world's largest single unit
for lasting termite control!	Nousing development. City Zone State Available free for 14 day loan period. City Zone State

Builders discover extra selling points, added beauty for quality homes with

Hardware of Care-free Alcoa Aluminum

Today's home buyer is constantly on the lookout for the extra values that signify quality construction. And that's where hardware of Alcoa[®] Aluminum gives you a real talking point—a positive sales clincher that turns prospects into buyers.

Aluminum locksets and accessories, weather stripping and door strips, interior trim, mailboxes, nails, fasteners and almost 100 other items offer a lifetime of Care-free living that home buyers really appreciate. Aluminum, with lustrous good looks, never corrodes, rots, pits or peels. No polishing, painting or other upkeep is necessary. No need to worry about ugly staining.

The trend toward hardware and other quality building products of Alcoa Aluminum shows that home buyers know and look for the lighter, brighter living that only aluminum can provide. To move more homes this year, sell the Care-free living that comes with aluminum.

Aluminum Company of America, Pittsburgh 19, Pa.

Turn the page for more sales facts about Care-free hardware of Alcoa Aluminum

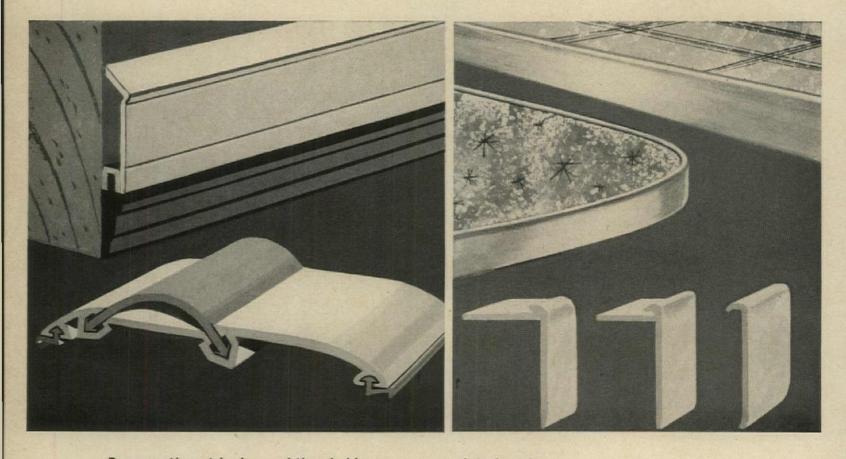
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Hardware of Alcoa Aluminum... for a distinctive modern appearance ... that stays that way... without maintenance

Permanent beauty

Aluminum house numerals, mailboxes, handrails, thresholds, locksets and other hardware of durable Alcoa Aluminum alloys add a distinctive modern note to any home. Nails and fasteners eliminate ugly red stains that mar the appearance of a house and depreciate property value. No matter what type of home you sell, prospects will be impressed by aluminum's good looks and rich, attractive luster.

Over 100 items produced by quality manufacturers for every style of home



Door weather stripping and thresholds

Thresholds and weather stripping of high-strength Alcoa Aluminum alloys resist scuffing, never corrode, rot or warp. Keep homes airtight.

Interior trim

Counters, table tops and other areas gain added beauty and longer life with nonstaining, protective aluminum trim.

No maintenance

Aluminum's inherent corrosion resistance means hardware that won't tarnish or stain. It spells lasting freedom from polishing and painting chores. Locks, hinges, latches and other movable parts operate smoothly in every season, year after year, without a penny for upkeep.

Fast, economical installation

Aluminum hardware is easy to handle and is precision-made for high-speed installation. Labor costs are reduced, because no painting is necessary. Nails and fasteners drive easily and hold tight—no countersinking or puttying required.

Low cost

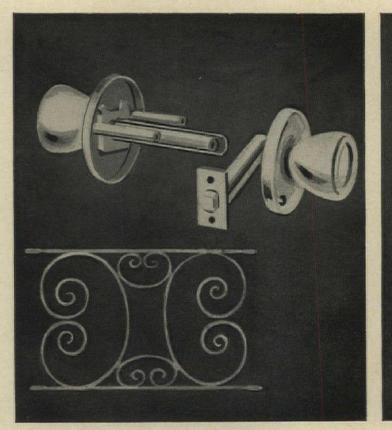
Aluminum hardware is priced competitively with other types—yet it always gives you more for your money. With nails, for example, you get three times as many per pound because of aluminum's light weight. Other savings come from faster installation, fewer complaints and better appearance that attracts more prospects.

To add extra value to your homes... over 100 items of aluminum hardware

From door holders to drawer slides, grilles to ventilating grid systems, major hardware manufacturers have brought out their choicest designs in Care-free Alcoa Aluminum. Whether cast, formed, machined, stripped or extruded, aluminum hardware keynotes distinction, bears the mark of unmistakable value.

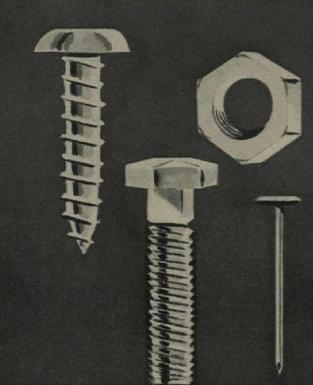
Aluminum hardware is styled to suit any architectural motif from traditional to modern, new construction or remodeling. The following is only a partial list of the many quality items available.

Aluminum Company of America, Pittsburgh 19, Pa.



Locksets and door accessories

Aluminum locksets and accessories can be installed in minutes, retain their smart, lustrous appearance without polishing.



Nails and fasteners

Nails, screws, nuts and bolts of Alcoa Aluminum work easily, hold tight and last longer, because they are resistant to corrosion all the way through. Countersinking or puttying is unnecessary. No worries about ugly stains. Lightweight aluminum means triple the number of nails in a pound.

Miscellaneous For virtually every hardware need, it pays to check first for the added value of aluminum Automatic door closers Storm window molding Shelf brackets Door stoppers Door holders Sliding door hardware Weather stripping Extruded push bars Ventilator grilles Mailboxes House numerals Letter box plates Extruded closet rod systems Sliding door tracks Drawer slides and tracks D 0 1 0 0 S -0 1 1 Light switch plates Hinges Wall fixtures and brackets Drawer pulls and knobs Push plates-door pulls Handrails

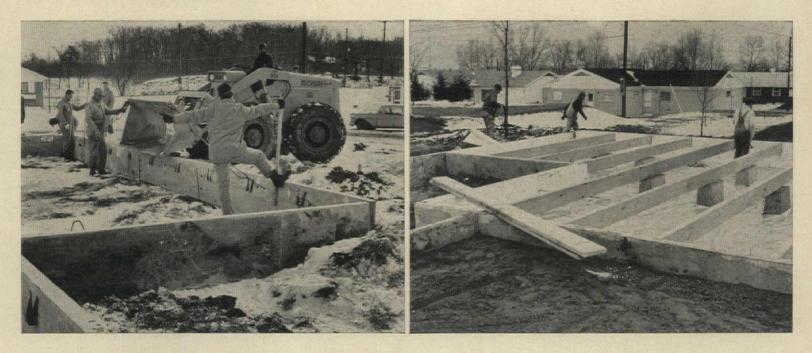
The Alcoa Care-free tag speeds the home-buying decision

When you use quality hardware of Alcoa Aluminum, you gain the extra selling power of the Alcoa Care-free tag. Preselling over 40 million people on two network television programs, via radio, national magazines and local newspapers, this tag immediately says lighter, brighter living to *your* prospects. Eight out of ten adult Americans now know and look for it as their guide to the best in aluminum value.

Join the trend to aluminum for more Care-free homes. Alcoa would like to share with you the experience gained in over 30 years of research and development of better products and better building techniques for American homes.

For the names of manufacturers who make quality hardware of Alcoa Aluminum, call your Alcoa sales office or write: Aluminum Company of America, 1882-D Alcoa Building, Pittsburgh 19, Pa.





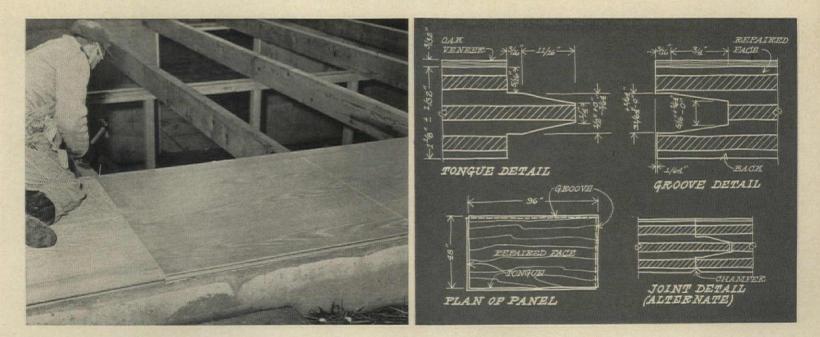
Prestressed grade beam lets Place build in winter

Using 4" x 24" steam-cured prestressed concrete grade beams (shown above) a five man crew can place complete foundations for a 1,400 sq ft house in two hours. The beams, made by Kuert Concrete of South Bend, are moved and positioned by a front end loader. They rest on 20" diameter piers placed 16' oc. At corners, reinforcing rods cast into beams ends are welded (on the job) to make a solid connection. Joist hangars—seen in photo at left—are cast into beam and support box beams for the insulated crawl space, photo right.

Each grade beam has four 3/8" diameter woven wire cables that are prestressed when beam is cast. Beams could be cast in 380' lengths, cut up after concrete cures. Says Place's engineer Bruce Fast: "We hope this system will cut our costs, but so far after two houses we're only breaking even."

Andy Place is testing a new foundation and a new floor

Place, a South Bend Builder and ex-chairman of NAHB's Research Institute, is trying two new techniques to solve two of housings oldest problems: 1) How can you build all year in a cold climate? 2) How can you avoid laying the four plies of the usual floor? The beam above and floor below may be the answer.



These 2.4.1 floor panels have finish veneer

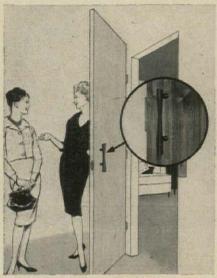
The finished first floor above cost Builder Place only 80ϕ a sq ft including the framing above the basement. The structural subfloor, spanning 4', and the finish floor are all in one piece, a big version of $1\frac{1}{8}$ " thick 2.4.1 panel with a special 3/32" finished oak veneer applied in the plywood mill. Diamond Lumber Co, Portland made the panels for Place.

The floor is nailed to the framing at the score line, seen at right edge of photo above, and at the joint. The big panel joint eliminates blocking at unsupported panel edges: stresses are carried continuously from panel to panel by the interlocking panel joint. Added benefit: the basement ceiling is the flush bottom side of panels broken only every 4' by the floor framing. The bottom fir ply can be finished with a stain or painted to give a textured surface. /END



A Series On Residential Hardware For Builders Of America's Homes

1960



Exciting Door Pull Styling A New SURFASET^{*} Development

The push-pull action of SURFASET Door Hardware provides the oppor-tunity for exciting decorative touches through the imaginative use of door pulls. Now, Stanley offers attractively different styling in a new solid molded black pull (No. 3710), and a hardwood pull, richly stained (No. 3714). Each set includes one pair of pulls designed for mounting back-to-back with through bolts. For single pulls, order 3705 (Black) or 3707 (Wood). This new SURFASET development will add to customer appeal of the revolutionary door styling for which SURFASET Surface Mounted Door Hardware was designed . . . doors that close over the openings.

The advantages for builders are obvious. Installation time and material and service costs are reduced. There is no need for wood jambs, finish trim, mortising or planing. No more callbacks, because, equipped with SUR-FASET Door Hardware, doors cannot stick or bind . . . ever! * TM

STANLEY SURFASET Surface Mounted Door Hardware and new SURFASET Pulls are being advertised to prospective home owners in national consumer magazines such as HOUSE BEAUTIFUL and SUNSET.

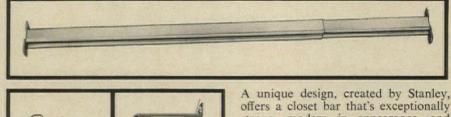
Write for SURFASET Door Hardware Installation Sheet (Form No. DS167).

Trouble-free Operation A Certainty with Stanley Bi-Fold Door Hardware

Modern, space-saving Stanley bi-fold door hardware makes smooth, dependable, trouble-free installation and oper-



NEW No. 7035 ADJUSTABLE CLOSET BAR Satisfies Builder's Requirements for Strength, Appearance, Cost and Ease of Installation.



ation a certainty. Door handling, adjusting or removing is speedily accomplished by one man. A one-nut, one-wrench adjustment system means doors can be rapidly adjusted and aligned from either side in closed or open position. Even if out of alignment up to one inch, doors will operate smoothly; suspended guide pivot holds doors in track. Nylon pivots and guides insure silent operation. Write for free literature (Forms DS164; DS165).

NEW! Reference Book For **Builders Now Available**

Helps you select hardware that's RIGHT for the job. Reduces installation time and costs; saves the cost of call-backs; builds your reputa-tion through satisfied customers. For your copy, write to STANLEY HARDWARE, Division of The Stanley Works, Dept. D, 80 Lake Street, New Britain, Connecticut.

A House Moves On Its Hardware

No Chance for Error with 2825 Wall Pocket Sliding Door Set!

This steel wall pocket frame is adjustable for all door openings sizes 2' 0" to 3' 0" wide and 6' 6" to 6' 8" high.

One set for all door sizes - no chance for misfits because of errors in ordering or framing.

Another big plus value is that the door can always be readjusted without removing the finish trim. For detailed information write for Form DS156.

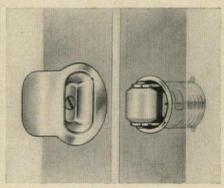
strong, modern in appearance, and economically priced. Available in stock sizes to fit all closets up to 120" in width. Installation is easy and fast. There is no cutting necessary. Simply spot two top screws, slip the bar over, then mount firmly, driving in upper and lower screws. The closet bar is ready for use and hangers cannot mar the bright nickel finish.

Eliminate hanger "tangle" with Snap-in Nylon glides

Team up the No. 7035 Adjustable Closet Bar with Stanley "snap-in" smooth riding nylon hanger glides for closet luxury, added appearance and performance appeal. Glides are easily snapped into the inner bar section and can be added even after the bar is mounted in place. Write for Form No. H-163 for prices and ordering information.

NEWS FLASH! Roller Catch Now Available for 11/8" doors

The Stanley No. 24 Roller-Catch is ideal for $1\frac{1}{8}$ " louvered doors. It answers the builder's need for easy, fast installation. Simple mounting . . only one screw required. Write for Form H-159.



Address requests to Stanley Hardware, Division of The Stanley Works, Dept. D, 80 Lake Street, New Britain, Conn.

AMERICA BUILDS BETTER AND LIVES BETTER WITH STANLEY This famous trademark distinguishes over 20,000 quality products of The Stanley Works, New Britain, Conn.—hand tools • electric tools • builders hardware • industrial hardware • drapery hardware • automatic door controls • aluminum windows • stampings • springs • coatings • strip steel • steel strapping—made in 24 plants in the United States, Canada, England and Germany. CANADIAN OFFICES: ROXTON POND. P.O. AND HAMILTON, ONT.

Here are seven more ways to cut your costs:

Swimming pools cost less for Burton W. Duenke Building Co in St Louis because he saves 10% by contracting the job himself. Says Vice President Gerry Mefferd: "We use all our regular subs—carpenters build the forms, plumbers install the piping and filter equipment, and our electricians hook up the power. Pool construction works in easily with our regular homebuilding operation."

Door trim costs less for Strauss Bros in Lincoln, Omaha, and Denver because they now use an aluminum bead instead of wood trim around all interior doors. John Strauss says the aluminum bead saves time and money on installations.

Drywalling costs less for Ed Bennett in Bethesda, Md, because he uses adhesive rather than nails to hold his drywall to studs. Says Bennett: "Though I pay \$25 more for a \$900 drywall job right now, my subcontractor has promised a reduction when his men get used to the system. I know it will be cheaper, and I'll be bothered with fewer nail pops." He uses a third fewer nails by switching to adhesives.



Soffits (above) cost less for Bob Schmitt in Berea, Ohio because he uses unpainted corrugated aluminum barn roofing, claims "it looks good, needs no painting and requires no maintenance."

Fences cost less for Matt Jetton in Tampa, Fla. because he uses a heavy expanded metal lath. It can be unrolled and nailed to posts in a jiffy, says Jetton.

Garages cost less for Sam Huff in Kansas City because "we lower the garage ceiling to the same height (8') as the ceiling in the house. This lets us use the same precut studs in the garage that we use in all the walls in the house."

Landscaping can cost less for you if you get free advice from state foresters, says Florida Landscape Architect M.W. Barwald. He explains: "The forester can tell you which trees you should and should not save, and what sprays to use to protect them. Most trees die because the unhealthy ones were saved, or because insects rather than bulldozers damaged the roots."



A loose-leaf sales book can help you sell more houses

So say three sales-book users—Eichler Homes of Palo Alto, Calif.; Raymond Bros of La Crosse, Wis.; and Lake Forest Builders of Palatine, Ill.

Loose-leaf books used by the three builders include photos and plans of houses, photos of subdivisions and community facilities, price and financing data, and awards won by the builders' houses.

Here, the builders say, are some reasons why the loose-leaf books can help you sell houses:

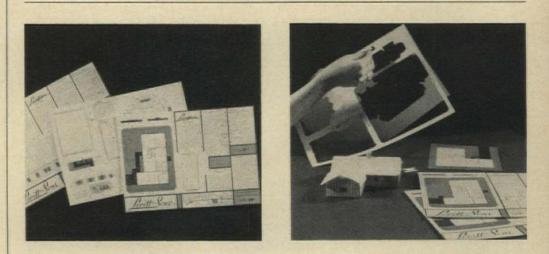
1. They dignify your sales presentation. Eichler's books are bound into leather briefcases (above). They are shown not only to prospects but also to "sphere of influence people (motel owners, Chamber of Commerce officers, corporation executives) who might steer new residents our way."

2. They make your sales presentation more graphic—especially when salesmen call on prospects in their homes.

3. They help your salesmen focus attention on items that interest a particular prospect. (For quick reference, Lake Forest's book has index tabs.)

4. They help train your salesmen. The more a salesman leafs through a book, the better he learns your sales story.

5. They are flexible. You can add or drop pages as your model line changes.



From these die-cut sheets, prospects make scale model houses

When a prospect takes home one of these cardboard sheets, punches out the pieces, and assembles a model, he becomes more closely identified with a new house.

That's the opinion of salesmen who distribute the sheets at Levittown, Pa. The sheets are priced at 10ϕ each to discourage casual lookers and children from picking them up, but they are given to likely buyers. Says a Levitt spokesman: "We think the sheets have led—indirectly, of course—to a number of sales."

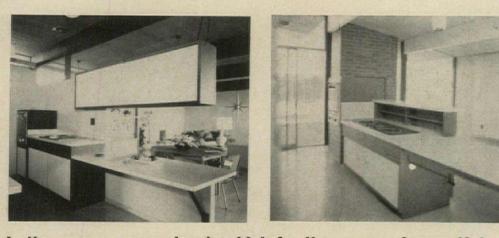
What the leaders are doing

starts on p 201



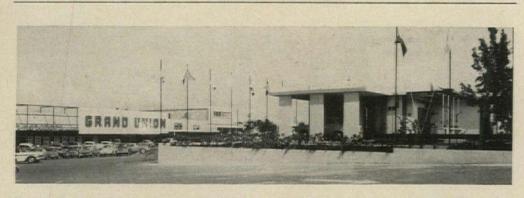
This "appraisal caravan" speeds sales of used houses

Every Tuesday morning Baltimore Realtor Mal Sherman (extreme right in photo) takes his 12 sales people on a tour of all used houses listed the preceding week. Each salesman estimates the market value of each house seen; then the estimates are averaged to get a suggested market price. Sherman says his system leads to quicker used-house sales (he sells more than 50 a month) because it helps convince owners that the realtor's suggested price is realistic. There's a publicity angle, too: Sherman's four-car caravan draws attention wherever it goes.



Is the average range top too high for the average housewife?

Yes, says California Builder Joe Eichler (Palo Alto, Los Angeles), who has lowered his countertop ranges from the standard 36" (left above) to 30" (right). Eichler says the 30" height is more convenient for the average woman (5'4" in shoes), and people seated at the breakfast bar can reach the lower range easier. At Cornell University's Housing Research Center, Glenn Beyer says: "I know of no studies on range heights, but I am sure the standard 36" is at least 4" too high."



A model in a shopping center is boosting sales in Puerto Rico

That is what Ibec Housing Corp reports after fast sales of its newest model built in a San Juan shopping center. The threebedroom house sells for \$13,400 to \$14,400. Ibec's highest price in Puerto Rico. Ibec has built 5,000 Puerto Rican houses since 1954 and plans 2,000 more, including 234 like the model above.

"Don't let your buyers

make decisions for you"

That advice comes from Washington Builder Milton Kettler, who insists that once a house is sold "buyers want to think of the builder as a professional and want him to make decisions for them."

Says Kettler (whose firm has built about 200 higher-priced houses in the capital and Maryland the past three years): "You have to be businesslike once you have sold a house to keep buyers from driving you crazy over changes. We have learned that a firm stand and a positive approach are what buyers really want.

"For example, we used to ask a buyer to go to the decorator to select his wallpaper pattern, but this took forever. Next we sent the house plans to the decorator, instead of direct to the buyer, thinking this would get the buyer over to the decorator fast. It did, except that all the buyers wanted to go over on Saturday and the decorator didn't want to see them Saturdays. So we started sending these people specific appointment hours on weekdays—and they keep their dates. They think we are organized. They don't want to upset our operation.

"And we no longer ask the buyer what he wants us to do when an appliance or material specified in the contract is no longer available. We simply give him an alternate door, for example, and a time limit to make up his mind. We seldom get any resistance."

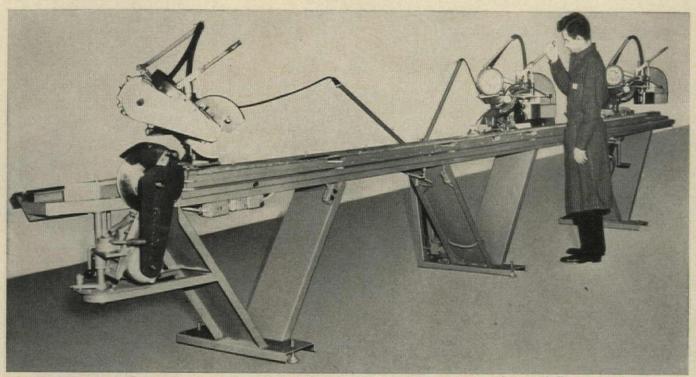
Kettler has another way of "keeping people off our necks with complaints." A Kettler salesman "must settle a buyer's complaint before the salesman leaves the house." So far Kettler has never had to go back on a salesman's word.

Survey among housewives attracts more viewers

Builder Joe J. Danna of Richardson, Tex. practically guaranteed a big turnout at his model showing by conducting a big survey in the Dallas area. First he sent questionnaires to 5,200 women asking their preferences on products and materials, then used the preferred items in his model and advertised it as a survey-based model. He not only won attention from the housewives but drew wider attention through newspaper publicity about the study.

Tip from a small builder: "Get the foundation right"

Five-house-a-year Builder John Booth of Hamden, Conn. who subcontracts all work ("because subs have better men than I could keep year-round") makes his closest check on foundation work. He operates his own transit, gets everything right. Says Booth: "If the foundation is not right, then everything will get fouled up all along the line. If it's right, all the later work can be spot-checked with little danger of serious problems." /END



TRUSS BENCH will make all cuts necessary for any style of lumber truss. Cutters are positioned semi-automatically.

With this new machine, one man can trim, miter, and notch a truss in four minutes

Truss packagers get four distinct advantages from the use of Turn-A-Bore's new machine, claims the president of the company, Paul Stevens:

1. Workmen can make trusses of any style, in any span or pitch, without using pattern boards or templates, or without repeated reference to specification sheets.

2. The time needed to saw and rout the members is cut from about 30 minutes to less than four minutes. 3. Parts are cut precisely, making assembly quick and easy.

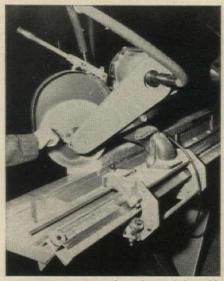
4. Scrap from operator error or miscalculation is eliminated.

Running the machine is said to be only a semi-skilled job; it requires only one operator and he can be trained in half a day.

Turn-A-Bore, Fort Worth. For details, check No. 4 on coupon, p 304



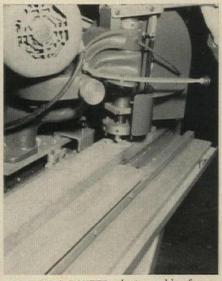
SPAN AND PITCH of truss are set on this indicator panel by rotating a front-mounted crank. This sets angle and depth of cut.



END ANGLES are trimmed precisely with swinging-arm crosscut saws. Saw assembly moves along bench on roller rails, right.

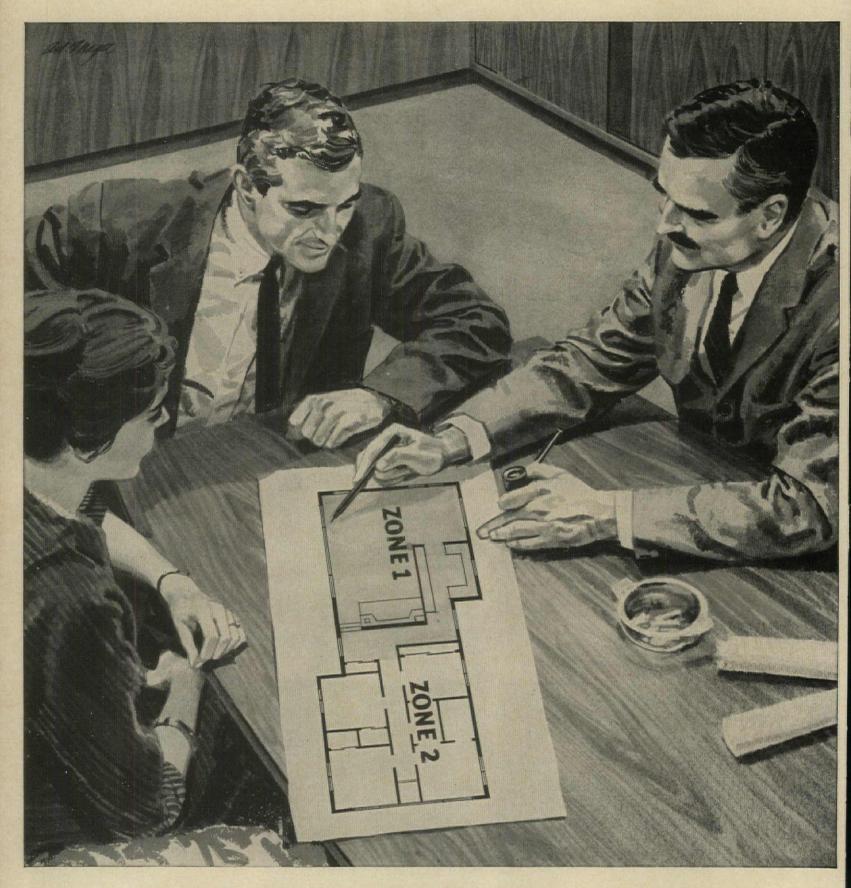


RAFTER NOTCHES are cut in one pass. The manufacturer claims all cuts are so precise, repeated parts are fully interchangeable.

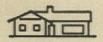


SPLIT-RING ROUTER adapts machine for use in Teco system. Machine will cut members for use in any fabrication system.

Zone your homes for



THESE QUALITY-HOME FEATURES CALL FOR COMFORT-ZONING



Picture windows often mean greater heat gain or loss.



Spread-out plans cause temperature differences.

Split-level homes are a puzzle for one ther-

mostat to handle.

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Rooms over garages often need extra

heating or cooling.

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Living and sleeping areas require different temperatures.



Recreation or family rooms require tailored temperatures,

maximum comfort per square foot!

New Honeywell Comfort-Zoning assures whole-house comfort, adds extra value to quality homes

Now you can impress quality-home buyers with comfort that is zoned to match their way of living. In quality homes, such desirable features as spread-out floor plans and split-level designs often make it impossible for a standard heating system to provide uniform comfort in every area. Only zone control assures whole-house, maximum square-footage comfort.

Show your prospects how zone control divides their home into comfort zones. Point out the thermostat in each zone that provides heating or cooling to that zone according to its own individual comfort needs. And explain that they can be comfortably warm in the living area and pleasantly cool in the sleeping area all at the same time.

Zone control can be accomplished in 4 ways: (1) with two furnaces, each serving one or more zones and thermostats; (2) with one furnace serving two or more zones and thermostats; (3) with one boiler serving two or more zones with separate thermostats and valves; and (4) with one boiler serving two or more zones with separate thermostats and circulators.

See how Honeywell Zone Control helps you sell homes. Plan to comfort-zone the next homes you build. And get full information on comfort-zoning from your nearby Honeywell office. Or write Honeywell, Department HH-4-78, Minneapolis 8, Minn.

ASK YOUR CONTRACTOR to give you all Honeywell controls on your heating and air conditioning systems. Honeywell controls are matched to work together. They are built to provide maximum safety, comfort and economy. And they are backed by colorful national advertising in Better Homes and Gardens, House & Gardens, House Beautiful, and Sunset.





APRIL 1960

NEW HONEYWELL WEATHER STATION

adda da 1.5

At last, you'll have visual evidence of quality air conditioning in the living area of the home. And prospects will love the way this plete command of their indoor climate. At a plance they can check indoor humidity and a touch they can pre-set day and nighttime both indoor and outdoor temperatures. At a touch they can pre-set day and nightsin There's a barometer to help them forecast weather changes. And special lights to warn disorders they can correct themselves. The Honeywell Weather Station is one of an offer in your homes.

NEW INDOOR-OUTDOOR SYSTEM

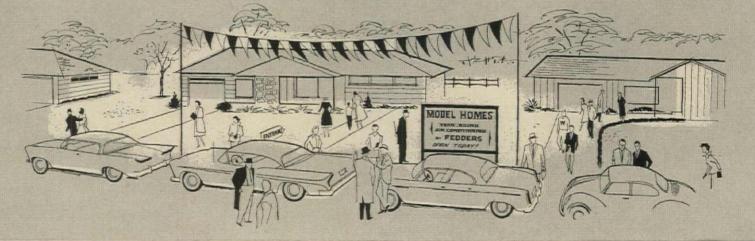
House hunters will be fascinated with the way thouse numers will be ascinated with the way this low-cost control system actually antici-pates their comfort needs. Here's how it does it is our door the more senses a change in Pates their comfort needs. Here's how it does it ! An outdoor thermostat senses a change in wind, sun and temperature and signals this information to an indoor thermostat. The door thermostat then lowers or taises room temperature accordingly. Your home buyers won't notice changes in the weather because the system compensates for it. the system compensates for it.

the system compensates for it. With this new Indoor-Outdoor System you have your choice of many of Honeywell's complete line of thermostats—including the new Diamond Jubilee model of the famous Honeywell Round.

"CLEAN" ... "SAFE" ... "MODERN" - everything

The Adaptomatic Heat Pump operates as the sole source of heating in moderate climates. For larger homes or colder climates, resistance heating elements of 5 to 15 KW are installed right inside the Adaptomatic cabinet. Automatic controls turn them on in stages as needed at pre-selected outdoor temperatures.

FEDDERS to the pre-selected out the pre-selected ou



you can say about forced air electric heating...plus

THE BIG FEATURE that really sells new homes

We beg your pardon. Right or wrong, buyers expect the heating plant in a new home, any new home, to be "clean", "safe", and "modern".

You're resting your sales efforts on a pretty fragile base, if electric heating is the biggest thing you have to offer in 1960. It's almost impossible to drum up merchandising excitement about a commonplace that every builder in town (aided and abetted by competing utilities and fuel dealers) is promoting as loudly and eloquently as you are.

BUT WHEN ELECTRIC HEAT PLAYS ITS PROPER ROLE as part of a bigger package—air conditioning in summer, electric heating in winter—it really makes sense dollar-wise and sales-wise. You feature the most-wanted of all new-home features—whole-house air conditioning. You answer all the questions, overcome all the objections to ordinary electric heating. You can sell from a merchandising platform that works wonders in newspaper ads...on site signs...in model homes—the year 'round comfort system of the future.

The Fedders Adaptomatic Heat Pump makes all this possible without blowing your construction budgets out of line. It costs no more installed than a good conventional heating system. As a result, it is being featured as standard equipment in homes selling for as little as \$10,000.

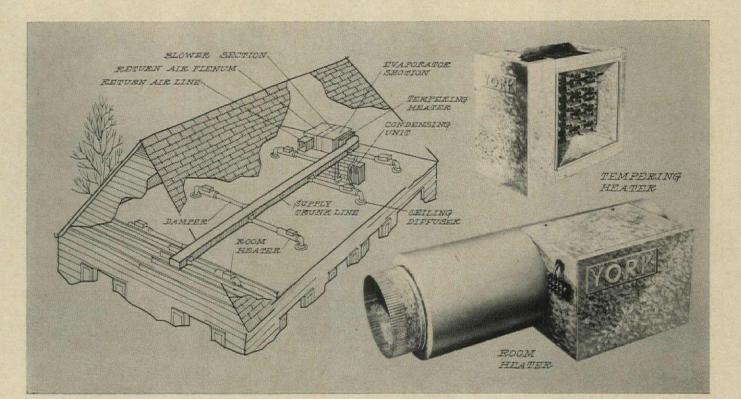
IN ADDITION TO WHOLE-HOUSE SUMMER COOLING by one of the best-known most respected brands of household air conditioning, the Fedders Adaptomatic Heat Pump offers the most comfortable, most economical kind of electrical heating. It permits controlled air circulation and humidification, the two drawbacks to which regular electric heating is vulnerable. And you can easily demonstrate and document that the Fedders Adaptomatic Heat Pump gives lower winter operating costs than any other system of electric heating. (Its electric, heating elements operate only in extreme temperatures at other times, operating on reverse cycle, each watt of current turns out many more BTU's than resistance heat.)

A record of thousands of successful installations all over the U. S. and in homes of every price, puts the Adaptomatic Heat Pump Air Conditioner in a class by itself price-wise and performance-wise. Your local Fedders representative has a plan to help you test the selling power of the Adaptomatic Heat Pump in your model home. Mail the coupon below for details.

FEDDERS COR Department HH4 Maspeth 78, New	-0	
Gentlemen: Pleas sales power of the my model home.		
Name		
Firm		Contraction of the second
Street		
City	Zone	State

ELECTRIC HEATING — here are ducted-heat systems

Warm-air heating manufacturers are now getting into the electric heat business and this is the kind of equipment they are offering for air-handling systems. For reviews of Majestic and Lennox systems announced earlier, see H&H, Mar '59, July '59.



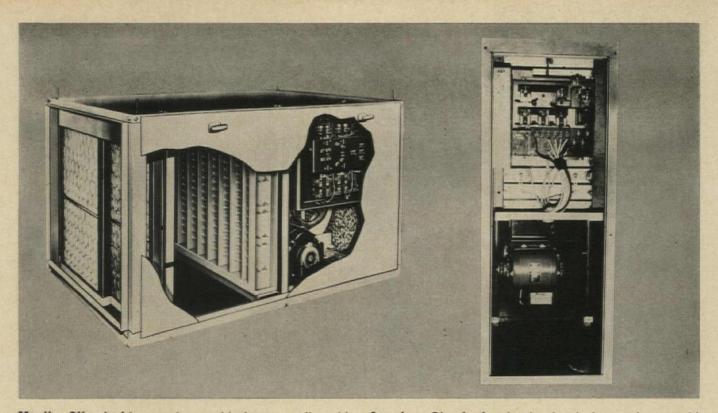
York division of Borg Warner has taken an approach to electric warm-air heating that combines the virtues of room units and central systems. Instead of a central bank of modulated elements, York mounts 2,500-w elements in ducts just before the room outlet diffusers. Thus, they offer room-by-room zoning, which has been electric heat's biggest advantage, plus the better circulation, cleaner air, better humidification possible with a moving-air system. In York's system, air handling is supplied by a central air conditioner which blows, cleans, and dehumidifies the air. A tempering heater (7,000-w or 9,000-w) prewarms the air at the central unit. System is fully flexible: individual units can be modulated; dual compressors offer two-stage cooling; combination of cooling and heating offers reheat dehumidification. Insulated ducts work well in attic or crawl space. York, York, Pa.

For details, check No. 5 on coupon, p 304

Williamson system is designed to add electric heat to company's console, hi-boy, companion, or self-contained Condaire cooling units, or, where cooling is not wanted, to give ducted heating with a specially designed horizontal blower. Heating capacities meet most residential and commercial demands: five sizes are available putting out from 4,700 to 15,450 Btu for wattages of 1,383 to 4,530. Variable speed blowers run from 600 to 3,000 cfm. All units are 24" long, are 5", 6", 7", 8", or 9" in diameter depending on wattage. Each can be thermostat controlled for room-by-room zoning. Williamson Co, Cincinnati.

For details, check No. 6 on coupon, p 304

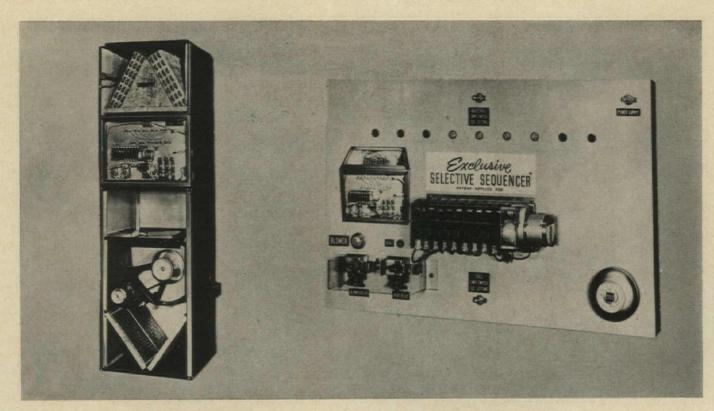




Mueller Climatrol has supplemented its heat-pump line with an 81,840 Btu resistance furnace. It uses four 6,000-w elements, controlled by a four-stage sequencer, to give modulated heat. Large centrifugal blower is belt driven off a variable-speed sheave. Motor is resilient-mounted; blower is dynamically and statically balanced. Casing is heavy gauge steel, insulated for heat and sound. Horizontal design (above, left) allows the unit to be hung in crawl space, basement, utility room, or attic, operated with or without a duct system. Filter rack and filters are included with the furnace. Downstream section of case has built-in coil hangers and drain pan so cooling can be added easily.

Mueller Climatrol, Milwaukee. For details, check No. 7 on coupon, p 304 American Standard makes its electric furnace in two cabinet sizes, three capacities, and in either upflow or downflow models. Four banks of heating elements are staged to give modulated control to meet the heat demand. Furnaces are factory-wired to give 82,000 Btu but may be adjusted in the field to give 41,000 or 61,500 Btu. Steel casings are insulated for heat, sound, and moisture with $\frac{1}{2}$ " foil-faced spun glass and Quilt-Cote undercoating. Smaller case is $\frac{46''x30''x19''}{x19''}$, will take $\frac{1}{4}$ -hp, 1200-cfm blower to handle bigger cooling loads. Both operate on 240 v, draw 12,000 to 24,000 w. For closet installation, both allow zero clearance at back and sides, 6" clearance at front and top.

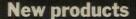
American-Standard, New York City. For details, check No. 8 on coupon, p 304



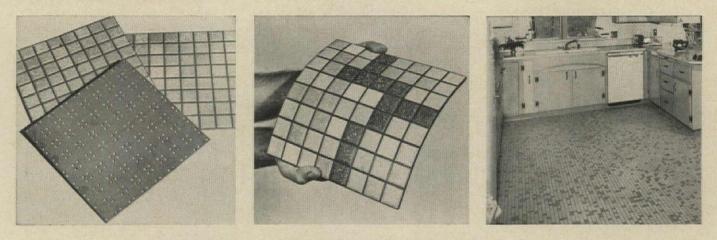
Stewart Warner has the most completely modulated electric furnace on the market. Most systems offer four-stage heating. S-W's Selective-Sequencer cuts heat in or out in nine-step sequence. As the thermostat calls for heat, elements come on one at a time; as demand is satisfied, units start cutting out. In case of power failure, sequencer reverts to start-up situation, builds load gradually as power comes back on so

as not to overload system. Various models give 23,000 to 92,000 Btu output on 208-v, 220-v, or 240-v current. Blowers have adequate capacity for summer cooling. Furnaces come in upflow, downflow, or horizontal models. Heating sections are all 22"x22"x16".

Stewart Warner, Lebanon, Ind. For details, check No. 9 on coupon, p 304



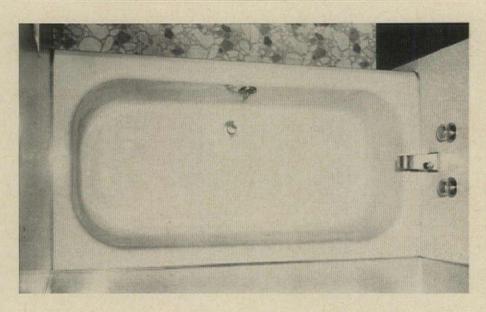
start on p 213



Flexible tiles join virtues of ceramic and rubber

Tiles 1" square are bonded in a synthetic rubber matrix, left, to form a 9" tile that flexes, center, and blends into full mosaic floor, right. Floor offers greater comfort (it's softer under foot), greater durability (there's no grout to chip out), and longer wearing (surface is ceramic). Installation savings offset slightly higher materials cost. Cost in place: about \$1.25 a sq ft.

US Ceramic Tile, Canton, Ohio. For details, check No. 10 on coupon, p 304



Center-drain tub cuts fixture inventory

AllianceWare's new enameled steel tub makes right- or left-hand installation possible with one model. New tub coordinates with company's Cat Cay line, fits standard 5' recess. Designed to be wall hung, tub has a 1" leakproof wall flange and a full-length grab rail. Like other Cat Cay fixtures, tub comes in yellow, gray, tan, blue, pink, green, and white. Model shown is prototype: production model will have drain at back wall.

AllianceWare, Alliance, Ohio.

For details, check No. 11 on coupon, p 304



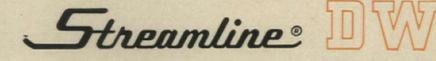
Quality bay is made from stock parts

Andersen has solved many cost problems of bow window construction by assembling its new Casement Radial Bay from stock sash, mullions, and casings (details, left). Windows are made for $1'10\frac{1}{2}''$ or 1'6'' sash in five to seven sash bays. Sash can be single or double glazed, give two-point seal at

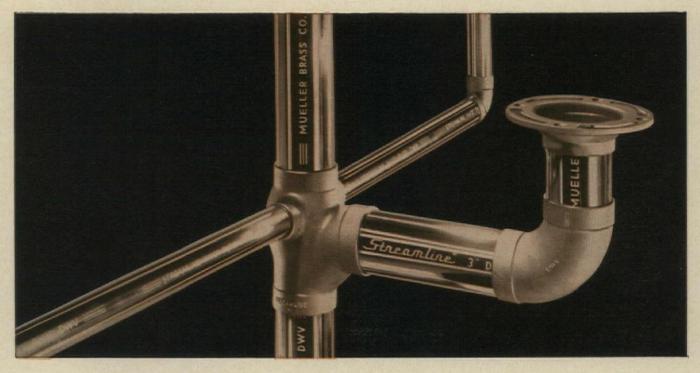
both jambs. Only side casings and extension jambs need custom fitting. Andersen Corp, Bayport, Minn.

For details, check No. 12 on coupon, p 304

New Products continued on p 225



TUBE AND SOLDER-TYPE FITTINGS CAN SAVE YOU UP TO 15% AND YOU GET A BETTER INSTALLATION TOO!



You can install STREAMLINE DWV COPPER TUBE AND FITTINGS at savings up to 15% and get the most modern drainage system possible . . . a compact, space-saving system that's lightweight, sanitary, non-rustable and clog proof.

> COMPARISON WITH RUSTABLE MATERIAL PROVES INSTALLED COST OF STREAMLINE DWV COPPER TUBE AND FITTINGS IS LOWER !*

3" ALL COPPER DWV DRAINAGE INSTALLATION

> COST TO PLUMBING CONTRACTOR

\$174.66

\$62.46

50.89

60.00

1.31

*

Stack Fittings and Tube Drainage Branch Lines Solder and Flux Labor

TOTAL COST OF INSTALLATION

3" GALVANIZED AND DURHAM DRAINAGE INSTALLATION

Stack Fittings and Pipe Drainage Branch Lines Lead and Oakum Labor

TOTAL COST OF INSTALLATION

COST TO PLUMBING CONTRACTOR \$53.01 30.91 1.00 120.00

> TOTAL COST OF INSTALLATION

Labor

Stack Fittings and Pipe

Drainage Branch Lines

Lead and Oakum 120.00 7*

COST TO

PLUMBING CONTRACTOR

\$26.52

30.78

4.87

3" IRON DRAINAGE INSTALLATION

COPPER

⁶This comparison is based on actual material and labor costs in effect on January 7, 1960, in a mid-west metro-politan area of 75,000 population.

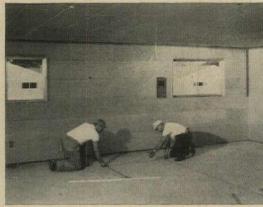
Complete technical information on Stream-ine DWV Copper Tube and Solder-Type Fittings is included in big, new 32-page Bulletin D-459. Send for your free copy today.

0*

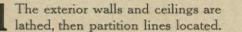


MUELLER BRASS CO., PORT HURON 10, MICHIGAN

294







2" metal floor runner is nailed in position to receive lath panels.



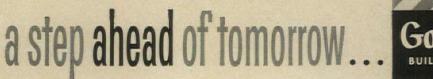
3 Safe-Edge[®] Cornerite is stapled to ceiling to hold top of lath panels.

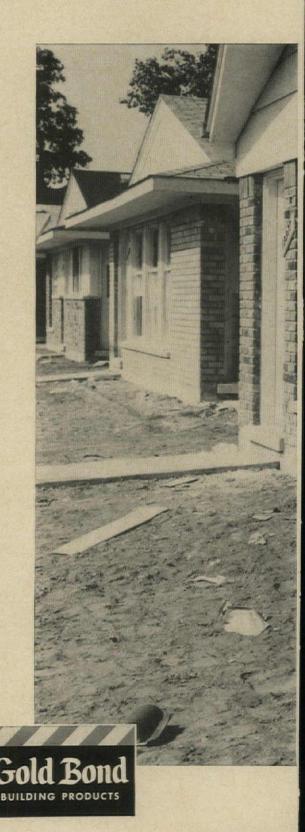
"This new partition adds 25 square feet to our homes – at no extra cost!"

"25 square feet...that's how much space we save in our 910 square foot home by using Gold Bond's new lath and plaster partition," says Dave Holtzman of Holtzman and Silverman, Detroit builders since 1919. "It makes an excellent wall, too. Two inches of solid lath and plaster give it a full hour of fire protection, good sound insulation, and more impact-resistance than any of the walls we've been using. And the price is right in line!"

It's the patented interlocking core that gives this exclusive Gold Bond partition the extra strength and fire protection. Ask your Gold Bond® Representative for the full story about it — or write Dept. HH-460 for free samples and technical bulletin.

NATIONAL GYPSUM COMPANY, BUFFALO 13, NEW YORK







4 1" long length gypsum lath is then erected. Edges interlock for strength. **5** Safe-Edge Cornerite is stapled to the other side of lath at ceiling.

6 Dave Holtzman (left) inspects 2" space-saving plastered wall.



Gold Bond Representative shows patented interlocking core to Ed Endert, Plastering Contractor.

POMONA'S CUSTOM-LOOK SELLS HER!!!!! FOR ONLY A FEW DOLLARS MORE

"Diamond," Distinguished Designer tile by Saul Bass.

DOLLARS MORE ... And with the "lady of the house" Pomona's new "customlook" in ceramic tile adds the fresh, unique appeal that makes her home different...helps to sell her faster, easier. You can have this "custom-look" for only a few dollars more...here's

6 6

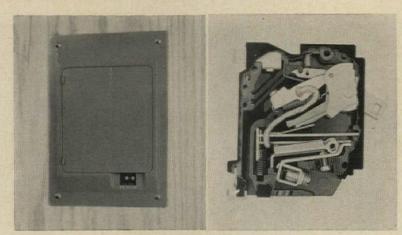
how... Simply include a few of Pomona's new Sculptured or Designer Tiles (usu in a field of economical standard tiles as seen above. Because Pomona has the most extensive selection of designs and colors, this custom-look can be achieved in large tracts with no two installations alike. A new illustrated Idea Booklet for the Builder outlines the Custom-look Program and other Pomona Sales Aids in detail. Ask your Pomona representative for a copy or mail the coupon below today.

POMONA TILE MANUFACTURING CO.

sually	seen only in more expensive nomes)
P	POMONA TILE MrG. Co. 629 N. La Brea Ave. Los Angeles 36, California
l "C	ease send your illustrated brochure on the Justom Look in Tile" (No. HH-1) ease have a representative call on me with full formation
NAME	
FIRM _	
ADDRE	88 <u>1</u>
CITY_	STATE

New products

start on p 213



BREAKER BOX is neat, unobstructive. Breaker, right, combines thermal and magnetic action; trips fast for short circuit, ignores brief and harmless overload.

Here is a breaker panel that's easy to get at

New convenience in breaker panels is found in Cutler-Hammer's redesigned device. Appliance styling and finish allow panel to be used in plain sight in kitchen or hallway where it will be easy to get to. Panels to handle two to 42 breakers are available in the new Safetybreaker style. Cutler-Hammer, Milwaukee.

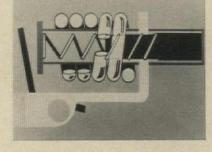
Cutter-Hammer, Milwaukee.

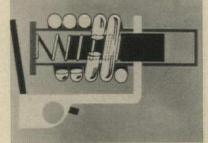
For details, check No. 13 on coupon, p 304

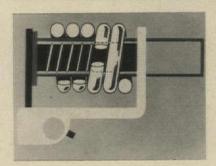
Here is a breaker with a life guarantee

Magnetic breakers guaranteed for life, are now offered for residential use. This type, as the diagrams show, is thrown by a solenoid, does not have to build up heat to trip. It can be installed anywhere even near a range or furnace. A hydraulic fluid dampens the action so that the device is not tripped by a light flash overload.

Murray Mfg Corp, Brooklyn. For details, check No. 14 on coupon, p 304







IN OPEN BREAKER, core is retracted by spring. Normal current flows through coil.

adding force to electric magnet to attract breaker leaf.

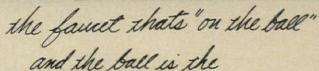
OVERLOAD IN OIL pulls core in,

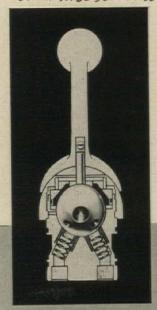
TRIPPED BREAKER has closed leaf, left. To reset, user need only push reset button.

New Products continued on p 227







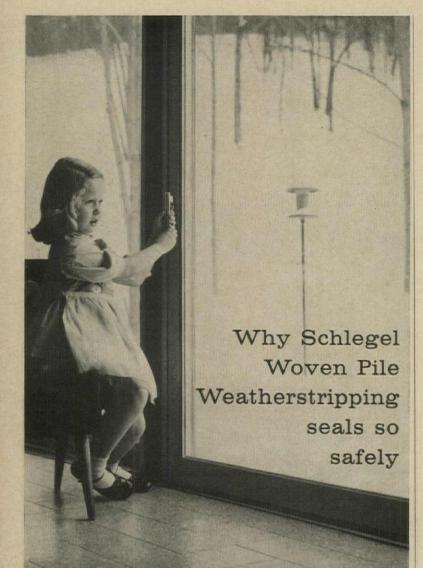


ONLY ONE MOVING PART...

Here shown is a cut-a-way of the heart of the Delta Faucet. Note the expert simplicity in design excellence. Having only one moving part (the BALL) it is readily understandable WHY the DELTA FAUCET is considered the FINEST.



In Canada: EMCO LIMITED GREENSBURG Literature available upon request.



Schlegel's dense pile of soft wool fibres adjusts to all uneven surfaces and forms a soft, sure, cushiony seal against rain, snow, wind, dust, dirt. It keeps conditioned air *in*, locks drafts and cold air *out* ... and helps protect every member of the family.

The reason? Schlegel Woven Pile Weatherstripping has a natural resilience not found in metal or plastic. Its positive seal has been proven by rigid FHA tests for air infiltration—and by countless satisfactory installations.

SILICONE-TREATED. Dow-Corning silicone treatment maintains the natural resilience of Schlegel Woven Pile *under all weather conditions*. It makes the pile extra water resistant for positive protection against moisture leakage and makes it last longer under all weather conditions.

SEALS SILENTLY. Nothing matches Schlegel Woven Pile Weatherstripping for sheer soundlessness. Its deep, soft pile can't squeak, rasp, or rattle. It gives doors and windows an easy ride on wool "ball bearings" that never swell, stick or bind.

For complete information on Schlegel Weatherstripping, and a list of manufacturers using it, write for our booklet "Your Guide to Windows—Doors—Screens."



Wool fibres smooth out the uneven surfaces, give a firm, snug bond.

for protection that's silent, smooth and sure

Schlegel WOVEN PILE WEATHERSTRIPPING SCHLEGEL MANUFACTURING COMPANY P. O. Box 197, Rochester 1, N. Y. In Canada: Oakville, Ontario

IN AMERICA'S BIGGEST INDUSTRY...

almost everybody now *advertises*

in **Jouse**

With very few exceptions, every important advertiser of housing products is now advertising in HOUSE & HOME. In January, for example, HOUSE & HOME carried 64% more advertising revenue than any other magazine in the housing industry. And more and more advertisers are concentrating their advertising in HOUSE & HOME to get maximum impact on the readers of the leading industry magazine. In the first quarter of 1960, HOUSE & HOME advertisers increased their space by 155 pages over the space they bought in the first quarter of 1959; 57 advertisers bought double spreads and 22 advertisers bought three consecutive pages or more (6 of these ran an average of 10 pages).

Last year, more advertisers invested their advertising dollars in HOUSE & HOME than in any other monthly trade or industrial magazine in any field.

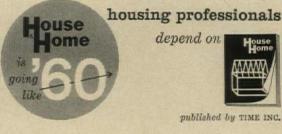
This year, HOUSE & HOME is starting the '60's by "going like '60!" HOUSE & HOME advertising revenue was up 49% in the first quarter of 1960.

...because almost everybody reads House Lone

More builders of more houses than read any other builder magazine, and they vote three to one that HOUSE & HOME is their first choice magazine. More builders who buy more building products. More builders with display model houses. More builders big enough to own their own construction equipment.

Also, practically all residential architects. And more mortgage lenders—the men who have to appraise and finance the sale of your products in houses. And more realtors—the men who must sell your products to homebuyers as part of both the new house and the old house. And more dealers. And more distributors. And more prefabricators, FHA-VA officials and local building officials regularly read HOUSE & HOME.

HOUSE & HOME will carry your sales message to all these people for less than half of what it would cost you to try to reach them through any combination of lesser magazines.



start on p 213



Emerson Electric has a new hood with a 10" two-speed fan and an extra large charcoal filter. Grease is trapped by a washable aluminum-mesh filter. Clean de-odorized air is discharged upwards, not out into the cook's face. Hoods come 30", 36", and 42" wide, 5" high, in copper, stainless steel, or color. Prices: \$97.90 to \$99.90.

Emerson Electric, St Louis.

For details, check No. 15 on coupon, p 304

Hood makers add ductless models

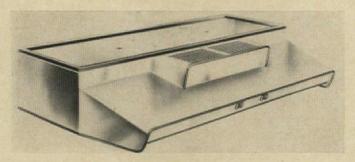
Stanthony solves the ductless installation problem with a conversion kit to fit all standard Stanthony hoods. The conversion unit can be installed in the hood, immediately above the hood, or in a soffit. Regular hood blower supplies vent air, regular filter adds its effect to grease and charcoal filters of the converter. Prices: \$23.50 to \$37.95.

Stanthony Corp, Los Angeles.

For details, check No. 16 on coupon, p 304

National Hood Corp calls its no-duct hood the Chef-Aire. The hood comes in five sizes: 24", 30", 36", 42", 48". Blower is pressure-type squirrel cage. Filters are easily removable. Push-button controls are at eye level. Aluminum hoods have anodized copper or stainless steel finish. Prices begin at \$103. National Hood Corp, Ocala, Fla.

For details, check No. 17 on coupon, p 304



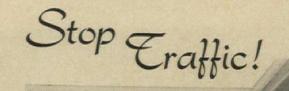
Fasco 60-series hood passes air over the activated charcoal at a rate calculated to give maximum odor absorption. Charcoal filter is teamed with a heavy-duty aluminum grease filter for easy cleaning. Air discharge is up and away from cook and cabinets. Rocker switch is up front. Sizes: 30'', 36'', 42'''; $7\frac{1}{2}''$ high. Price: \$99 up.

Fasco Industries, Rochester, N.Y. For details, check No. 18 on coupon, p 304

Berns Air King uses an adhesive-coated filter rather than the activated charcoal used by most manufacturers. This filter can be washed, then reactivated with spray-can adhesive. Hood has upward discharge, three-speed control, diffused-lens light. Units come 30", 36", and 42" wide in four finishes. Prices begin at \$84.95.

Berns Air King, Chicago.

For details. check No. 19 on coupon, p 304





INSTALL



Decorative Screen Doors

Put IDEAL Decorative Screen Doors on the front and back entrances of the next home you build. See how much they attract attention, help turn prospects into buyers.

Made of select Western Ponderosa Pine • Preservative Treated • 13 distinctive designs • Two sizes: 2-8 x 6-8 and 3-0 x 6-8 • Sanded smoothly both sides • Dowel-joint construction • Galvanized, Aluminum or Bronze wire.

AVAILABLE IN THE FOLLOWING STATES

Texas, Oklahoma, New Mexico, Kansas, Nebraska, Missouri, Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, Kentucky, Tennessee.

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IDEAL COMPANY, BOX 889, WACO, 7 Please send catalog on IDEAL Millwor	
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Free area capacity certified by Metal Ventilator Institute

0 sq. în. **GUARANTEED FREE AREA**

Louver — For buildings that have no ends. Easily installed on roofs of any Free area, 50 sq. in. Overall size, × 185%

Competitively Priced

Pleasing design... solid construction **MILCOR ROOF LOUVER VENTILATORS**

Meet FHA Requirements

FHA specifications now set minimum standards for the amount of ventilation required in the homes you build. These standards measure ventilator capacities in square inches of free area - the only true criterion for buying ventilators

Milcor Ventilators, like the Roof Louver shown above, offer maximum free areas in all sizes - and at competitive prices. Free area capacities for all Milcor Ventilators are certified by the Metal Ventilator Institute. Construction meets all FHA requirements.

See your building supply dealer or write us for Catalog' 300A, for complete information on FHA requirements, sizes and styles.



and centrally air-conditioned homes multiplies the problem of moisture condensation.

The extra insulation required by electrically heated

Part of Milcor's broad line that makes it easy to combine LCL quantities for truckload or carload savings

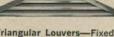




Stationary Louver — Flush and self-casing designs. 8" x 8" to 24" x 30".



Under-Eave Louver — Finned louvers deflect rain and snow. Three sizes, 4" x 16", 6" x 16", 8" x 16".



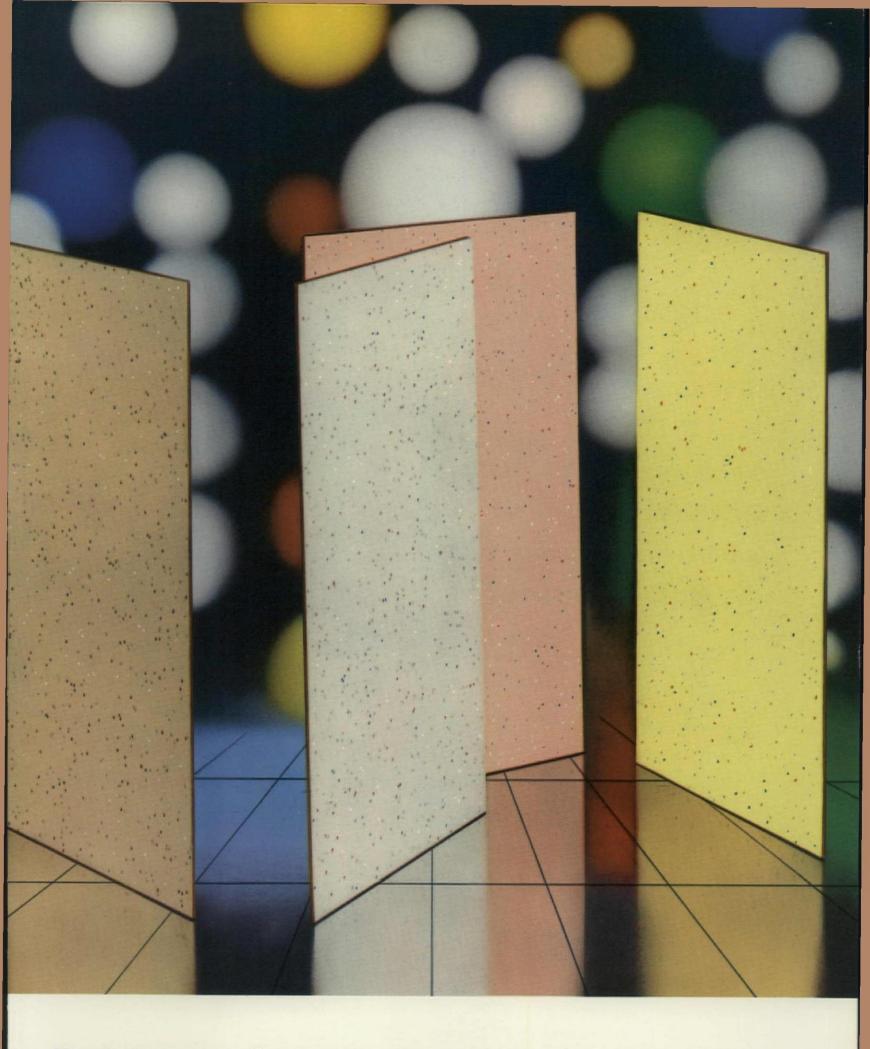
Triangular Louvers—Fixed and adjustable types. Sizes to fit various roof pitches.



Foundation Grilles -For crawl spaces and window-less basements. Size of one concrete block.

SM-10

BALTIMORE, BUFFALO, CHICAGO, CINCINNATI, CLEVELAND, DETROIT, KANSAS CITY, LOS ANGELES, MILWAUKEE, MINNEAPOLIS, NEW ORLEANS, NEW YORK, ST. LOUIS



New Iridescence reflects modern home design

What a winning appearance you can give kitchen or bathroom counter tops and other interior surfaces with new "IRIDESCENCE" from Panelyte[®]. It's a smart, modern pattern . . . a rainbow-like galaxy of color that glimmers and glows . . . invites prospects to feel right "at home." (The kind of feeling that helps *sell* homes.) Count on Panelyte, America's style leader in decorative laminates, for the most winning patterns in durable surfaces designed to last a *housetime*.



May we send you free samples of color-coordinated Panelyte? Write Panelyte Division, St. Regis Paper Company, 150 East 42nd Street, New York 17, N.Y. 17 days of building time and 15% of building costs with **P-B** Components

SAVE

To sell top-quality, custom-built houses — at an adequate profit—you need both speed and economy. Your aim is to increase your production, without increasing your work force.

Translate 17 days into man-hours... that's 544 hours for a 4-man crew. On a 5-day week basis, 17 days becomes 23 days of total elapsed time—a saving of almost 13 weeks a year.

With P-B Components you save this time; you also save 15% of your building costs. Here's why.

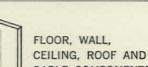
We have 24 years' experience in the building of the major house components. No other firm offers comparable experience. All this experience points to one fact...the centralized building of Precision-Built House Components — by the building materials distributor — cuts costs for everybody. Whatever your volume, you save 15% or better.

When the distributor handles the fabrication, many handling and rehandling costs are eliminated. The component parts come direct from the distributor to your site. Meantime, you are sharing in his far larger volume discounts.

With P-B Components — walls, floors, ceilings, roofs and gables — you build any type or size of house. Every component is custom-built to carry out your plan. This increases your selling strength. You give the home buyer any house he wants—2 to 4 months sooner than by conventional methods. You are equipped to compete profitably with every type of prefabricated housing.

P-B floor components, normally in large sections, approximately 100 sq. ft., include joists, headers, insulated underflooring and factory-finished hardwood flooring. (These panels are covered with a Sisalkraft-type paper as soon as installed.) The exterior wall components





Many dollars are saved by the elimination of all extra transportation and rehandling costs.

MFR

COST

103

20

DISTR.

BLDR.

DEALER

GABLE COMPONENTS -CUSTOM-BUILT FOR ANY SIZE OR TYPE OF HOUSE

30% 10 20 30 40 50 60 HOUSES PER DAY This chart shows how costs go down as the centralized production of house components increases. have either the sheathing and/or exterior finish applied and the finest of all drywall (Homasote) on the interior. The interior partition components come with the same drywall on both sides. Wall components are generally room size or

interior partition components come with the same drywall on both sides. Wall components are generally *room size or longer*. Ceiling components combine joists, strapping and Homasote ceiling panels. Roof components are made up of rafters, ridge, eave and insulated sheathing.

The average house is closed in the first day and completed in 1 to 3 weeks. Three weeks' completion means that one crew builds 17 houses per year instead of 6.

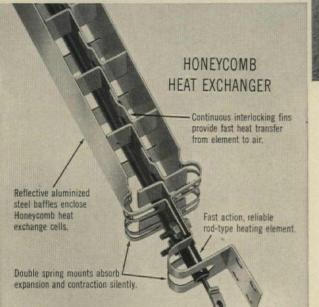
You buy your P-B Components through your local lumber dealer. If he does not yet know about this method, ask him to contact us.

Stop doing things the slow way! Make us prove our claims. Let us show you in complete detail just how this plan works for you—in your territory. Write or wire today—to Department D-5.



R & M-Hunter Convection Baseboard

Electric Heat at its best !



FEATURES

High and low density—Low wattage systems ideal for residential use. Higher wattage units primarily designed for institutional or commercial application.

Automatic controls—Built-in thermostat sections control comfort levels in each room.

Complete safety—Casing temperatures can't harm children. Won't damage fabrics which can be ironed with "medium" setting.

Thermal cut-out—Each section has thermal cut-out switch to prevent any over-heating if air flow through unit is cut off. **Silent operation**—Double spring mounts prevent expansion or contraction sounds.

Accessories—Convenience Outlet Sections (240 or 120 volt), Dummy Sections, Matching End Plates and Corner Pieces, Built-in Thermostat Sections, Wall Thermostats. Other data—Heating sections operate on 240, 277 or 208 volts. Section lengths: 32" and 48". 63/8" high x 21/4" deep.

HUNTER

R & M-Hunter Convection Baseboard Electric Heat

New, exclusive HONEYCOMB HEAT EXCHANGER increases warm air delivery

In the new R&M-Hunter Convection Baseboard, heating engineers have combined a fast-action, highly efficient heating unit with newly designed Honeycomb heat cells of non-corrosive aluminized steel. The result is greater metal-to-air ratios, providing more efficient heat transfer at lower surface temperatures. This means more comfort at less cost.

AIRFLOW DESIGN DELIVERS



Directional outlet speeds circulation of warm air into room, away from wall. The advanced design of the R&M-Hunter Convection Baseboard achieves a 9-to-1 ratio of warm air delivery to radiant heat.



Hunter Division—Robbins & Myers, Inc. 2454 Frisco Avenue, Memphis 14, Tenn.

Send complete data on the new R&M-Hunter Convection Baseboard to:

Name_

Address

steps to a faster home sale

with new electric Sno-Melter!



Plans call for a concrete driveway. Just before finish-coat layer is poured, electrical contractor rolls SNO-MELTER units quickly into place. Pre-spaced heater wire anchored in galvanized steel mesh, 18" wide, in 6' or 10' lengths. Pre-assembled lead wires and ground also attached. Saves installation time, cost!







Wires *don't* float as the concrete is poured. With SNO-MELTER, designed for 42 watts per square foot, uniformly even heat is assured! At last, the builder can put a practical price on snow-freewalks, tire tracks for the drive! And, homeowner will pay only about 8¢ an hour to melt tracks in the 30-foot drive.



With the first snowfall, SNO-MELTER will graphically demonstrate the convenience of "No more snow to shovel . . . no more ice to chop!" This "extra" will sell more homes in '60!

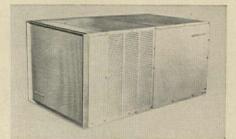
Write for complete, illustrated literature, including step-bystep installation instructions.



EASY-HEAT, INC., "Electric Anti-freeze Devices" Dept. 2-H, Lakeville, Indiana

New products

start on p 213



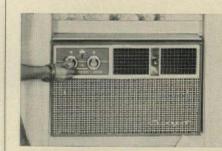
Compact conditioner, in 2, 3, or 5 hp size, in Perfection Tuckaway line, needs only power, thermostat, and duct connections, can be installed in attic, basement, crawlspace, or through the wall. Weatherproof steel cabinet is finished in baked enamel, is double walled to give sound insulation.

Perfection Industries, Cleveland. For details, check No. 20 on coupon, p 304



Low-cost comfort is promised by Carrier's new Thermo-Center, priced to sell "as low as \$875." Factory-made metal sleeve supports exterior condenser section, connects to furnace plenum. Cooling coil is out of main airstream so no fan power is wasted in heating season. Carrier furnaces to fit Thermo-Center come in 56,000 Btuh to 104,000 Btuh capacities, cooling units to 23,000 Buth. Carrier, Syracuse.

For details, check No. 21 on coupon, p 304



Humidity control is a feature of new Sears room air conditioners designed to supply comfort between heating and cooling seasons. The new unit has two automatic controls—a thermostat for temperature control, a humidistat for moisture control—each operating independently. Coldspot 500 supplies two-speed cooling to 11,000 Btuh capacity. All parts exposed to moisture are zinc-clad. Sears, Roebuck, Chicago.

For details, check No. 22 on coupon, p 304

continued on p 240

is your assurance of windows that satisfy all FHA requirements

TYPE: DH-A1

100

SIZE TESTED: 3'8"x5'0" CERT. NO. 400 MANUFACTURERS NAME

Look for it before you buy

Aluminum windows that carry this new "Quality-Approved" seal and are backed by the official AWMA Conformance Test Report of an Approved Testing Laboratory will satisfy all FHA requirements. If you want to avoid costly delays and possible disappointment, be sure to look for this "Quality-Approved" seal on the window before you buy.

ALUMINUM WINDOW MANUFACTURERS ASSOCIATION

630 Third Ave., New York 17, N. Y.

SLIDING GLASS DOORS

ROJECTER

HORIZONTAL SUDING

DOUBLE-HUNG

ALOUSIE

THIS SEAL

QUALITY APPROVED

ALUMINUM WINDOW

These window manufacturers are ready to supply you with "Quality-Approved" Aluminum Windows.

Adams Engineering Co., Inc., Miami, Fla. + Albritton Engineering Corp., Bryan, Texas + Aluminum & Glass Products Co., Houston, Texas + American Duralite Corp., Loudon, Tenn. • Arnold Altex Aluminum Co., Miami, Fla. • The Wm. Bayley Co., Springfield, Ohio • Capitol Products Corp., Mechanicsburg, Pa. • Ceco Steel Products Corp., Chicago, III. • Crossly Window Corp., Miami, Fla. • Fenestra Incorporated, Philadelphia, Pa. • Michael Flynn Mfg. Co., Philadelphia, Pa. • Mayfair Industries, Inc., Lafayette, La. • Miami Window Corp., Miami, Fla. • Porterfield Industries, Inc., Miami, Fla. • Reynolds Metals Co., Richmond, Va. • F. C. Russell Co., Columbiana, Ohio • Truscon Division, Republic Steel Corp., Youngstown, Ohio • Valley Metal Products Co., Plainwell, Mich. • W. M. Products Co., Houston, Texas • Windalume Corp., Kenvil, N. J. • Wisco Incorporated, Detroit, Mich.



B reasons why ALFOL is the ideal insulation for electrically-heated homes

High thermal efficiency. In electrically-heated homes, effective insulation is doubly important. By resisting all 3 forms of heat loss, ALFOL delivers exceptional insulating value...holds annual heat costs to the practical minimum.

Complete condensation control. To cope with the problem of high inside humidity, ALFOL affords superior condensation protection. That's because ALFOL provides a separate vapor barrier that is positive and continuous. (It's applied in unbroken lengths.)

"Plus" summer value. To go along with the extra winter comfort afforded by electric heating, ALFOL gives you superior summer comfort as well. In the famous Bureau of Standards summer comfort tests, for example, it took only two layers of aluminum foil to surpass the down-heat efficiency of full-thick bulk insulation.

Instant thermal action. Instead of "soaking up" heat, ALFOL reflects it...instantly, continuously. This low heat storage capacity means faster heating in winter, faster cooling in summer.

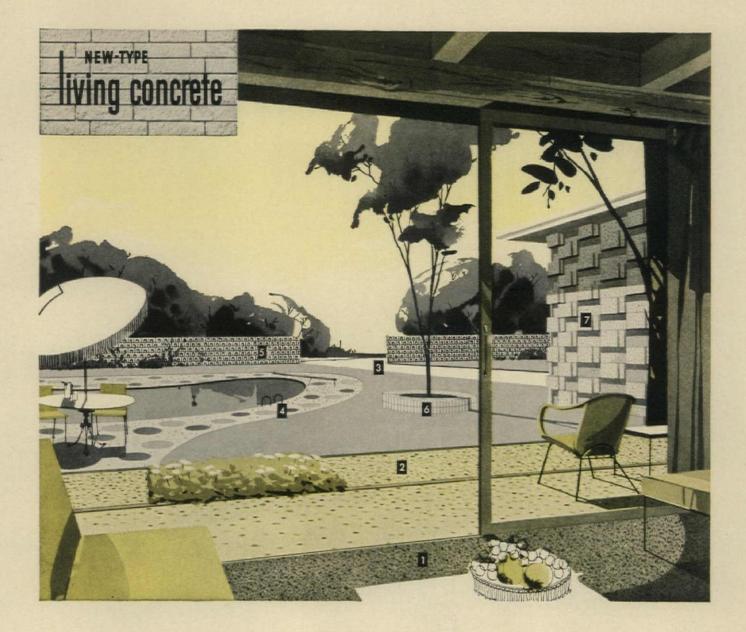
Positive application. ALFOL application is simple, positive, virtually foolproof. All you do is staple the flanges—the multiple aluminum foil layers space themselves automatically!

Clean, permanent, dust-free. ALFOL is as clean, permanent and odorless as electric heat itself! Made of pure aluminum foil, there's no dust or dirt...no fibers to sift through walls, etc.

Wind-resistance. Applied in continuous and unbroken lengths, the ALFOL insulated panel is completely sealed, top to bottom or wall to wall. No infiltration of wind, no drafts.

Low installed cost. For comparable efficiency (as calculated by NEMA specifications), ALFOL usually costs less in place than any bulk-type insulation you can buy! Savings on handling, storage and application make this amazing economy possible.





modern concrete

gives homes the special features that really spark sales!

There's practically no limit to the ways concrete can stimulate homebuyer interest and excitement. Cast-in-place, shaped, assembled, colored, polished—concrete fits the most imaginative ideas.

From striking masonry walls to unusual patios and yard accents, concrete adds that vital fresh appeal.

Today magazines and newspapers are giving increasing editorial emphasis to this versatile material. Special PCA advertising in top "home" publications—*Better Homes & Gardens, House Beautiful*, and *Living for Young Homemakers*—is adding to public interest in concrete and concrete masonry . . . in new-type *living* concrete!

Of course, concrete is your sure way to say "quality." Low on care, long on life, it promises sound investment. Idea literature is free to you on request. (U.S. and Canada only.)

PORTLAND CEMENT ASSOCIATION

Dept. 4-94, 33 W. Grand Ave., Chicago 10, III. A national organization to improve and extend the uses of concrete

A FEW WAYS CONCRETE CAN CREATE EXTRA BUYER APPEAL

- 1. Concrete slab floor of gleaming terrazzo.
- 2. Patio of cast-in-place concrete with exposed aggregate.
- 3. Driveway in bright, clean concrete.
- 4. Swimming pool of lifetime concrete.
- 5. Garden wall of concrete masonry grille block.
- 6. Tree curbing of concrete masonry split block.
- 7. Carport screen of 3-D concrete masonry units.

AS LITTLE AS \$875 WILL AIR CONDITION AND HEAT YOUR HOMES

WITH THE AMAZING CARRIER THERMO-CENTER!

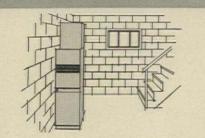
Now, for little more than the price of heating alone, you can also offer your prospects all the benefits of year-round air conditioning with the exclusive Carrier Thermo-Center. This unique method, which combines a forced warm air heating unit with a self-contained air conditioner, provides low-cost, twelve-month air conditioning for small and medium size homes. The key to the method is the prefabricated wall sleeve and the transition assembly which provides a simple, through-the-wall mounting for the air conditioner and controls the air flow

between the heating and cooling units, as shown below.

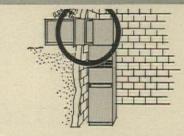
With a Thermo-Center you save hundreds of dollars per home: (1) No water supply or drain piping is required, (2) No refrigerant lines are needed. (3) Ductwork and wiring are simplified. (4) No specialized on-the-job construction is necessary. (5) Installation time and labor are greatly reduced. (6) Less than 5 square feet of floor area is required. Get the full facts about the Thermo-Center from your Carrier dealer listed in the Yellow Pages. Or write Carrier Corporation, Syracuse 1, N. Y.



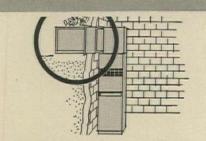
The first step is to put aside outdated notions of where a heating unit can be located. Planting the furnace in the middle of the basement was good enough years ago when people were satisfied simply with heating their homes.



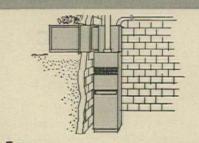
2 In the Thermo-Center, the unit is moved to an outside wall. There's no change in the amount of duct-work required, nor is the system operation affected in any way. Heating units can be upflow, downflow or horizontal; gas or oil.



3 Next, the prefabricated sleeve and transition assembly is built into the wall and joined to the furnace plenum and ductwork. The sleeve and transition assembly can be applied to any standard type of wall construction—frame, brick or concrete.



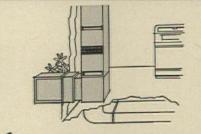
4 The cooling unit is inserted into the sleeve, anchor brackets attached, seams caulked and electrical connections made. There are no refrigerant lines, no plumbing, no specialized on-the-job construction, no installation delays.



5 The Thermo-Center can be applied to any type of home-ranch, split level or multi-story. In a house with a basement, for example, the cooling unit is connected to a plenum set on top of an upflow Carrier Winter Weathermaker*.

MORE PROOF OF

BETTER AIR CONDITIONING FOR EVERYBODY



6 In a house built on a slab, the transition is joined directly to a Thermo-Center downflow plenum which supports the Winter Weathermaker. The plenum directs air from the heating and cooling units into the regular duct system.

*Reg. U.S. Pat. Off.

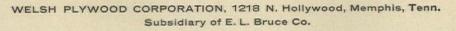
everywhere Carrier

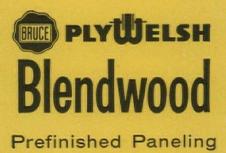


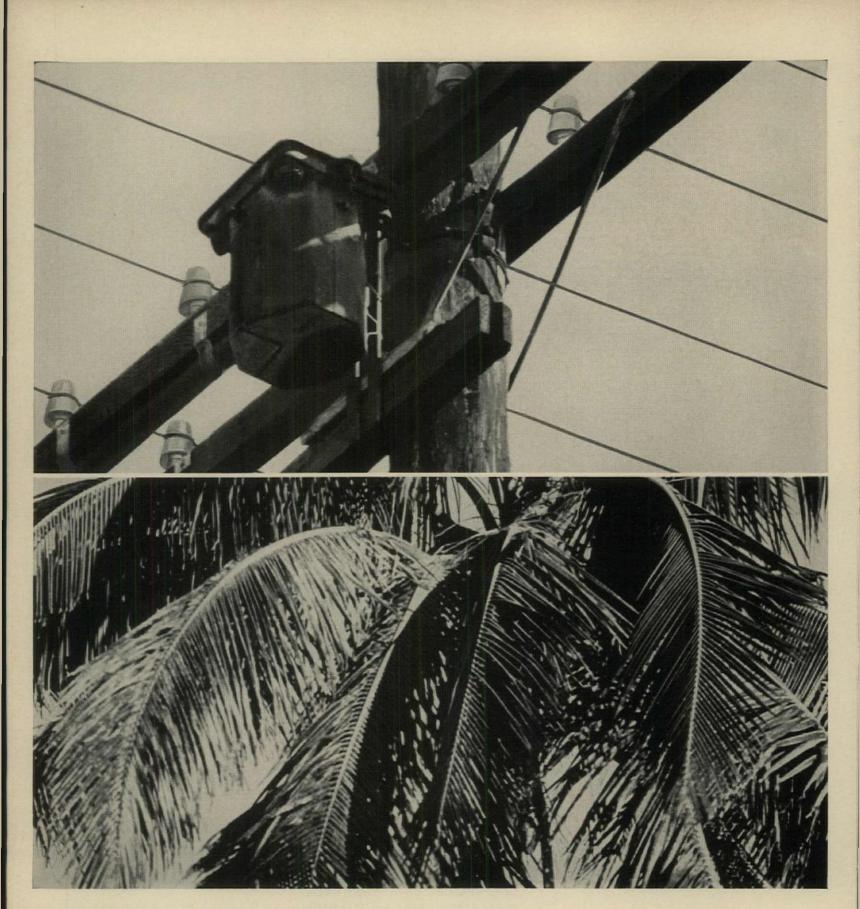
Now...expensive random appearance at lower cost!

New Blendwood paneling by PlyWelsh looks like custom installation

• Now you can provide genuine paneled rooms at lower cost than ever before! New BLENDWOOD Paneling is the product of a special process developed by PlyWelsh. Each 4' x 8' panel is grooved at random widths, and the resulting "planks" are stained in varying shades so that each panel blends uniformly with adjoining panels. The over-all effect is one of expensive custom paneling, yet BLENDWOOD costs only a fraction as much. The famous Bruce factory finish won't chip off... assures the homeowner a lifetime of wall beauty. Ask your lumber dealer about new PlyWelsh BLENDWOOD Prefinished Wall Paneling today, or write for complete information.







When poles and palms don't mix...

No poles or overhead wires will mar the beauty of Arvida's Royal Palm Yacht & Country Club residential community! With 742 homesites, this distinguished Boca Raton, Florida community is putting *all utilities underground*. For the job Arvida selected Orangeburg Fibre Conduit—the best known, best-selling Brand in America. And for good reasons: Orangeburg Conduit is lightweight, easy to install. Its self-sealing joints and impermeable walls keep water out for good. Its 100% smooth fibre raceway adds years to

cable life. Get all the facts on Orangeburg Fibre Conduit. Write Dept. HH-40 for Catalog 52.





Architect's drawing-Arvida home of Dr. and Mrs. John F. Pearl. Architect: Arthur H. Rude, of Ft. Lauderdale.

Orangeburg Fibre Conduit is distributed by Graybar Electric Co. and General Electric Supply Company with branches and stocks in principal cities. ORANGEBURG MANUFACTURING CO., Orangeburg, New York. Division of The Flintkote Company, Manufacturer of America's Broadest Line of Building Materials.

Plywood with a Plus

Crezon assures a higher return on income property

CREZON OVERLAID PLYWOOD SAVES:

LABOR during installation because it cuts cleanly, is easy to handle and apply.

FINISHING COSTS because Crezon's smooth surface requires no preparation. Two coats of paint do the job of three.

MAINTENANCE after installation ... the weatherproof Crezon surface resists moisture, prolongs finish life, does not check or crack.

Building motels, service stations, light industrial projects? Use Crezon Overlaid Plywood for good looks that last longer and cost less. Write: Crown Zellerbach Crezon Sales, One Bush Street, San Francisco 19, California.



These leading plywood manufacturers produce the highest quality overlaid ply-wood by bonding Crezon to DFPA Tested exterior grade plywood:

CREZON® OVERLAID PLYWOOD

Anacortes Veneer, Inc. St. Paul & Tacoma Diamond Lumber Company Diamond Lumber Corp.

Evans Products Company Georgia Pacific Corp.

International Paper Company (Long-Bell Division)

Roseburg Lumber Company

Simpson Logging Company

United States Plywood Company

Washington Plywood Company, Inc.

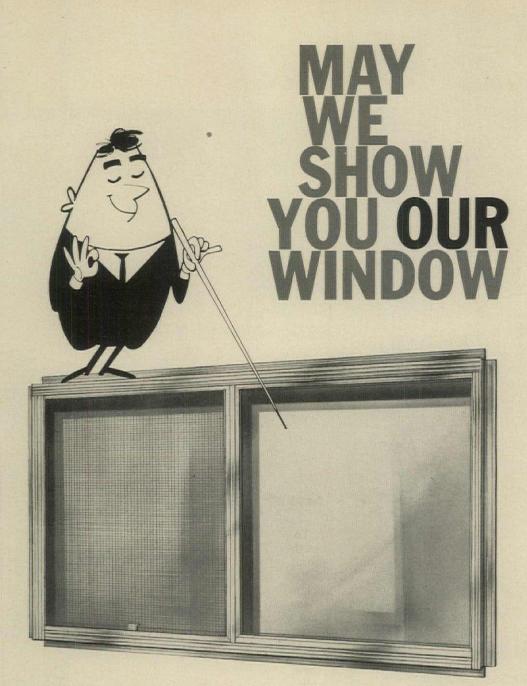
Canadian Western Lumber Co.

MacMillan & Bloedel, Ltd.

Western Plywood Co., Ltd.

BELOW: Easily handled Crezon overlaid panels resist moisture, need little or no protection.





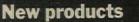
Slidarol, the low cost, wonder window that has always featured nylon rollers, heavy vinyl glazing spline, screw fastened corners, heavy pile weather stripping, now adds F.F.F.* to its remarkable removable track. Slidarol's removable track is made of vinyl, guaranteed to be completely FROST FREE. No more piling up of frost or ice on the interior track section of the window. Allows completely free operation of the window at all times.



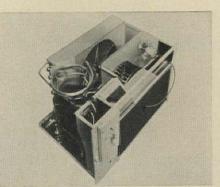


Our sales representatives will be pleased to show you our window. Call, wire or write today!

*Frost-Free Feature



start on p 213



Coolerator room unit uses a charged foam filter to remove dust and pollen from circulating air. Unit has a Van de Graaf generator, powered by the moving air, to energize the filtering medium. Filter is easy to remove and wash. Full line has 22 models including four reverse-cycle models. Cooling capacities range from 4,200 to 9,100 Btuh for ½ hp to 2½ hp power.

Coolerator, Albion, Mich. For details, check No. 23 on coupon, p 304



York's new electronic filters come in three model series—120, 160, and 240 sized 22" x 20" x 21", 22" x 24" x 26", 22" x 24" x 29". Largest size handles 2,400 cfm, has about 14,000 sq in. of collecting plate area. York filter units are designed to be installed in ductwork, have drawertype plate sections which are easily removed for cleaning. York Div, Borg-Warner, York, Pa.

York Div, Borg-Warner, York, Pa. For details, check No. 24 on coupon, p 304



New electronic filters from Electro-Air are less bulky and less expensive. The new units (there's one in the Universal line, two each in the Tec and Compact lines) have reduced cell spacing (to 5/16") and redesigned cell and power pack, but keep basic system used in high capacity commercial and industrial equipment. New models keep 90% efficiency rating.

Electro-Air, McKees Rocks, Pa. For details, check No. 25 on coupon, p 304

continued on p 244

90% OF ALL CENTRAL AIR-CONDITIONING EQUIPMENT NOW RATED TO UNIFORM HIGH STANDARDS



This is the ARI Seal of Certification—backed by the combined reputations of 46 manufacturers who produce more than 90% of all central air-conditioning equipment sold. It assures you—and your home buyers—of central air-conditioning equipment rated to uniform high standards of safety and performance.

NEW SAFEGUARD FOR HOME BUILDERS: To be granted this Seal by the Air-Conditioning and Refrigeration Institute, these manufacturers have agreed to rate their equipment by one uniform standard, in Btu per hour-misleading terms such as "tons" and "horsepower" have been dropped. This rated capacity is subject to checking and verification in an independent testing laboratory under adverse conditions, with emphasis on wilting heat and high humidity. Any model failing to deliver rated capacity must be brought up to standard or be withdrawn from sale.

WHAT DOES THIS MEAN TO YOU? When you install ARI-certified central air-conditioning equipment in your new homes, you can have complete confidence in its performance. Simply look for the ARI Seal: It assures you of flexible design, laboratory ratings, reliable performance and the best chance for complete customer satisfaction.

Consult your local air-conditioning contractor and specify equipment bearing the ARI Seal of Certification in the next homes you build.

For free explanatory booklet and Directory of participating manufacturers, write to: Chief Engineer, Dept. R-402, Air-Conditioning and Refrigeration Institute, 1346 Connecticut Ave., N.W., Washington, D.C.

Manufacturers participating in the program: • Airtemp Division, Chrysler Corporation • Amana Refrigeration, Incorporated • American Furnace Company • American-Standard Industrial Division American Radiator and Standard Sanitary Corporation • Arkla Air Conditioning Corporation • Armstrong Furnace Company, Division of National Union Electric Corporation • Bryant Manufacturing Company • Carrier Corporation • Arkla Air Conditioning Corporation • Cobell Industries Incorporated • Continental Manufacturing Company • Contribution Manufacturing Company • Florida Warren Corporation • Cleveland Steel Products Corporation • Cobell Industries Incorporated • Continental Manufacturing Company • Contribution Manufacturing Company • Florida Warren Corporation • Fraeer and Johnston Company • Friedrich Refrigerators, Inc. • Gaffers & Sattler, Division of Utility Appliance Corporation • General Electric Company • Goettl Bros. Metal Products Inc. • Holly-General Company • Friedrich Refrigerators, Inc. • Gaffers & Sattler, Division of Utility Appliance Corporation • General Electric Company • Goettl Bros. Metal Products Corporation • Lennox Industries Inc. • Lincol Air Control Products, Inc. • The Mathes Company, Division of Glen Alden Corporation • Maini Products, Inc. • Mission Appliance Corporation • Mueller Climatrol, Division of Worthington Corporation • National Thermatic Corporation • National Company • Round Oak Company • The Payne Company • Peerless Corporation • Mueller Climatrol, Division of Hupp Corporation • National Thermatic Company, Division of Hupp Corporation • Southwest Manufacturing Company • Thermatic Corporation • Company • The Trane Company • Thermatic Conditioning Company, Division of Hupp Corporation • Mueller Climatrol, Company • The Trane Company • Typhoon Air Conditioning Company, Division of Hupp Corporation • Vork Corporation • Westinghouse Electric Corporation • Williams Oil-O-Matic Heating Company, Division of National Union Electric Company • Worthington Corporation • York Corporation • Meeting

According to the FHA: "Within a few years, any house that is not air conditioned will probably be obsolescent." In many areas, air conditioning is already as important as central heat. It provides more than comfort: *central* air conditioning makes any home cleaner and healthier, helps cut laundry and housecleaning bills. It silently suggests that the builder has omitted nothing to provide the finest home for the money. As the FHA suggests, central air conditioning will add increased resale value to your homes—a persuasive selling feature for your prospects.



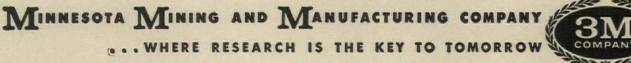
No special safety precaution required with easy-to-apply ROLTITE® WATER-BASE CONTACT CEMENT

It gives you the good workability, excellent heat and water resistance you want and need.

But unlike solvent-base cements, Roltite Water-Base Contact Cement is non-flammable during application. You can smoke near it, use any power tools you like. There are no time-consuming safety precautions you or other contractors on the job must follow. There's no objectionable odor, either, to disturb you or your customers. This means you can do your work any time without shutdowns, after-hours or overtime problems. Roltite Water-Base Contact Cement has exceptionally high bond strength, saves about 25% on cement costs because it covers more square feet per gallon. Use it for bonding decorative laminates to porous base surfaces; and plywood, and decorative wallboards to studding or furring strips.

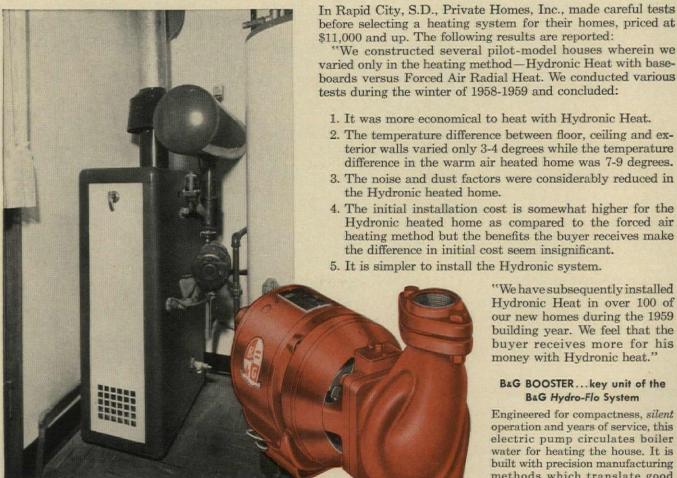
The complete family of Roltite Brand Adhesives provides better construction at lower cost. For further information see Sweet's Catalog or contact your 3M Field Engineer. Or write: AC&S Division, 3M Co., Dept. SBAA-40, St. Paul 6, Minnesota.

ADHESIVES, COATINGS AND SEALERS DIVISION





private homes, inc. INSTALLS Hydronic* HEATING IN OVER ONE HUNDRED HOMES



before selecting a heating system for their homes, priced at \$11,000 and up. The following results are reported: "We constructed several pilot-model houses wherein we

varied only in the heating method-Hydronic Heat with baseboards versus Forced Air Radial Heat. We conducted various tests during the winter of 1958-1959 and concluded:

- 1. It was more economical to heat with Hydronic Heat.
- 2. The temperature difference between floor, ceiling and exterior walls varied only 3-4 degrees while the temperature difference in the warm air heated home was 7-9 degrees.
- 3. The noise and dust factors were considerably reduced in the Hydronic heated home.
- 4. The initial installation cost is somewhat higher for the Hydronic heated home as compared to the forced air heating method but the benefits the buyer receives make the difference in initial cost seem insignificant.
- 5. It is simpler to install the Hydronic system.

"We have subsequently installed Hydronic Heat in over 100 of our new homes during the 1959 building year. We feel that the buyer receives more for his money with Hydronic heat."

B&G BOOSTER ... key unit of the **B&G Hydro-Flo System**

Engineered for compactness, silent operation and years of service, this electric pump circulates boiler water for heating the house. It is built with precision manufacturing methods which translate good design into superior product.

The B&G Booster has a solid reputation for quiet, dependable and long-lived operation. That's why over three million units have been sold to date!

Photo shows small space required by a B&G Hydro-Flo System. The boiler can be installed at any level within a building.

HYDRONIC HOMES SALES PROMOTION FOR BUILDERS

A comprehensive program of ideas and sale helps for utilizing the outstanding and exclusive advantages of hydronic* heating. Every builder should see this presentation-there's no obligation in getting the facts. Write, phone or wire today.

*Modern hot water heating.

LL & GOSSETT OMPANY C Dept. GD-10, Morton Grove, Illinois

Hydro-Flo SYSTEM

Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto 16, Ontario



Style leader for any decor

• TRIM, CONTEMPORARY DESIGN Hugs the wall and compliments any decor with its rich, beautifully proportioned appearance.

• MATCHES OR BLENDS WITH ANY WALL You simply paint the easily snapped-out face panel. A touch of the brush and it's part of the decor.

. ANTIQUE GOLD TRIM RING

Accents the Desert Tan face panel. Other trim ring finishes also available for individual needs.

• RECOGNIZED STYLE-LEADER

The "decorator" has been acclaimed by a national design magazine as the leading thermostat design.

. GREATER ACCURACY

Precision engineering makes the "decorator" especially sensitive to temperature changes for even temperature control, with the widest range in the industry.

. POSITIVE SNAP ACTION SWITCH

Gives split-second response with immediate contact. There's no prolonged "sizzling" period when the "decorator" turns on or off.

· EASY TO INSTALL

Screw-type terminals for easier connecting, faster installation, more positive contact. Installs easily over rough plaster.



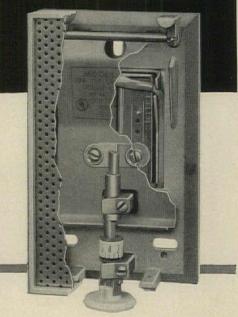
Contact your electrical distributor for full information, or send for informative catalog.

modern MEARS "DECORATOR" thermostats

for modern electric heat as advertised in



ENGINEERED FOR Most accurate, Reliable control



Leaves plenty of room in the box for wires.

. MEETS ALL CODES

Double line break of the M6-D offers additional safety and performance, meets all local codes . . . for very little additional cost.

THREE "DECORATOR" MODELS AVAILABLE

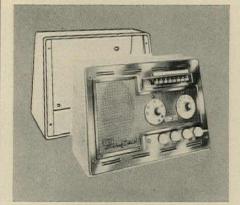
All identical in size and design . . . offer the finest control for all types of electric heating,

MEARS ELECTRIC CONTROLS, INC. Box 3798, Portland 8, Oregon Please send your catalog on the new "decorator" thermostat and names of suppliers in our area.

Name Address City____ Zone_____ State_____

New products

start on p 213



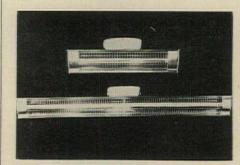
Convertible intercom from Sound-Guard makes installation simple, allows easy addition to remodeling jobs. A small five-wire cable is run like bellwire from the master station to each remote and connected to five coded terminals. Beige leatherette cabinets mount on surface, hold any of Sound-Guard's four lines from deluxe Commander to budget Cadet. Progress Mfg Co, Philadelphia.

For details, check No. 26 on coupon, p 304



Intercom has clock, convenience outlet, AM radio. The new CH-1100-2 is a roomto-room three-wire system for up to seven remote stations. Standard package had five 5" room speakers, one 3" door speaker. Finish is sand and gold, door baffle is gold anodized aluminum.

C&H Supply Co, Dallas. For details, check No. 27 on coupon, p 304



Infra-red radiant heat is supplied by two new units from Hanovia. The new 450-w and 1,500-w heaters may be used indoors or out, are suggested for use in baths, basements, vestibules, patios, etc. The quartz tube and other electrical parts are splashproof, shockproof, moisture resistant. Smaller unit will heat 30-sq-ft area, larger will heat 90 sq ft. Retail prices are \$24.95, \$39.95.

Hanovia Lamp Div, Newark. For details, check No. 28 on coupon, p 304

continued on p 251



"G-P PREMIUM SHEATHING helped keep our 8,000-home Chicago job moving right through the winter."

Osborne Fernald, Vice-President, Centex Construction Co.

"We had no storage problem, no delivery delays. Even snow and rain didn't damage this plywood sheathing. We stored it uncovered right at the site, used it for both roof decking and subflooring in our Elk Grove Village development."

- Georgia-Pacific's exclusive glue formula is the weatherproof secret of this edge-sealed Premium Sheathing, guaranteed* against delamination.
- You get consistent quality, fast delivery from the world's largest producer of plywood.
- Available in all standard sizes, 5 thicknesses.
- Packaged in handy steel-strapped bundles, 25" high.

Call your nearest Georgia-Pacific source or write to us today. *Georgia-Pacific guarantees G-P Premium Sheathing against delamination and mold for 12 months when stored outdoors off the ground, tarpaulin-covered; or for 6 months uncovered.

GP
GEORGIA-PACIFIC
Plywood & Redwood - Lumber & Hardboard - Chemicals - Pulp & Paper
Dept. HH 460, Equitable Bldg., Portland, Ore.
Please send me complete information and nearest source of Georgia-Pacific Guaranteed Premium Sheathing.
Name
Firm
Address
City
CountyState



increase the saleability of your homes with ...



NEW

Sparkling new design that will add glamour, snap and sales appeal to cabinets and built-ins. Slim, sleek, contemporary pulls and "starlike" knobs with a trim hinge, give a beautiful touch to old, new or remodeled cabinets. Every time a prospective customer appears—just point out the beauty and quality of this new Washington "Stellar" Hardware. It's different—it's spectacular—and your customer will be happy—so will you!

Write now for a catalog sheet on this hardware-then see your dealer for a supply.



Washington

MANUFACTURED BY WASHINGTON STEEL PRODUCTS, INC. TACOMA 1, WASHINGTON Dept. HH-4

DISTINCTIVE BUILDING PRODUCTS

IN CANADA: GENERAL SALES SYNDICATE, 202-470 GRANVILLE ST., VANCOUVER, B. C., CANADA

First choice for comfort and beauty

Ak has a well-earned reputation as a comfortable floor... naturally resilient, easy to walk on. High insulating value keeps out the cold, a particularly important quality when Oak Floors are laid over concrete slabs. But comfort is just one reason why home buyers prefer Oak over all other flooring materials combined. Natural beauty, lifetime durability, easy upkeep are others. Always use Oak Floors...and always be sure of buyer acceptance.

You know you're right when you specify OAK FLOORS

National Oak Flooring Manufacturers' Association, 814 Sterick Building, Memphis 3, Tenn.



Use COLOR STAINS on OAK FLOORS

for new, different, decorative appeal!

Here's a colorful idea with real merchandising possibilities. Try color-staining your Oak Floors for a "different" look. Modern materials provide a wide range of color tones which are easily applied and can be counted on to give dependable results.

With color-toned Oak Floors you can achieve wholeroom harmony, matching or accenting the hues of wood-paneled, painted or papered walls. The effect is attractively different, because the wood stain usually accentuates the warm, rich wood grain of Oak. For a "feature" room or throughout the house, colortoned Oak Floors can be that extra touch to make your homes sell better. Try this different merchandising idea in your next model home.



NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION 814 Sterick Building—Memphis 3, Tenn.

OAK FLOORS

The most popular, most practical of all floors

WINN A HAWAIIAN HOLIDAY



A fun-filled trip to America's Paradise in the Pacific awaits the nation's top builders and their wives in the...

HOTPOINT MEDALLION HOME PROGRAM



Now, a complete advertising and merchandising program to help you cash in on the public preference for Hotpoint appliances, plus 1960's greatest sales-clincher—Hotpoint Electric Baseboard Heating. This dynamic program is power-packed with everything needed to give your home sales a sensational start in '60. Call your Hotpoint distributor for complete details today! * DRAMATIC FULL-COLOR MAGAZINE ADVERTISING

- * NATION-WIDE NEWSPAPER ADVERTISING
- * PROSPECT-PULLING DISPLAY MATERIALS
- * PROFESSIONALLY-PREPARED HANDOUT BROCHURES
- * SALES-BUILDING KITCHEN PLANNING SERVICE
- * PROVEN PUBLICITY PROGRAM
- * PLUS SPECIAL MERCHANDISING ASSISTANCE



A Division of General Electric Company, Chicago 44, Illinois ELECTRIC RANGES • REFRIGERATORS • AUTOMATIC WASHERS • CLOTHES DRYERS • CUSTOMLINE® • DISHWASHERS DISPOSALLS® • WATER HEATERS • FOOD FREEZERS • AIR CONDITIONERS • ELECTRIC BASEBOARD HEATING



Three exclusive, sales-producing features are combined in Certain-teed's new "Our Wonderful World of Color and Comfort" program.

Color Styling Service provides your customers with free exterior home color styling by Beatrice West, nationally-known color consultant.

Complete Merchandising Program furnishes you with a carefully-planned promotion kit containing a variety of effective selling aids.

Certain-teed ... Superior Products through Creating



Color and Comfort Promoted Products which include Certain-teed's full line of Color-Tuned asphalt shingles and insulating and asbestos sidings.

With today's new-home buyers, **exterior** color is a decisive selling point. And with this dynamic new program, Certain-teed helps you merchandise exterior color — for large or small developments. Get full details from your Certain-teed representative.

CERTAIN-TEED PRODUCTS CORPORATION Ardmore, Pennsylvania Plants and offices throughout the United States

New products

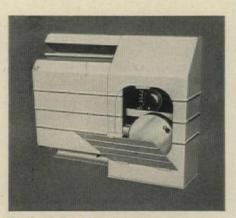
start on p 213



Quartz infra-red heater develops filament temperatures of up to 4,000F, is particularly adapted to outside use since its radiant energy will not be dissipated by cold air and it is not affected by moisture, atmospheric changes, etc. Luminator units come in one-lamp fixtures of 500 w to three-lamp furnaces of 15,000 w.

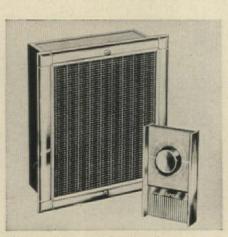
Luminator Inc, Chicago.

For details, check No. 29 on coupon, p 304



Radiant Ray baseboard now comes in an electric type. New product operates on 115-v, 205-v, 230-v current, delivers Btu "equivalent to 200F water" from 200-w per foot. Finned elements come with connection boxes at either end and a full line of enclosures, accessories, and trim. Sections come 4', 6', and 8' long, may have integral or room thermostats.

Radiant Ray, Newington, Conn. For details, check No. 30 on coupon, p 304



Thermostat and heater form a team in this new Broan model, the first, the company claims, to use a wall thermostat. The thermostat's sensing element is fully exposed to the room air, is said to react to $\frac{1}{2}^{\circ}$ change in temperature. Heat is delivered within ten seconds of switch-on. Broan Mfg Co, Hartford, Wis.

For details, check No. 31 on coupon, p 304

Show them a world of COMFORT-

...and you'll sell more in the 60's as a Comfort Conditioned Home Builder

Today's new-home prospects are color- and comfortconscious. And to them, "comfort" means insulationfull insulation.

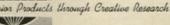
Certain-teed Fiberglas* Building Insulation is one of the proven, nationally-known products featured in "Our Wonderful World of Color And Comfort" builder program.

This includes not only a variety of free promotional material and sales aids from Certain-teed, but in addition the many builder services provided in the Owens-Corning Comfort Conditioned Home Program—national advertising and listings, sales-training film and sample home insulation display, among others.

Find out from your Certain-teed representative how you can qualify for this combined, sales-producing program or write direct.

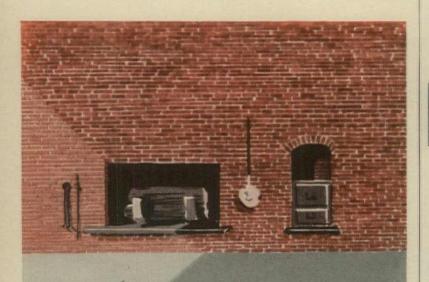
*TM Owens-Corning



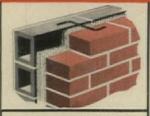


CERTAIN-TEED PRODUCTS CORPORATION Ardmore, Pennsylvania Plants and offices throughout the United States





Build Better...Manage Better ...Sell Better... ^{with} BRICK!









A Wall For Every Purpose

The clay masonry cavity wall offers the beauty of exposed interiors, plus outstanding fire safety, insulation, and maintenance-free economy. The 4" exterior brick wythe is separated from 4" brick or tile interior wythe by 2" air space, effectively minimizing heat loss and gain, and moisture penetration. Cavity walls can be insulated for maximum results.

The brick veneer wall offers new or remodeled homes the prestige, freedom from maintenance, and high value of a beautiful, permanent, and preferred brick facing at low cost.

The 6-inch "SCR brick"* wall provides finish and structure in one, eliminating need for backup materials. Savings in time, labor, and materials make it one of the most economical, yet permanent, walls available for one-story construction.

The reinforced brick masonry wall contains steel reinforcing rods to provide extra strength for resisting lateral forces from earthquakes, tornadoes, hurricanes, and nuclear blasts. RBM is particularly desirable as a "safety zone" within the home; it also offers interior brick "accent" walls.

* Reg. U.S. Pat. Off., Pat. Pend., SCPRF

For further information, see your brick supplier or write to Structural Clay Products Institute 1520 18th St., N.W., Washington 6, D. C.



SIMPLEX FORMS USER NETS \$467532 EXTRA PROFITS FROM 37 BASEMENTS

Contractor Norbert A. Paul figured he could make more money by building his own basements. And, pocket extra cash, he did . . . to the tune of \$4,675.32 *in just one season!*

More and more, other enterprising builders are finding that forming and pouring their own basements can be *the most profitable part of home building*. More and more, they are finding that nothing beats the Simplex System for accuracy, flexibility, speed, and ease of handling. Let us show you how you can equal, or even better, contractor Paul's success. May we hear from you today?



Steel bars

aive added

ented

II locking

ted in place

Make more money from your operation with the fastest, most flexible method of concrete forming

With Simplex, you don't have to skimp or cut corners to make a neat profit! The system is so easy, so quick, so simple that workmanlike jobs come naturally to any one who has just a basic knowledge of concrete. Look at these superior features of the Simplex System!

Accurate Foundations

Because Simplex panels are drawn together by patented hardware, forms set-up straight and true . . . seam marks are at a minimum. Homes become more salable!

Best for Pre-Fabs

Here's where accuracy really counts! Simplex assures positive wall dimension . . . specifications are easily met . . . above grade work naturally goes faster!

Time-Saving Features

Patented levers and hardware are bolted firmly to panels. Levers lock or unlock with the tap of a hammer. With Simplex, vital parts can't be lost or misplaced . . . saves stripping and moving time. Cuts parts replacement costs.

Rugged, Long-Life

Panels are 9-ply, 1¹/₈" plastic-impregnated plyglaze and are strengthened by horizontal steel backing bars. Users report excellent results a[°]ter hundreds of pours.

Send For the Complete Story SIMPLEX FORMS SYSTEM, INC. 5625 Industrial Avenue Rockford (Loves Park) Illinois



Dual-Blower Range Hoods

...give your kitchens Modern Selling Power

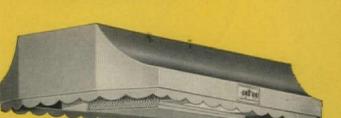
When kitchens are so vital, see to it that you have the extra luster that a Broan Hood offers. You can point to crisp, modern design second to none, that strikes a woman's fancy... and you can demonstrate whisper-quiet operation that she won't find anywhere else, unless it's a Broan. You can show her metal craftsmanship in hood construction that no other line duplicates. All Broan Hoods have heliarc welded seams — no rivets, no trim strips to catch and harbor grease.

If you want to emphasize quality details, you have it with Broan — feature for feature the finest, but still competitively priced. Available in 5 sizes . . . in genuine Stainless Steel, Antique Copper, or Coppertone. See your distributor, or write for full information.

111 111

DUAL-BLOWER HOOD

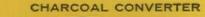
- · Hood and blower unit factory prewired
- Heliarc welded construction
- Spring-loaded backdraft damper prevents cold drafts and damper flutter
- · Combined blower and hood saves on cabinet space
- Dual blower provides extra pressure needed for long duct runs and elbows
- Twin air intake with twin aluminum lifetime filters
- Blower and light removable without tools



DUAL-BLOWER

- A complete package hood, blowers, light . . . factory prewired, for fast, economical installation.
- Combines the engineering features and advantages of the regular Broan Dual Blower Hood
- 36" and 42" size only

EXPLODED VIEW DUCT-FREE CONVERTER

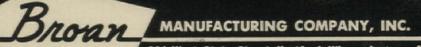




DUAL BLOWER HOOD

NEW DUCT-FREE HOOD COMBINATION WITH AIR REFRESHING CHARCOAL CONVERTER

- Slim line converter mounts directly on top of any Broan Dual Blower Hood for Duct-Free service
- Converter removable should a ducted outlet be desired later
- Converter comes equipped with effective charcoal filter that adsorbs odors and smoke . . . refreshes air.
- Louvers are concealed, so the Duct-Free looks like a conventional hood



In Canada — Manufactured by Superior Electrics Ltd., Pembroke, Ontario

924 West State Street, Hartford, Wisconsin (near Milwaukee) Specialists in Quality Ventilating Equipment Over 25 Years

-

Cest Magnifique (Pronounced Mah-ni-FEEK)

In • Sink • Erator HELPS YOU SELL THE WOMAN!!

don't sell your house if you don't sell the woman. And now In-Sink-Erator gives you more help selling the woman than you've ever had before!

For your kitchen—and hers—In-Sink-Erator developed a beautiful new, different, and better garbage disposer... 4 glamorous new models —the Gold Comet, Silver Star, Saturn, and Mark 27. The new In-Sink-Erator will be her most wanted "built-in" because it has wonderful new features never before possible in one disposer ... exclusive automatic reversing action, exclusive self-service wrench, exclusive miraculous Polystyrene sound-absorbing inner liner.

Let the magnificent new In-Sink-Erator Gold Comet help you sell-thewoman. Contact your Plumbing Contractor or In-Sink-Erator immediately.

This ad appears in glorious color in full pages in Vogue, Look, Reader's Digest, Saturday Evening Post, Sunset.

SPECIAL BUILDER OFFER!

Limited time only! Introductory model home offer, prospect check list, feature display cards, and other helpful selling aids. Act now! Write In-Sink-Erator Manufacturing Co., Racine, Wisconsin.



Designed by Reinicke

Florentine change purse-just for visiting your plumber to see the new Gold Comet.

DISCOVER THE DIFFERENCES IN DISPOSERS





Silent Treatment — Quietest Ever! New! Exclusivel Miraculous Polystyrene inner-liner achieves new level of quietness.

 Twice The Life – Non-jamming!
 Exclusive! Patented, automatic reversing a action. Prevents jams.
 Daubles shredder life! The magnificent new Gold Comet Garbage Disposer from the originator and perfecter!

Gold Comet

The fashion houses of Paris know no smarter styling than that found in the new In-Sink-Erator Gold Comet Garbage Disposer. Inspired by the heavens from which it gets its name, the new modern shape Gold Comet is as beautiful and quiet as the stars. It sets new standards for styling and design.

Magnifique 1

And this new In-Sink-Erator reaches new levels of performance with 124,200 positive cutting edges per minute. Never before have you seen trips to a garbage can ended in such high fashion. Never before has a Disposer been so efficient in shredding food waste down your kitchen drain.



"Only KEYMESH for stucco

says A.L. BRANDEN of Branden Enterprises, developer of 10,000 home



"We don't buy cheap materials. What you save in first cost, you often lose—and then some—on extra labor and callbacks. That's why I insist that subcontractors working for me use Keymesh as a stucco reinforcing material," reports Alec Lee Branden, Hayward, California.

Mr. Branden finds stucco a quality feature for exterior walls. At Tropicana Village, his latest development, stucco is applied over Keymesh reinforcement. This wall construction helps him maintain a 35-house a day schedule (final plans call for 10,000 homes)—and assures the strength, durability, and fire-safety that owners of Branden-built homes expect. Low initial cost plus highest quality are trademarks of all Branden-built homes.

"I've found that Keymesh gives with the wall, taking up the stretch and contraction that any new home goes through as it settles. With Keymesh, stucco walls show no signs of exterior cracking. Require no callbacks to repair settling cracks. And, being easy to work with, my subcontractors appreciate the way it handles."

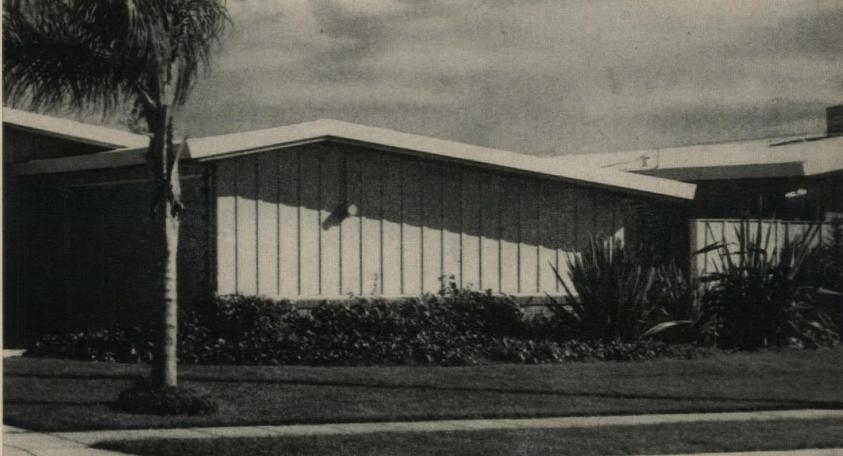
Other use and test-proved products in the Keymesh family of quality plaster reinforcements...Keycorner for almost double the crack resistance of plaster corners ...Keystrip for extra strength at points of maximum stress where flat strip reinforcement is needed.

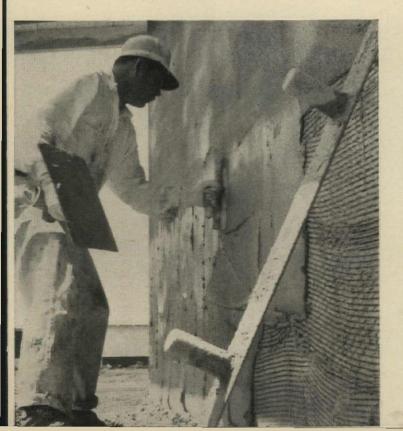
> Frank A. Schiro, Plastering Subcontractor, uses 18-gauge Keymesh. Mr. Schiro reports, "I like to use Keymesh because it permits rapid troweling. My workmen easily keep up with construction schedules."

reinforcement"

Tropicana Village, San Jose, California







Send for complete information. Write

KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

Yes, I would like to learn more about the effective crack resistant qualities of Keymesh, Keycorner and Keystrip reinforcement. Please send me complete test reports and more complete information.

State.

Name___

Company_

Address_

City____

257

New products

start on p 213



Neat, thrifty, safe ELECTROMODE heating saves construction time...cuts selling costs

Heating System gives you all these heating advantages ... and every one of them gives you a sales advantage:

Electric heat is thrifty heat. It uses the only fuel that's getting cheaper-and that will continue to get cheaper.

It's the safest heat you can put in a home. An Electromode baseboard or wall heater with our exclusive Safety Grid can't burn, can't cause a fire, can't shock.

An ELECTROMODE Electric It's personalized heat . . . allows individual room temperature control for better living, better health.

It saves construction time ... cuts selling costs by eliminating duct work, chimneys, heater rooms, soundproofing, etc.

It's neat heat . . . the cleanest you can install.

It makes home decoration and furniture placement easier.

It's maintenance-free. Once it's in, you don't have to worry about it.

ELECTROMODE Electric Baseboard Heat. Pictured above (in main illustration). In 32-, 64- and 96-inch lengths, matching blank sections, corner sections, hardware. Provides a wall of warmth around each room. Individual room thermostats. No cold spots, no drafts. Never gets too warm to touch. Can be finished to match rest of woodwork.

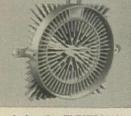


ELECTROMODE Bathroom and Wall Heaters. Fan circulated warm air for hard to heat rooms, and areas where only intermittent heat is needed. Completely shockproof and burn-proof. With or without thermostats. Easily installed.

ELECTROMODE



ELECTROMODE Floor Insert Heaters. For installation under picture windows and similar locations. Mount flush with floor. Whole heating unit is easily removable for cleaning. Safety Grid can't burn or start fire.

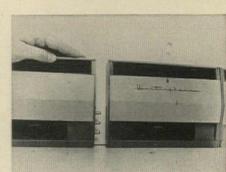


Look for the ELECTROMODE Safety Grid . . . the cast alu-minum heating element in which all the current-carrying heating wires are safely sealed inside. Nothing to burn inquir-ing fingers, no shocks, can't start a fire.

For full details write for Catalog No. EC 199

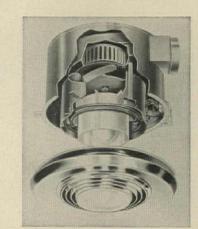
Visit the

ELECTROMODE Exhibit at the NEMA Show, March 21-23-Hotel Sherman, Chicago, Booth No. 101



Plug-together baseboard from Westinghouse needs no section-to-section wiring. After control section is wired in, a 2' 500-w section is plugged to the control and other 2' sections added as needed. A universal corner section turns inside or outside corners. A thermostat in the control section is sensitive to 2° over a 50F to 90F range. Safety shut-off guards against thermal overload.

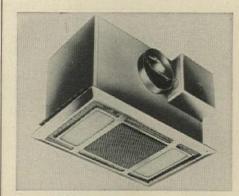
Westinghouse, Pittsburgh. For details, check No. 32 on coupon, p 304



All-in-one fixture from Nutone has been designed to be decorative as well as functional. Aluminum diffuser and grille blend into new large lens. Plug-in unit is foolproof; prewired switch has flexible leads, no jumper wires to connect. Propeller fan circulates warm air, squirrel cage blower exhausts stale air. Louvers close when heater is on.

Nutone, Cincinnati.

For details, check No. 33 on coupon, p 304



New R&M-Hunter heater uses nichrome ribbon heating elements to deliver 4,949 Btuh at 1,450 w. Reversible fan circulates warm air or exhausts horizontally to outside. Lights use two 60-w bulbs behind Alba-lite glass. Unit roughs-in in space 141/4"x81/2", grille covers 16"x101/2". R&M-Hunter, Memphis.

For details, check No. 34 on coupon, p 304

continued on p 262

PROTECT YOUR Building Investment

Plywood Grade Stamp of Dependable Quality

TECO is the plywood grade stamp of PLYWOOD dependable quality backed by the Timber Engineering Company of Washington, D.C. They are a highly respected engineering and research group known in the forest products field for more than a quarter of a century. This independent FHA-accredited testing agency place their own technician in each participating plant. TECO knows there is more than meets the eye in every sheet of plywood. They check and test on a continuing basis the core material, the kind and type of glue, patching, in fact the whole operation from log to finished product. This is the reason TECO is your best guarantee of a dependable supply of superior plywood.

One of your best sources of TECO TESTED Plywood is:

ECC

DOUGLAS

WILLAMETTE VALLEY LUMBER COMPANY WILLAMETTE NATIONAL LUMBER COMPANY Dallas, Oregon, Phone MAyfair 3-2351, TWX 80-U

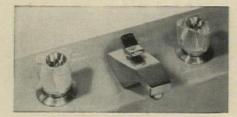
ORDANCE

THE COMMERCIAL STANDARD FOR

FIR



BUILDER SPECIFIED for greater home sales



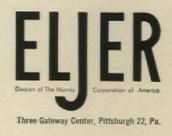
NEW LUXURY BRASS FITTINGS Sparkling new brushed chrome fittings with plastic prism handles add beauty to any bath . . . another popular new salesmaker from Eljer.

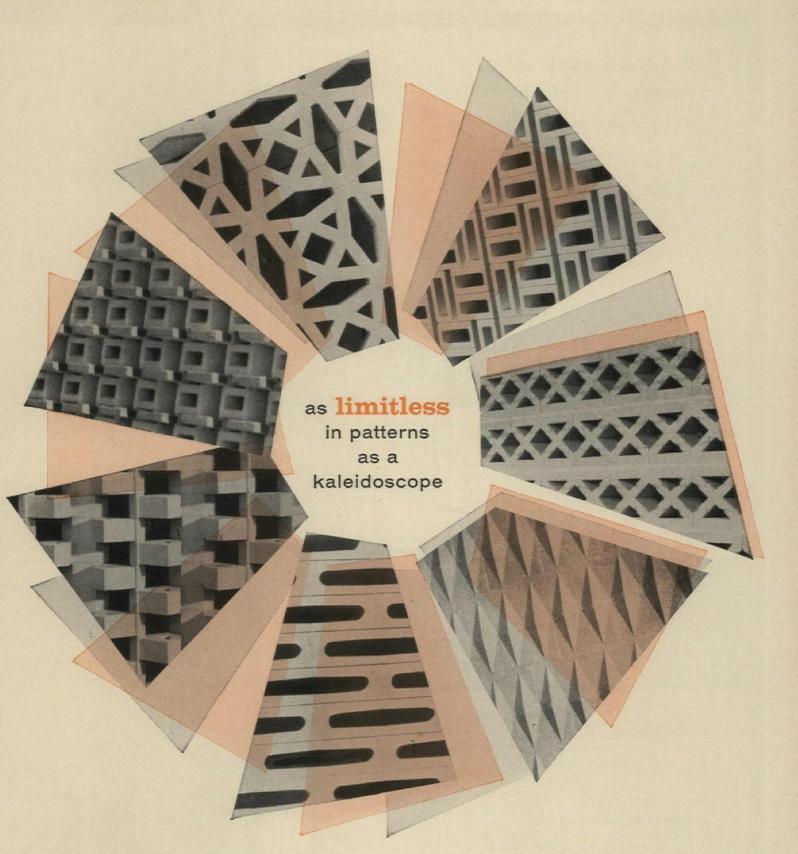
"Attractive appearance . . . choice of colors . . . choice of genuine, hand-rubbed wood cabinets . . . ample storage area . . ." These were some of the features specified by builders throughout the country when we asked them what they wanted most in a completely new, first-quality lavatory.

You will find all these features (and many more) in this beautiful new *Brent* lavatory-cabinet combination. That's why we call it *builder specified* . . . it was designed for *you*—to help sell more of *your* homes. Send today for complete specifications.



1,850,000 CONSUMERS WILL SEE THIS ADI More than 1,850,000 prospective homeowners will be presold on the new *Brent* lavatory and *Luxury Brass* fittings when they see this fullpage, four-color ad appearing in current issues of leading consumer magazines.





vibrapac architectural block

Turn loose your creative imagination on Vibrapac Architectural Block. One style alone gives you countless numbers of wall patterns. And each Vibrapac wall provides fireproof, textured beauty of dramatic contrasts. What's more, it's so easy to maintain. Specify this exciting product, Vibrapac Architectural Block, on your new building projects. Most Vibrapac block plants can meet your specifications for architectural block—in many styles and sizes, interesting textures, and distinctive colors. Write for our A.I.A. Design Block Bulletin No. 139.

BESSER COMPANY Dept. 175. Alpena, Michigan, U. S. A. FIRST IN CONCRETE BLOCK MACHINES

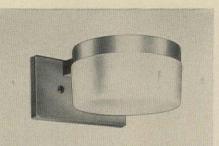


A9-201



New products

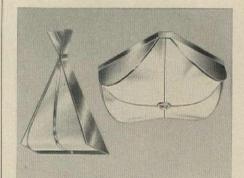
start on p 213



Diecast wall bracket for use in halls, under overhangs, soffits, or on porches has an 8" hand-blown Thermopal glass. Patented mounting strap locks base in de-sired position. Fixture also comes with convenience outlets and pin switches. Finishes: satin chrome and oyster, chocolate, green, black, satin brass baked enamel. Overall size: 93/4"x41/2".

Prescolite, Berkeley, Calif.

For details, check No. 35 on coupon, p 304



Nonmetallic fixtures for wall and ceiling use are insulated, nonstaining, noncorroding. Vapor-tight cases are bugproof, dustproof, moistureproof, can even be used safely in a stall shower. Plastic frames come in textured aluminum, brass, and black to match hardware. Globes come clear, frosted, ringed, or plain.

Union Insulating, Parkersburg, W. Va. For details, check No. 36 on coupon, p 304



Post lantern switch turns yard lights on and off at dusk and dawn. Time-delay photoelectric eye activates switch, allows three-minute lag so lights will not be turned off accidentally by car headlights. Unit is compact, prewired, will fit any 3" post. Switch works on 115v with 400-w capacity. Temperature compensator will withstand -25F to 150F.

Energy Kontrols Inc, Geneva, Ill. For details, check No. 37 on coupon, p 304

CUSTOM KITCHENS FOR CUSTOM HOMES..

WITH NATIONAL DISPOSER'S NEW



POWER SERIES MODEL 744-P

- New Triple Sound Barrier Acusti-Shell for whisper quiet operation!
- New Styling-fresh, clean, modern!
- New Power—1/2 H.P. Capacitor motor for more efficient performance than ever!
- Power Surge Reversing—the most effective means of clearing a jam!
- New Lok-Top Cover Control—one-piece cover rotates to "grind" (safer—unit operates only with cover locked in "grind"), to "seal" (new positive cam-locking action for leak-proof seal), and "drain" for open drain sink use!

New, new "Lazy Susan"

• The handiest "extra" ever devised—holds bottles, brushes, cleaning materials, sponges, etc. Keeps under-sink area clean and clutter-free!

Other National Models

- New Supreme Model-twin of the Citation in a continuous feed model!
- New Custom-Cover control model.
- New Super-Power Surge Reverse continuous feed model.
- New Sprite-continuous feed model.

THERE'S A NEW NATIONAL FOOD WASTE DISPOSER FOR EVERY HOME, EVERY KITCHEN

NATIONAL Grutant HOT WATER DISPENSER

Let's you "toss away the teakettle"... Pressure-free hot water (190°-200°F.) at a touch—so handy for preparing instant foods and for all the little chores that require "hotter-than-tap" water.

ANOTHER PROFIT BUILDER FROM NATIONAL

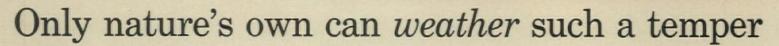
For detailed information about the NEW National Disposers and Instant-Hot write..... Dept. 864

PRODUCTS OF PLUMBING EQUIPMENT DIVISION • NATIONAL RUBBER MACHINERY CO. • 920 LAFAYETTE RD. • MEDINA, OHIO

NATIONAL Onstan



UNational dispose

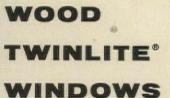


Western Cedar, with grown-in qualities, resists moisture, decay, shrinkage, rot and swelling. No twisting, thumping, pitting or warping with this wonderful siding. Left untreated, Cedar siding mellows in time to handsome, silvery-grey tones or soft, warm tans, depending upon the climate. Use of a bleach will hasten color changes and also provide a more uniform appearance. Let the weather do your next exterior finishing job. Side with Cedar-ideal for any climate, any design.



THE STERLING OF WOODS

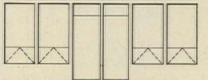




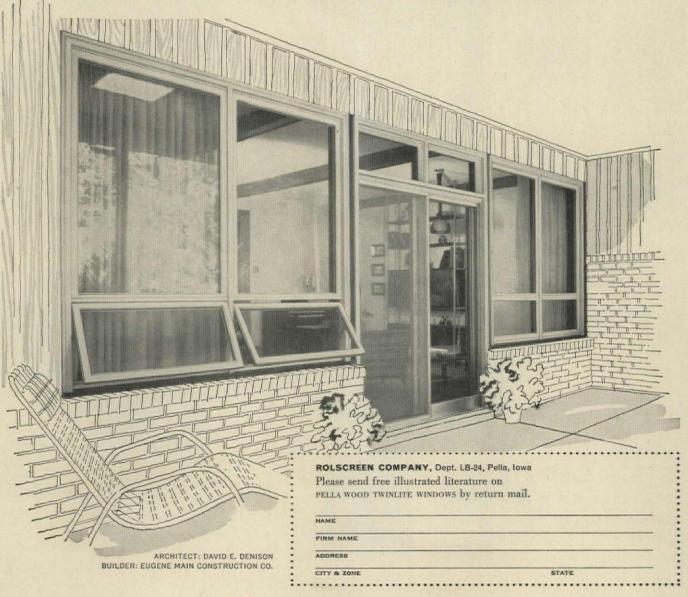
give homes a "can't-wait-to-move-in" feature

When combined into exciting arrangements like this, PELLA WOOD TWINLITE WINDOWS become a custom-like design feature that appeals to women. Aside from eye-appeal, their convenience and quality construction can be *demonstrated*. It's done by simply showing prospects the exclusive PELLA GLIDE-LOCK[®] underscreen operator and how it holds in 10 positions (Roto-Operator also available)...self-storing screens and storm sash...solid aluminum and stain-

less steel hardware. Removable muntin bars available to make cleaning and painting easier. On your next jobs, let the good looks and features of PELLA WINDOWS take an *important part* in the selling process. Call in your PELLA distributor now. Consult the classified telephone directory or mail coupon. *It will be answered within 24 hours!*



FOUR No. 476 PELLA TWINLITE UNITS used in this arrangement



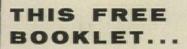
New products

start on p 213



William Brockway residence, Los Angeles, Calif. Burton Schutt, architect. Reprint, Sunset Magazine. H. H. Baskerville, Jr., photographer.





Shows how decorative glass brightens and beautifies homes. It is filled with dramatic illustrations of the ways translucent glass adds a touch of luxury and smartness to every room. Specify Mississippi Glass. Available in a wide range of exciting patterns and surface finishes wherever quality glass is sold.



Create a distinctive decor with translucent glass by Mississippi that floods interiors with softened, flattering light, makes rooms seem larger, friendlier, important. Write for free booklet. Address Department 9.



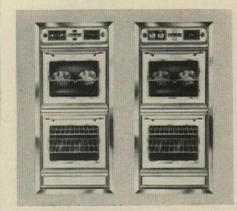


FIGURED & WIRED GLASS



Package kitchen is one of two new modular units being offered by Westinghouse, complete with 21"x20" sink, Micarta counters, built-in oven and range tops. Both are 9' long, have 3'9" return. Cabinets are maple. Kitchen above has 30" oven, will cost about \$670 in the Midwest; model with 17" oven, about \$650. Westinghouse, Mansfield, Ohio.

For details, check No. 38 on coupon, p 304



Twin double ovens from Modern Maid offer a choice of gas or electricity. Each fits a 24" cabinet, has full time and temperature controls, triple rotisserie. Upper and lower ovens have separate controls. Gas model has ceramic Infra-Ray upper burner claimed to cook twice as fast as standard. Price: about \$585. Tennessee Stove Works, Chattanooga.

For details, check No. 39 on coupon, p 304



New Youngstown kitchen is provincial styled in Honeywood. The new cabinets are an addition to the low-cost Woodcharm line. Cabinet fronts have raised beading; door and drawer pulls are antiqued copper. The Honeywood finish is a durable laminate with a wood tone and grain. The cases are rigid steel.

Youngstown Kitchens, Warren, Ohio. For details, check No. 40 on coupon, p 304

> continued on p 274 HOUSE & HOME





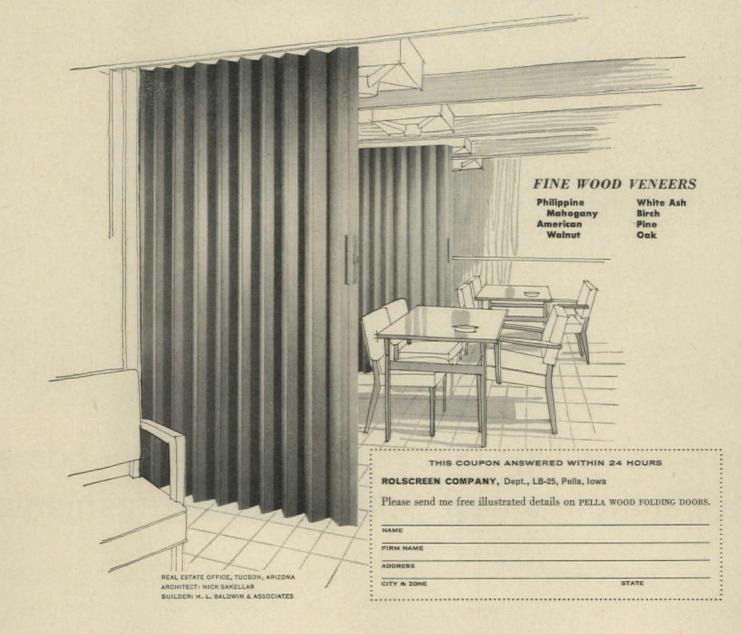


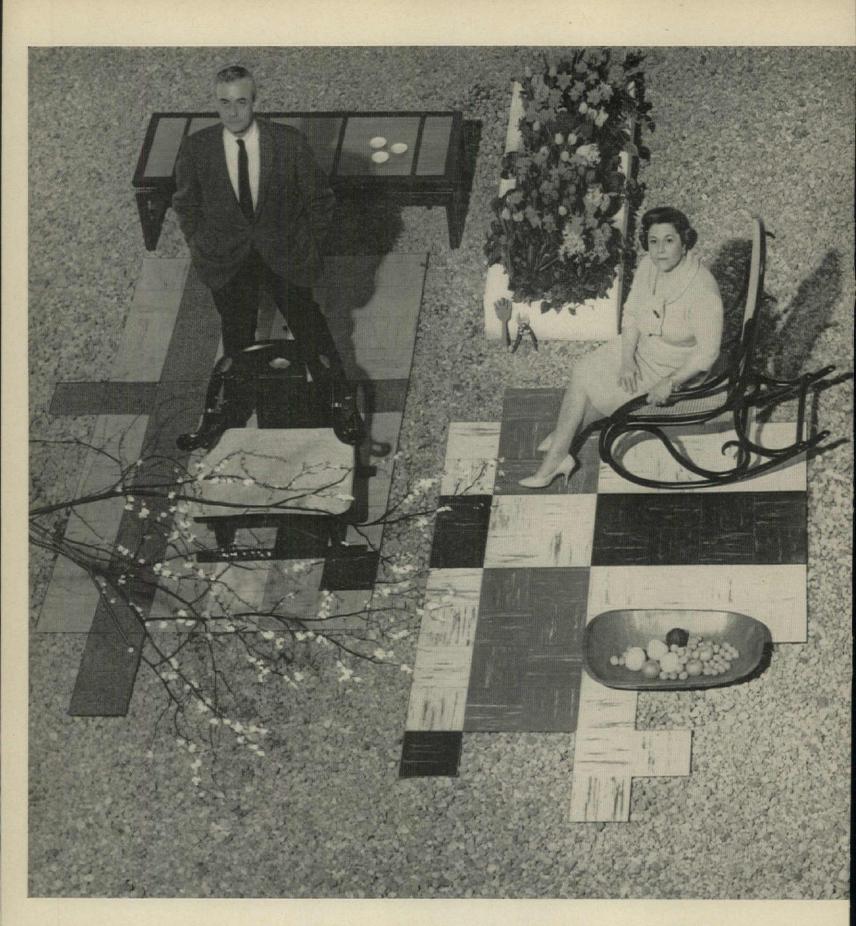
FOLDING DOORS

add richness of genuine wood

without building solid walls

PELLA FOLDING DOORS adapt space to needs instantly with decorative panels of *genuine wood* for lasting beauty and construction economy. The natural grains of 6 different woods provide a pleasing match for surrounding paneling and trim. Available factory-finished like fine furniture or unfinished. Installation is economically quick because PELLA WOOD FOLDING DOORS arrive factory assembled, complete with all hardware. Made for any width and in heights to 12' 1". Solid wood "Lamicor" construction prevents warping. Patented steel spring hinging assures easy, dependable operation of even the largest units. Call the PELLA distributor listed in the classified section of your telephone directory or mail coupon today for full details. ROLSCREEN COMPANY, PELLA, IOWA.





Here's a new high in "eye appeal" for your home with Flintkote's new Spring flooring fashions!

Flintkote's Spring collection of new flooring styles sparks ideas by famous Interior Designers that fashion-minded home buyers will want to see!



Everyone gets ideas in the Springtime. But Tom Lee, Geraldine Nicosia, Burton Tysinger and Emily Malino—famous Interior Designers—have the brightest of all: fresh home floor designs for Spring created with Flintkote's new flooring styles.

Flintkote's Spring collection is as new as the first robin—full of bright, smartly different patterns and colors that will send a shimmer of excitement throughout your homes. And when high-fashion flooring ideas like these catch homebuyers' eyes, you'll soon be catching new sales.

But beauty only starts the Flintkote story. Flintkote Floor Tile is unmatched for quality and for easy care. There's a Flintkote Flooring for every building need. And, behind the Flintkote Flooring line is a powerful, four-color consumer advertising campaign to pre-sell buyers before they visit your homes—pre-selling that can go a long way to help you sell more homes, faster. The Flintkote Company, Flooring Division, 30 Rockefeller Plaza, New York 20, N.Y.





In interiors, too, wood combines an essential structural function with decorative effects—saving builders the cost of additional interior finishing. Wood paneling is one of the most popular extras, helps make any house more salable.

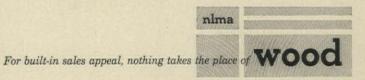
Because wood makes individuality practical at any price . . .

built of WOOD means built to sell

Today, more and more buyers are in the market for a home that is completely their own . . . unique in styling, taking full advantage of site orientation, planned around their own special family needs and way of life. But how to build a house with that one-of-a-kind look without going overboard on cost? *Wood* is helping builders find the answer.

No other material is so adaptable to such a wide range of size and cost specifications. No other material conforms so readily to any architectural style, yet allows for *economical* variations on the basic design. Luxury touches such as hardwood floors, paneling, exposed posts and beams do a double job. They are structurally important *and* decorative. These customized features go a long way toward creating a feeling of value... a receptive buying atmosphere that helps you *sell more houses* and *make more profit* on each sale. For more information on better homes of wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION Wood Information Center, 1319 18th St., N.W., Washington 6, D. C.

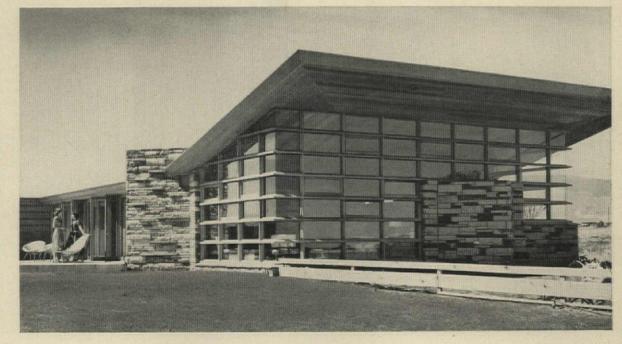




Wood is equal to any site problem as witnessed by this dramatic home perched on a seacoast hillside in California. Wood's easy portability makes economical construction possible on the most difficult terrain.



Attractive additions to existing homes are economically practical, thanks to wood's availability and the case with which it can be worked with ordinary tools. And wood is right for nearly every style of home.



A fine example of how wood construction can help the builder translate even the most advanced designs into reality. Readily available wood framing, used imaginatively, makes practical this dramatic expanse of glass. A deep wood overhang shields window areas against both sun and rain.





Everything ELEGTRICAL

that goes into a home (including the tools to build 'em!)

see...

Largest Selection Latest Styles National Brands

in our new giant



morgan-wightman

Suppliers of

Building Materials

throughout the 50 states

at WHOLESALE

plus the economy of ... one-stop buying and single invoicing to reduce paper work and accounting costs



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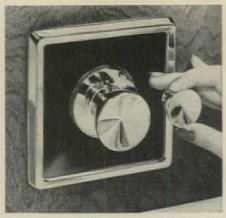
MORGAN-WIGHTMAN can be of service to you

Dept. A4 - P. O. Box No. 1 - St. Louis 66, Mo.

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COMPANY	A Date Ste
STREET	
CITY	STATE

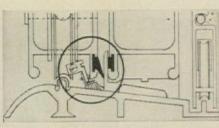
New products

start on p 213



Matching hardware in solid brass is now available from Weslock. Shown is a new 880 solid brass cabinet knob to match Sunray Deluxe series lockets. New 881 knob matches Classic series locksets. Both also come in solid bronze and a choice of nine finishes.

Western Lock, Huntington Park, Calif. For details, check No. 41 on coupon, p 304



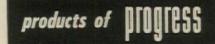
New sill seal that is claimed to be airtight and weatherproof is featured on new Continental sliding glass door. Pile sweep maintains sure contact with the sill under tension when door is closed. A self-sealing vinyl weatherstrip presses against fixed panel. Doors are heavy-duty, take ¼" plate or 1" insulating glass, are fully Aluminited.

Capri Sales Inc, Burbank, Calif. For details, check No. 42 on coupon, p 304



Head guide for bi-fold is latest refinement in Stanley's surface-mounted hardware series. The new guide allows controlled action for hinge-hung surfacemounted bifold doors. No jambs or trim are necessary; hardware can be applied to any height or type of door 34" to 134"thick. Also new: push-pull handles and urethane gaskets.

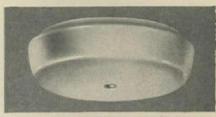
Stanley Works, New Britain, Conn. For details, check No. 43 on coupon, p 304





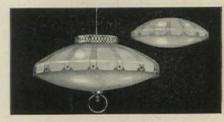
GALAXY SERIES CREATES NEW LIGHTING DRAMA

Galaxy silhouettes capture the sparkle of shimmering moonbeams. White with brass trim highlights every color scheme. Matching pulldown, pendant and ceiling fixtures — designed for specific areas and a variety of purposes — coordinate the home's lighting personality.



ASTRAL FLUORESCENT FIXTURES FOR BEAUTY, MORE EFFICIENT LIGHTING

Medium-impact styrene diffusers in luminous white make both circline and straightline fluorescent lighting more effective than ever. Astral rimless fixtures provide the built-in look so attractive in lowceilinged rooms. No exposed metal rims solve the matching fixture problem.



GOLDTONE OR COPPERTONE ACCENTS ENLIVEN VERSATILE MARDI GRAS

Matching Mardi Gras pull-down and ceiling fixtures—in white with goldtone or coppertone accents—create a gay and carefree spirit in living room, dining area . . . bring the glamour of carnival time to bedroom and kitchen. Wonderful in recreation room—where you want gaiety to prevail. White glass diffusers make light softly radiant.

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🗆 Galaxy	Astral	🗌 Mardi Gras
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DALLAS BUILDER FEATURED

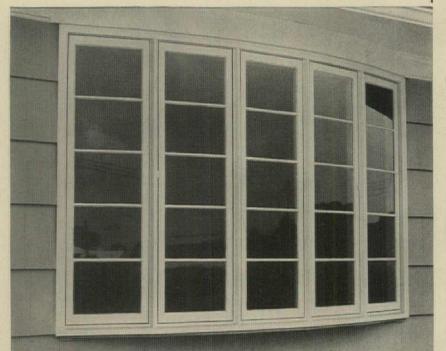


BECAUSE IT HELPS HIM SELL HOUSES!

How come one of the largest builders in Dallas takes a large section of his own newspaper advertisement, at his own cost, to feature Advertised-in-LIFE products? Because this symbol means confidence to 18,950,000 householders. That's how come. It is the most significant media symbol in selling. Used by builders across the nation in their own newspaper advertising 3 to 1 over the next two general magazines combined.







Only BILT-WELL Casement and Double-Hung Windows convert to Angle and Radial Bays with all Stock Parts

Stock filler moulds for radial bays available to make angles from 5 degrees to 12 degrees. Choice of 30 or 45 degree stock filler moulds for angle bays.

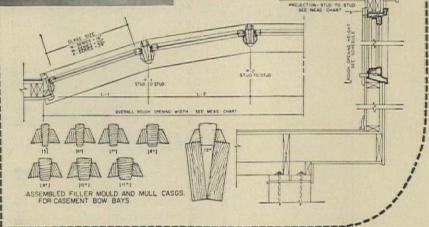
BILT-WELL Engineering offers new flexibility in planning window arrangements... new labor-saving installation features

Unique window groupings limited only by creativity of the designer with BILT-WELL's unitized sill construction and stock filler moulds.

Individual units can be installed side by side in long, continuous ribbons... around corners...in charming angle or bow bays.

The BILT-WELL Line of Building Woodwork-WINDOW UNITS, Double-hung, Awning, Casement, Basement. CABINETS, Kitchen, Multiple-use, Wardrobe, Storage, Vanity-Lavatory. DOORS, Exterior, Interior, Screen and Combination.

> manufactured by. GARADCO, Inc. Dubuque, Iowa



BOW BAY

Look for these BILT-WELL Window Features

- 1. Distinctive Hardware
- 2. Effective Weatherstripping
- 3. Kiln-dried Ponderosa Pine, preservative treated
- 4. Surpasses F.H.A. Requirements
- 5. Single or Insulating Glass

There's more to offer with wood work by Caradco

HOUSE & HOME



Awning Windows



New releasable hinge permits removal of sash for easy cleaning. Lever, jointed bar, rigid bar or gear operator available. Use these windows as casements, awning, hopper or fixed sash.

Kitchen Cabinets



Beautiful, streamlined cabinets of Ponderosa Pine, all water repellent treated for dimensional stability, with pine or birch doors and drawer fronts. Cabinets come in 3" modules to fit any size kitchen. Wide choice of accessories.

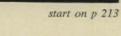
Storage Walls



Economical and practical arrangements of door and drawer units form complete storage walls. Easy to install in out-of-the-way corners for additional storage, too.

BILT-WELL Products by CARADCO, INC. Dubuque, Iowa

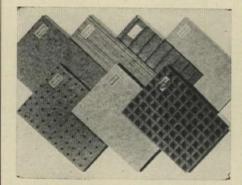
New products





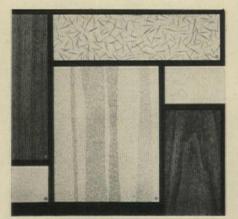
Mesh-mounted ceramics are new from American Olean. New backing holds tiles firmly in place, is flexible enough to handle easily yet stiff enough so it doesn't sag. Since mesh is on back, design is always visible and little cleanup is necessary. Strong bond will allow slight masonry movement without loss of grip. Perma-Bak may be used with any setting method, comes in all patterns in 1 9/16"—34" and 2 3/16"—1 1/16" series.

American Olean, Olean, N.Y. For details, check No. 44 on coupon, p 304



New hardboard line from Certain-teed includes smooth-surfaced standard, tempered, perforated, and underlayment types plus a variety of textures. Decorative boards come striated, basketweave, pyramidal, louverform, squared, and V-grooved. All are made from Douglas fir. Standard thicknesses and sheet sizes.

Certain-teed Products, Ardmore, Pa. For details, check No. 45 on coupon, p 304

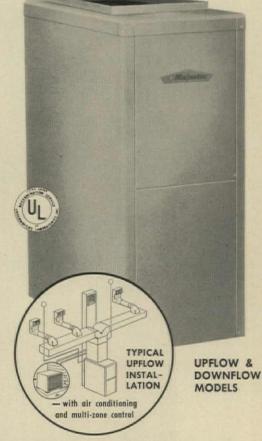


New Textolite patterns are designed to coordinate with Ruban Mist, a textured ribbon-stripe pattern in soft yellow, cocoa, white, pumpkin, turquoise. Soft solid colors in green, white, yellow, beige, gray, cocoa, and a wide variety of wood grains—including new Danish and gunstock walnut—tie into Ruban color scheme. Textured woodgrains simulate look of oil-rubbed wood. Sheets run 2' to 4' wide, 5' to 10' long in all styles.

General Electric, Conshocten, Ohio. For details, check No. 46 on coupon, p 304 Sell <u>all-season</u> comfort with today's <u>cleanest heat</u>

THE NEW





C ustom home buyers find a happy combination of leisure and economy in Majestic's Electric Furnace! It combines the best features of forced-air and electrical resistance heating. There's no combustion, no smoke, no soot, no burned fuel deposits to settle on walls, draperies and furniture.

There's no heat lost, just 100% clean, effective warmth. No stale, dead air results; instead, Majestic's smooth-running belt-driven blower circulates air healthfully through the system. To assure economy, the heat supply is modulated, delivered only as needed by means of automatic controls. It's the perfect furnace for adding year-round air conditioning with cooling, filtering, humidity control and multi-zone comfort. It's the best comfort system available

It's the *best comfort system* available for today's better insulated homes.

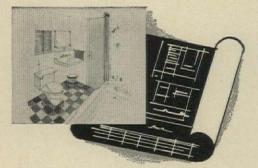


New from **Rheem-Richmond**.... the professional help you've

always wanted!

NOW!

your homes can have the prestige of bathrooms individually designed for you by the design staff of Living For Young Homemakers Magazine Imagine the impact . . . the sales appeal to home buyers . . . when you offer homes with bathrooms designed and planned exclusively for you by famous Living For Young Homemakers Magazine!



This prestige selling tool is exclusively yours from Rheem-Richmond through arrangement with Living For Young Homemakers magazine. Living's designers, interior decorators, and architects will completely design and color coordinate your bathroom, powder room and/or utility room. They'll create an original room correct in every detail and realistic in design, using material you've already contracted for, or others easily available. They'll follow your ideas if you wish, and work within your budget.

The service itself costs nothing but a small mailing fee and handling charge for all the material you get. Here's what this exclusive design package includes: Beautiful perspective rendering showing you how the room will look, blueprints, floor plan and elevation. Rheem Richmond will even furnish you with signs and material to advertise this exclusive design feature in your model homes.

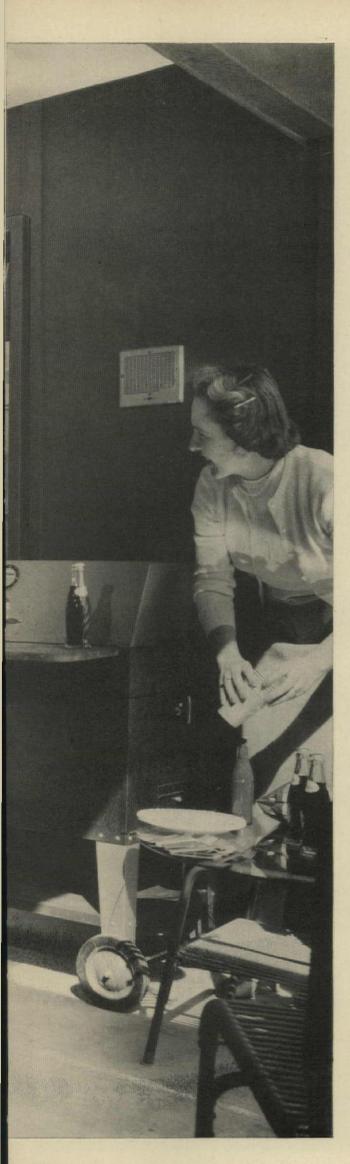
PRESTIGE PLUMBING FIXTURES ... PROFES-SIONAL PLANNING ... BENEFIT FROM BOTH

This exclusive Living/Rheem-Richmond design service puts Rheem-Richmond fixtures in their proper setting, enhancing the beauty of the fixtures and the bath area of your homes. In addition to expertly coordinated rooms, you offer home buyers the long-lasting quality, newest styling and modern features of the Rheem-Richmond line. Designers will select the sizes, shapes and any of Rheem Richmond's seven pastel colors or Whiter White to make even the smallest bath look luxurious.

Fill out the coupon below . . . Rheem-Richmond will rush full information to you.

Rheem Manufacturing Co. 16 Pearl Street, Dept. HH-4 Metuchen, New Jersey	RHEEM-RICHMOND Plumbing Fixtures
Gentlemen: Please send me more details room Design service and merc Name	
Company Name	
Company Name	





Today's Garage

your biggest bargain in space

Needed storage space, work space, play space—homebuyers are finding it in the garage, the place *you* can find more sales, more profits. For both *you* and the *homebuyer*, today's garage is a *big* bargain in space.

It's a bargain to build. Nationwide comparisons show the square foot cost of an attached garage is $\frac{1}{3}$ the square foot cost of the rest of the house... \$3 to \$5 for the garage compared with \$9 to \$15 for the house.

It's a bargain to sell. Surveys show homebuyers prefer garages to carports and certain built-ins. And it's space they can afford. Under FHA, a double garage adds only \$260 to the down payment of a \$15,000 home. To a \$16,000 home it adds only \$360. This is *less than half* the out-of-pocket cash most homeowners pay to a garage contractor within the *first year* of their home purchase.

A "Convertible-Garage-Room" makes it a bigger bargain—a bigger sales opportunity. A second door on the side or backwall makes your garage into a "Convertible-Garage-Room." Total cost: less than \$100 additional for a 16′ door. The garage gains light, ventilation, wide access to the backyard. It becomes a covered patio, workshop, play pavilion, family room, as well as storage space. The reason it's such a bargain to build? Materials and labor saved in the wall will make up most of the cost of the second door. Builders report greater garage evaluations, too. And "OVERHEAD DOOR" provides exciting sales tools FREE to help you make the most of this idea.

The "OVERHEAD DOOR" backs your bargain with a guaranteed product. You're guaranteed of dependable quality, reliable service—no callbacks. Any trouble will be efficiently handled by your local distributor. See your distributor soon. You'll find his name listed under "OVERHEAD DOOR" in the white pages of your phone book . . . or write Overhead Door Corporation, Dept. HH-4, Hartford City, Indiana.



RHEAD

the original, upward-acting sectional door, made only by

CORPORATION

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DOOR

the right flair... everywhere

Whatever the application, flair adds interest. And the right flair makes more sales. Everywhere quality is called for, you'll find an incomparable richness in Poly-Clad Plywall—at half the cost! And as to beauty you've 12 handsome wood grain finishes to assure the right touch for every taste... Poly-Clad protected to resist mars, scuffs, stains. The only paneling guaranteed against fading—in writing!

And that's not all! Now—you have Poly-Clad Plywall matching moldings—prefinished—ready to go right up. Nine styles and twelve matching finishes.

Add the right flair-everywhere-with Poly-Clad Plywall wood paneling.



Poly Clad. Plywall.

the right choice ... every time!

... says Michael N. Motto, custom builder

"We've used Poly-Clad Plywall in our new homes with excellent results. The beautiful finishes create an atmosphere of quality and richness—help convert prospects into purchasers. It goes up without any trouble, saves on both material and labor. It's a great way to upgrade—cut costs, too!"

Michael N. Motto has built in the Utica, New York, area for 25 years, constructing quality homes in the \$18,700 to \$40,000 bracket.

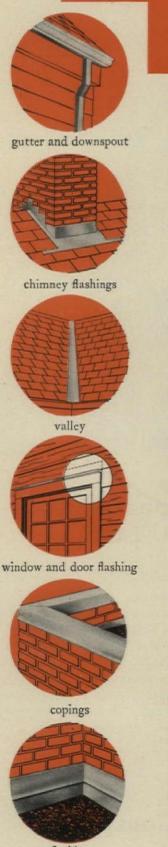
Let your dealer show you how beautifully Poly-Clad Plywall prefinished paneling and matching moldings meet your building requirements . . . give you more quality at less cost—everywhere, every time!



Plywall Products Company, Inc.

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FOLLANSBEE



flashings

Seamless TERNE

Follansbee Terne . . . a complaint-free roofing and weathersealing metal

Every builder is aware that even minor complaints aren't good for future business—and good business is the best reason for using Follansbee Terne in the areas where inadequate materials frequently cause complaints from home owners. There are many reasons why Terne is a superior roofing and weathersealing metal...

First, when a roofer paints Terne, the bond between the paint and Terne's coating is excellent.—Home owners will appreciate the fact that they will not have to paint nearly as often.

Second, Follansbee Terne will last as long as the house stands. There are Terne roofs which have been in service for well over 100 years.

Third, in comparison to non-ferrous metal accessories, Follansbee Terne can be painted—a real advantage because home owners like color in such things as gutters and downspouts. Terne also gives them the opportunity to change the color of house trim to harmonize with other exterior colors.

Fourth, Follansbee Terne allows the roofer to do a better installation job.—It's easy to work with, solders perfectly because of its tin-lead alloy coating.

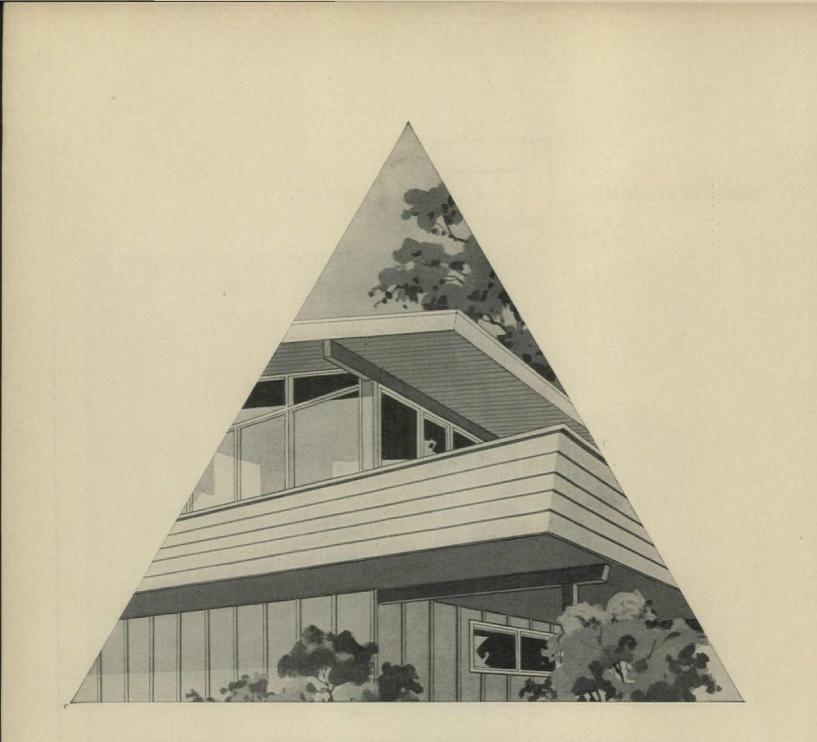
Fifth, Follansbee Terne requires fewer expansion joints than necessary with non-ferrous roofing metals—only one every 30 feet as compared to 8 for one metal and 3 for a second.

Sixth, Follansbee Terne, whether used for the complete roof or only for accessories, has advantages that your salesmen can point to in selling prospective buyers.

Using a competitively-priced, quality material like Follansbee Terne is good business — and helps make other sales possible. Ask your roofer or sheet metal contractor about Terne, or write

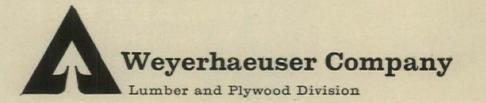


STEEL CORPORATION Follansbee, West Virginia • Sales Offices in Principal Cities



Save man hours_improve appearance_ with made-to-measure NU-LOC

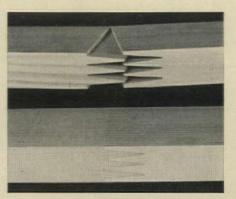
Weyerhaeuser's NU-Loc is manufactured lumber, produced to meet your needs in both extra wide and/or extra long length boards. Unlike many new building products, NU-Loc can give you savings on every job, large or small. It makes cutting and fitting time a minor cost factor, speeds construction, reduces waste—all this on top of improving appearance. It is ideal for such uses as soffits, fascias, door jambs, mouldings, shelvings, cornices, and stair trim ... and for bevel, board-and-batten, board-onboard, and drop siding. Weyerhaeuser Nu-Loc, a 4-Square Product, is precision manufactured from scientifically kiln-dried lumber. You can depend on its quality. The opposite page gives additional information on its use and performance. Your Weyerhaeuser 4-Square Lumber Dealer will be glad to show you samples and quote on specific applications so that you can see the savings Nu-Loc offers you.





Weyerhaeuser NU-LOC is lumber produced for specific needs and better performance

Nu-Loc is made of selected pieces of scientifically kiln-dried lumber, carefully machined for precision fit. The pieces are end-glued or end- and edge-glued together with a light-color waterproof exterior glue, then finished to uniform smoothness. Lumber to be used for Nu-Loc is cut thicker than regular stock to allow for surfacing after gluing. In order to minimize differences in color and grain, the pieces are sorted and matched into as many as five groups (depending on species) before gluing. Melamine urea resin adhesive is used because it creates a strong bond that is both waterproof and colorless.



Close-up shows precision-machined, interlocking Nu-Loc end joint before and after bonding.

Principal Advantages

NU-Loc improves appearance by presenting a smooth, even surface with snug fitting joints. It takes and holds paint or varnish extremely well. NU-Loc cuts labor costs by minimizing cutting, fitting, and handling time. It speeds construction by covering more area faster, and reduces waste because you order it in the lengths and widths you need. Made only of kiln-dried lumber, it has good dimensional stability, lays flat, resists cupping and warping.

Principal uses of NU-LOC

Nu-Loc is interchangeable with regular lumber in all non-structural uses. Nu-Loc is offered in American Lumber Standard and in West Coast Industry sizes. It is made in clear grades of Douglas Fir, Western Red Cedar, West Coast Hemlock, Ponderosa Pine, Idaho White Pine, Inland Red Cedar and Larch... and is also available in common grades of Idaho White Pine, Inland Red Cedar and Larch/Douglas Fir.

Nu-Loc exterior wall coverings-drop

siding, vertical patterns, board and batten—are available in lengths to 22', widths to 12"—bevel siding in lengths to 16'. Nu-Loc casing and base, and Nu-Loc mouldings are available in standard patterns, and in specified or random lengths. Nu-Loc door jamb sets are made in many sizes and patterns. Wide Nu-Loc Lumber can be ordered in lengths to 20', widths to 28". Nu-Loc Lumber is also ideal for window frames, cornices, rake trim, soffits, fascias, porch ceilings, signs, cabinet faces, shelving, drawer sides, drawer fronts, stair trim, valances, and bay window sills.

Fully Accepted

The combination of modern equipment, carefully trained operators, and strict quality controls assure consistent uniformity and durability. NU-Loc is backed by over 20 years of research, testing, and development. It is produced in accordance with grading rules of the West Coast Lumber Inspection Bureau or Western Pine Association.



For wide widths, the end-glued pieces are grain matched and edge-glued together.

Summary

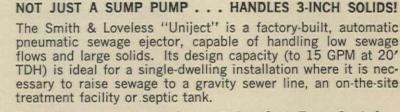
Advantages in wider widths: Gluing up of narrow pieces tends to stabilize wide widths by reducing cup and twist. NU-Loc provides wider widths than available in regular lumber.

Advantages in long lengths: Long lengths of NU-Loc require fewer endfitted joints to give better appearance and save labor. Both specified and fractional lengths are available in quantity.

For additional information write: Weyerhaeuser Company, Lumber and Plywood Division, First National Bank Building, St. Paul 1, Minn.



At Last! A New, Compact, Home Sewage Ejector



The "Uniject" is a simple, lowcost "lift station" for the home. No need to by-pass those "low lots" in a subdivision which are below the level for economical gravity sewer service. Several "Unijects" can be much cheaper than lowering the entire sewer system—and possibly having to pump all the sewage as a result.

With the "Uniject" you can now have shower, lavatory and laundry facilities in the basement of homes, old and new, where it was not possible before.

anel

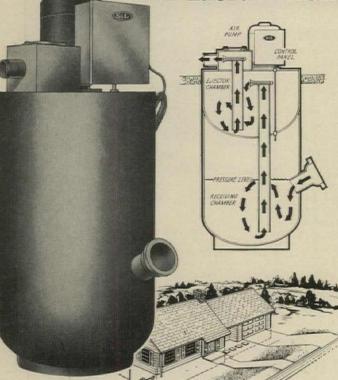
Division - Union Tank Car Company

- Low-Cost, Epoxy-Coated Unit
- Simple, Economical to Install
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- Needs No Regular Maintenance
- Expels 3-Inch Solids

By the Makers of America's Finest Factory-Built Sewage Lift Stations and Sewage Treatment Plants

For additional information—and the name of our sales representative in your area—write Department 70.

P.O. BOX 8884 KANSAS CITY 15, MO. Plant: Lenexa, Kansas



(Patent Pending)



(2441)

In celebration of our 60th year of world-wide progress . . .

Special Anniversary Offer to Builders

A Genuine Coleman gas-lite with the installation of

America's Only Bonded Line Heating and Air Conditioning

Now you can give your homes the extra elegance of outdoor gas lighting at no extra cost!

As a 60th anniversary salute to builders, Coleman makes this offer: A genuine Coleman Gas-Lite for every home in which you install a Coleman central furnace, wall heater, floor furnace or air conditioner.



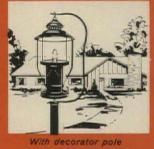
This allows you to offer the home buyer a *double* bonus. Bonus No. 1 is an exclusive \$500 Warranty Bond on the Coleman equipment installed. Bonus No. 2 is the Coleman Gas-Lite.

Lamp is easily placed at any point where it adds the most charm—in front yard or patio, along driveway, on wall of house or garage, on a table. And remember—the Gas-Lite is yours with the installation of Coleman heating or air conditioning. Get in touch with your Coleman dealer or mail coupon below.



Also makers of famous Vit-Rock water heaters, Decorama space heaters, Coleman lanterns, camp stoves, jugs and coolers mobile home heating and air conditioning

Works on any gas-Installs 4 ways Can be mounted on post (as at left)







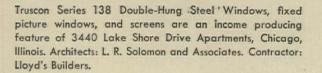
Can be mounted on wall with decorator bracket

The Coleman Company, Inc. Wichita 1, Kansas

I'm interested in your gas-lite offer. Please have your nearest dealer see me.

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ddress				-
	- 23,000	1200	 	

City_____Zone___State____



1111

BITH

BEST KITCHEN BUY FOR APARTMENT BUILDERS — Republic Steel Kitchens. Durable baked enamel in white and in colors ends kitchen maintenance costs, assures tenant satisfaction. Also available in new vinyl on steel cabinets—abuse resistant, high fashion decorative effect. You don't repaint with every tenant move. Dimensionally accurate Republic Steel Kitchens are easy to install. Doors and drawers fit right with no maintenance. You save for the life of the building when you install trouble-free Republic Steel Kitchens. Send coupon for specifications.



BEST WINDOW BUY FOR APARTMENT BUILDERS... TRUSCON SERIES 138 STEEL DOUBLE-HUNG WINDOWS

No other window like it! All-steel, bonderized, finished in lasting baked enamel. Stainless steel weatherstripping, stainless steel balance tapes. Series 138 is the trouble-free window.

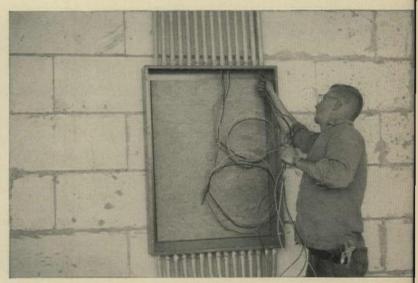
Steel construction is dimensionally stable. Window always operates easily, fits right, closes tight. Tenant satisfaction is built in. Weathertightness makes the Series 138 the ideal window for use with air conditioning—either central or window located. Series 138 Steel Double-Hung Window can be incorporated into Truscon's VISION-VENT[®] Window Wall, giving you the ultimate in apartment curtain wall construction. And, Series 138 can be furnished in your choice of color.

Where apartments are in your plans, be certain to see a demonstration of Truscon Series 138 Steel Double-Hung Window. Your local Truscon representative will be happy to give you all the facts. Or, send coupon.



BEST ROOF DRAINAGE SYSTEM FOR APARTMENT BUILDERS — Republic Roof Drainage Products. Republic "K" Gutter in lengths up to 32 feet go up easy, go up fast, go up to stay! Precision manufacturing eliminates bends and bows. And Republic tight galvanized coating stays on to provide years of vital protection. Your Republic roof drainage distributor offers a complete line of everything you need—in galvanized steel, stainless steel, terne, copper, with perfectly matched components. Call your Republic representative, or send coupon for additional facts and specifications.'

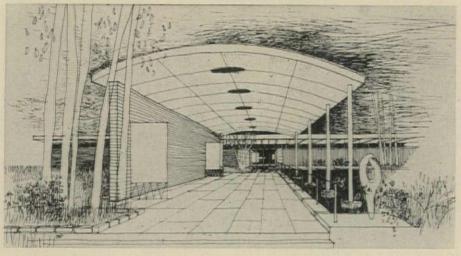


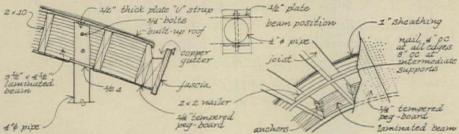


BEST RACEWAY BUY FOR APARTMENT BUILDERS—Republic Electrical Metallic Tubing. Give your building full housepower, now and in the future. Specify Republic E.M.T. in the next larger size and avoid early electrical obsolescence. You will have a grounded, pull-in, pull-out electrical system in which wire can readily be added or replaced. Tenants will enjoy full housepower, whatever their electrical needs for years to come. And, the installation economies of Republic "INCH-MARKED"[®] E.M.T. allow all this at no greater cost. Ask your electrical contractor for Republic E.M.T. Send coupon for more facts.

DEPT. H	LIC STEEL CORPORATION 0-9193 EPUBLIC BUILDING • CLEVEL	
Please s	end more information on the	
	Truscon Series 138 Steel	Double-Hung Windows
	CRepublic Steel Kitchens	CRoof Drainage Pro
	Republic Electrical Metal	lic Tubing
N		Tisla

ducts





ARCHED PEGBOARD ROOF forms an interesting shelter for an entry. The laminated beams are the only material not readily at hand. If insulation were included between the beams, it could serve as a roof section in post-and-beam construction. Here, Masonite has suggested using Panelgroove to give an interesting texture to the solid wall,

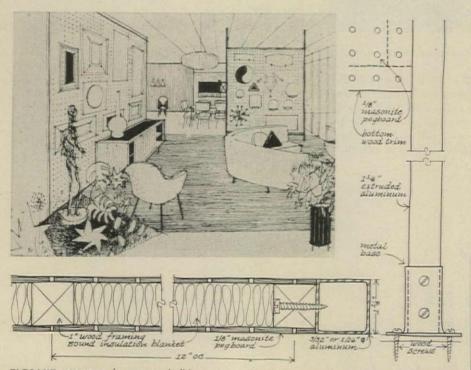
Here are design studies by Masonite

Design Series 1.01 M, the latest publication on the use of Masonite products, contains 18 fresh ideas for using various types of hardboard. Book contains ideas for interior and exterior treatments, storage pieces, siding, fencing, display areas, etc. All are shown in architectural perspectives and detail

drawings; all, in this series, are in contemporary style. Among products used: Panelgroove, Panelok, PegBoard, Presdwood, Ridgegroove, Ridgeline, Royalcote. Seadrift, Shadowvent. Designs are by George Alfred Parenti.

Masonite Corp, Chicago.

For copy, check No. 47 on coupon, p 304



ELEGANT DIVIDER is easy to build as an interest wall or a decorative piece of storage. The insulation-backed perforated board should have an acoustic effect. Extruded

aluminum post can, if necessary, be replaced with wood. Base could be ramset in a slab as well as nailed to wood floor. Peg-board takes paint well for decoration.

Folding door facts

Architectural detail and full specification data on four types of Accordion-Fold doors are given in a new 16-page catalog. The doors: Customfold—a commercial-use door; Stackdoor—a residential version of Customfold; Accordofold Royale—a hard-core, vinylcoated door; Wovynfold—a mahogany and nylon-fortified vinyl woven door. Hanging and construction details are included.

Accordion-Fold Doors, Jamaica, N.Y. For copy, check No. 48 on coupon, p 304

How to install floors

Kentile's 1960 36-page *Mechanics Manual* is now available. The book is simple enough for beginners, detailed enough for expert tile layers. New techniques, proper maintenance, Kencove and Greek Key installation, shuffleboard data, basketball court jobs, etc make up the contents.

Kentile Inc., Brooklyn.

For copy, check No. 49 on coupon, p 304

Up-to-date lighting

Supplement 60 A brings Jay Lighting's catalog up to date. It includes recent additions to the Jaycandescent line: Parasol Series, Roundabouts, Walnut Anzac Group, Colony and Williamsburg series, Multicolor lanterns.

Jay Lighting, Brooklyn.

For copy, check No. 50 on coupon, p 304

All about plywood

Simpson has a new 20-page catalog (AIA No. 23-L) of its complete plywood line including specialty plywoods: redwood, pine, Douglas fir, hardwoods, high and medium density overlaid, and hardboard faced. All grade data, physical characteristics are given; photos of each product are in four colors.

Simpson Logging Co, Seattle.

For copy, check No. 51 on coupon, p 304

Molded drawer assembly

Molded drawers for use in built-ins in all parts of the house are shown in a new folder from Amos Molded Plastics. Products described include the full line of drawers side, and center guide systems. Styling ideas are shown in photos.

Amos Molded Plastics, Edinburg, Ind. For copy, check No. 52 on coupon, p 304

Laminated wood members

New data on uses for Rilco products are presented in a new 20-page brochure. Applications for tangent arches, radial arches, beams and purlins, tied arches, bowstring trusses are shown. Rilco, St Paul.

For copy, check No. 53 on coupon, p 304

Publications continued on p 298 HOUSE & HOME AN EXCITING, NEW FINISH! "BRUSHED CHROMETONE" LOOKS LIKE STAINLESS STEEL

... at a fraction of the cost!



Teigh a



IN FOUR SIZES, 30", 36", 42" ... AND FOR THE FIRST TIME ... <u>24</u>"

This revolutionary new Brushed Chrometone finish, with a permanent abrasion-resistant coating, has all the soft, satin beauty of stainless steel, yet sells for a price only 5% more than Leigh's popular Coppertone. Now available exclusively with Leigh 5400 series economy Range Hoods.

FEATURES:

- . GOLD ANODIZED TEXTURED ALUMINUM CONTROL PANEL.
- COMPLETELY ASSEMBLED AND WIRED.
- NOISELESS 6-BLADED FAN WITH 593 CFM FREE AIR.
- NO ADAPTERS NEEDED. FITS CONVENTIONAL 8" DUCT.
- . TOTALLY ENCLOSED MOTOR.

Build bigger profits in '60! Contact your Leigh Dealer immediately or write for catalog #268-L.

Only from Leigh can you buy such a complete line of quality building products including Range Hoods, Ventilating Fans, and Rock Maple Chopping Blocks.

LEIGH BUILDING PRODUCTS, COOPERSVILLE, MICH., DIVISION OF AIR CONTROL PRODUCTS, INC., 2560 LEE STREET, WEST COAST WAREHOUSE: LEIGH INDUSTRIES (CALIFORNIA) INC., 560 SOUTH ANDERSON, LOS ANGELES, CALIFORNIA. MADE IN CANADA BY: LEIGH METAL PRODUCTS, LTD., 72 YORK STREET, LONDON, ONTARIO. PRAIRIE PROVINCES AFFILIATE: LEIGH-TORNEL DISTRIBUTORS LTD., 549 ARCHIBALD STREET, ST. BONIFACE, MANITOBA — COPYRIGHT 1960 LBP-ACP., INC.

Now! Put your best foot* forward. with the film story of your dynamic industry

* public relations foot, we mean!

"BUILDING THE AMERICAN DREAM"—a dramatic film story of the housing industry: its growth . . . its contribution to greater home value, to better living . . . its importance to our national economy, to your community... the career opportunities it offers; dedicated to the NAHB and to YOU . . . by United States Gypsum.

How would you like to bring to groups of influential people in your community the impressive story of the business of home building—your business? With the cooperation of the Educational and Public Relations Committees of the National Association of Home Builders, U.S.G. has prepared a revealing half-hour motion picture in full color . . . designed as an effective public relations and educational tool.

FREE TO YOU FOR LOCAL SHOWING

This entertaining film is a thorough documentary of modern home building in the U.S.A. its beginnings, its trials and errors, and its achievements. With bold color and warm human interest, the film will hold your viewers fascinated as they learn how you—and other builders across the nation—are fast succeeding in building the American dream. It's a highly entertaining, quality film that any organization will be glad to schedule. And *it's yours free* for showing to clubs, high schools, universities, other groups in your area . . . starting now!

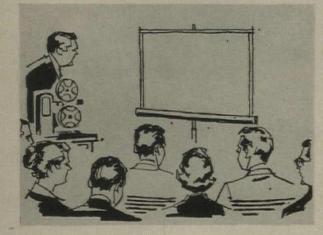
AVAILABLE FOR NAHB CHAPTER VIEWING

You can preview this film if your local builder association schedules it for showing to members. For this purpose, the film can be obtained from any office listed here. The secretary of each local NAHB affiliate has received detailed information about the film by mail from U.S.G.

SEE GROUP PROGRAM CHAIRMEN EARLY

Nationwide promotion is sure to develop great demand for this outstanding motion picture. The film is available for use by schools, clubs and other organizations all over the nation. But "Building the American Dream" was prepared especially to serve you and your fellow builders.

Make a date with program chairmen of organizations in your community for an early showing of the film. Then write, wire or phone the distributor of this film—Modern Talking Picture Service—selecting the office nearest you from this list. Do it today!



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Widespread promotion will carry the news of this motion picture, "Building the American Dream," to clubs, high schools, universities, other groups and organizations . . . all over the nation.



To reserve film, contact MODERN TALKING PICTURE SERVICE office near you!

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No. 5224



Newest of the New!

COMBINATION QUIET SWITCHES

You've been waiting for!

LEVITON is the first to bring you four entirely new devices in the combination duplex line... the now popular mechanical Quiet Switch in combination with power outlets or pilot lights. The Quiet Switches are all precision-balanced with heavy special silver contacts, magnetic arc-snuffing action. The movement? So quiet you can hardly feel it!

The features? All these:

U-GROUND POWER OUTLETS offer maximum safety. Conform to N.E.C. requirements. Also accepts any 2-wire plug.

ALL POWER OUTLETS have bronze double-wiping contacts for longer life and pressure grip. Can be wired independent of, or controlled by switch.

PILOT LIGHT takes standard S-6 candelabra lamp that's easily unscrewed. Nickel-plated protective hood over lamp.

RUGGED CONSTRUCTION! Base molded of brown phenolic... covers of either brown phenolic or ivory thermosetting plastic. Heavy gauge rustproofed underslung steel strap is riveted through cover and body to form a permanent assembly.

EASY TO INSTALL! Large head No. 8 terminal screws have deep milled slots for easy wiring. Accommodate up to No. 10 conductors. Wiring diagram furnished with unit. Wide plaster ears on strap make wall alignment easier. ECONOMY! Save installation costs and wall space-single gang box and wall plate are all that is needed.

No. 5225	• No. 5222	•	No. 5224	No. 5223 LB
SINGLE POLE	. SINGLE POLE		TWO SINGLE	SINGLE POLE
Quiet Switch with	• Quiet Switch WITH POWER		POLE	Quiet Switch
U-GROUND	OUTLET		Quiet Switches	WITH PILOT LIGHT
OUTLET	•		CIRCUIT	ricor cioni
Rating Quiet Switch:	· Rating		Rating	Rating
15A-120V	- Quiet Switch: 15A-120V	*	Quiet Switches: 15A-120-277V	Quiet Switch: 15A-120V
AC only	AC only	•	AC only	AC only
U-Ground Outlet: 15A-125V	* Power Outlet:	•	and a second a	Pilot Light:
104-1204	• 15A-125V	•		75W-125V

Listed by Underwriters' Laboratories, Inc.



LEVITON MANUFACTURING COMPANY, Brooklyn 22, N. Y. Chicago • Los Angeles • Leviton (Canada) Ltd., Montreal For your wire needs, contact our subsidiary: American Insulated Wire Corporation

Publications

start on p 294

Automatic staple tackers

Hand staple guns and hammer tackers to handle staples up to 9/16" long and airoperated guns for staples up to 1½" long are described in a new folder (FT-26) from Duo-Fast. FHA approved uses for the power gun are detailed for plywood, fiberboard, and gypsum wall sheathing; plywood roof sheathing; plywood subflooring; gypsum lath and drywall.

Fastener Corp, Franklin Park, Ill. For copy, check No. 54 on coupon, p 304

Plastic pipe standards

The Commodity Standards Division of the Department of Commerce has adopted the industry proposals on ABS plastic pipe and printed editions of the new standards are now available from the Government Printing Office. Bulletin CS218-59 covers requirements and methods of test for rigid ABS pipe (IPS dimensions). CS219-59 covers dimensions and tolerances for solvent-welded ABS pipe. CS220-59 covers dimensions and tolerances for lightweight ABS pipe. All three provide a means of identification and labeling. Prices: CS218-59, 10¢; CS219-59, 5¢. CS220-59, 5¢.

Superintendent of Documents, US Government Printing Office, Washington 25, DC.

For copy, write direct to Printing Office

How to preserve wood

Latest publication from Reichhold Chemicals covers the use of pentachlorophenol to protect wood, paper, fabrics, rope, paint, etc, against mold, rot, termites, and vermin. The pamphlet gives basic application information and specification data. Tables of physical properties and relative solubilities are included.

Reichhold Chemicals, Inc, White Plains, N. Y.

For copy, check No. 55 on coupon, p 304

Where to use utility grade

West Coast Lumbermen have a new 4page information sheet to guide you in the use of utility grade Douglas fir, West Coast hemlock, western red cedar, Sitka spruce, and white fir. Required span lengths are given for rafters and floor, ceiling, and roof joists.

For copy, check No. 56 on coupon, p 304

A companion piece—a 12-page pocketsize booklet—shows in facsimile all the grade stamps for West Coast lumber.

West Coast Lumbermen's Association, Portland, Ore.

For copy, check No. 57 on coupon, p 304

New uses for foam plastics

A detailed 10-page catalog from General Foam Plastics tells many of the rapidly developing uses for expanded polystyrene board. Some of the uses: perimeter insulation, plaster base, core walls, roof insulation, backer board, sandwich construction. Illustrations show how to install, how to handle, how to cut. A special section deals with use of flexible foams.

General Foam Plastics Corp, Portsmouth, Va.

For copy, check No. 58 on coupon, p 304

continued on p 304

NOW! A YFAR WRITTEN GUARANTEE **ON HOME DRAINAGE** SYSTEMS AND SEWERS!

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It's true! Use superior TYLER Cast Iron Soil Pipe & Fittings in the new homes you build and, AT NO EXTRA COST, you add the additional quality-feature of an entire home drainage system GUARANTEED FOR 50 YEARS! A written Guarantee that covers material AND labor . AND means what it says! For complete details on TYLER 50-YEAR HOME DRAINAGE SYSTEMS, see your plumbing contractor or write us TODAY!

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TYLER HOME DRAINAGE SYSTEM

House in San Francisco Architect Pietro Belluschi, Cambridge, Mass

Cabot's Colorful Stains assure Trouble-Free Protection **Cabot's RANCH HOUSE HUES** at 1/2 the cost of paint · Will not crack, peel or blister

- Easy to apply and maintain. No brush marks
- No priming no thinning no sanding no scraping
- · Penetrate deeply, actually dyeing the wood Can be painted or stained over later if desired

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430 South Terminal Trust Bldg., Boston 10, Mass. Please send color card on Cabot's Ranch House Hues

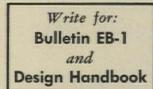
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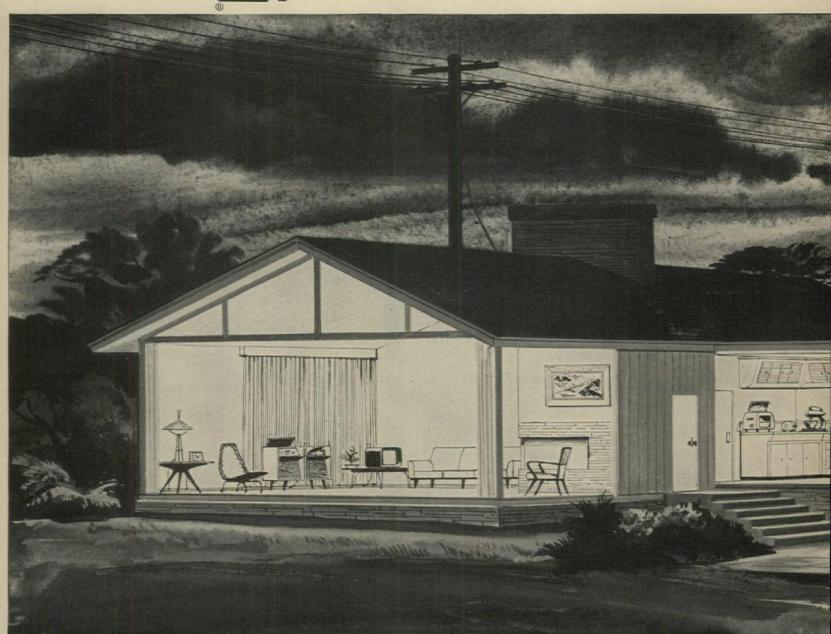
Provide better electrical living with BullDog's PL12A Pushmatic Electri-Center[®]! This residential distribution service system supplies 34 circuits to feed electric heating, air conditioning, range, oven, water heater, dryer, plus lighting and general purpose circuits ... all from a single compact 200-Amp 12-circuit panel! (See dia-

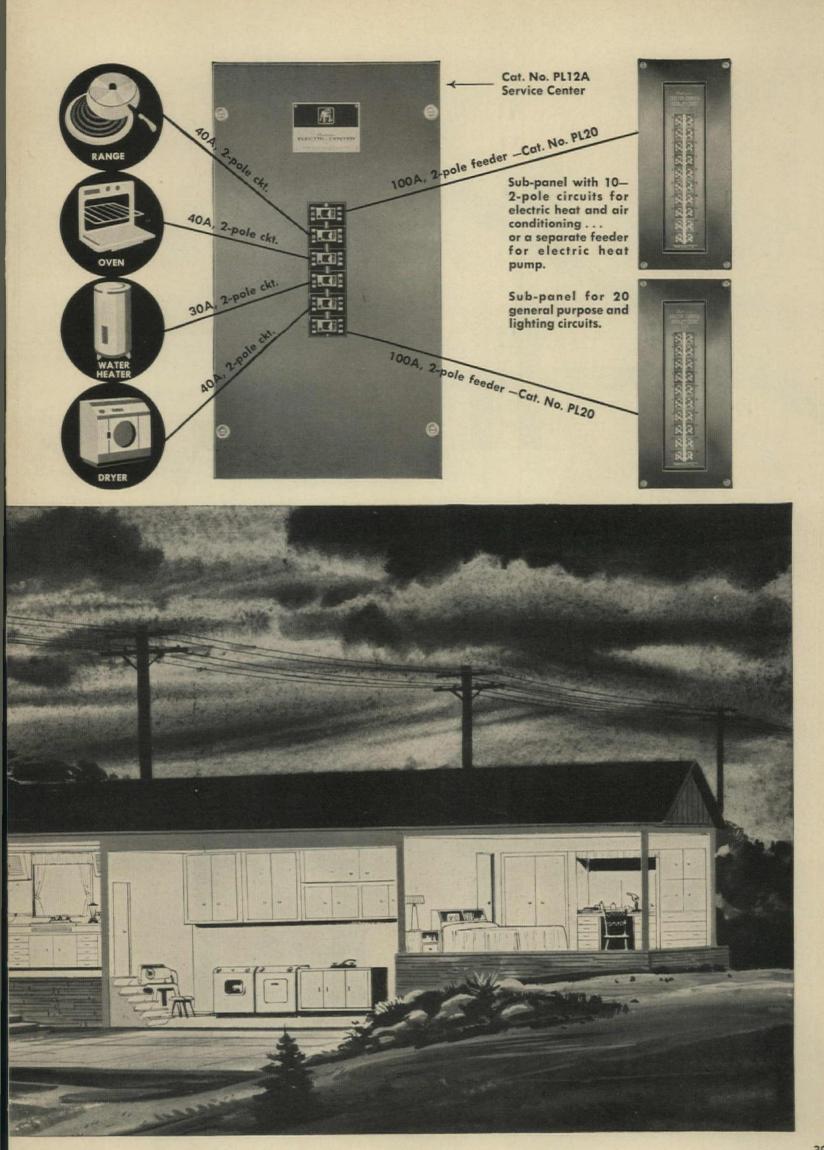
gram at right.) For further information contact:

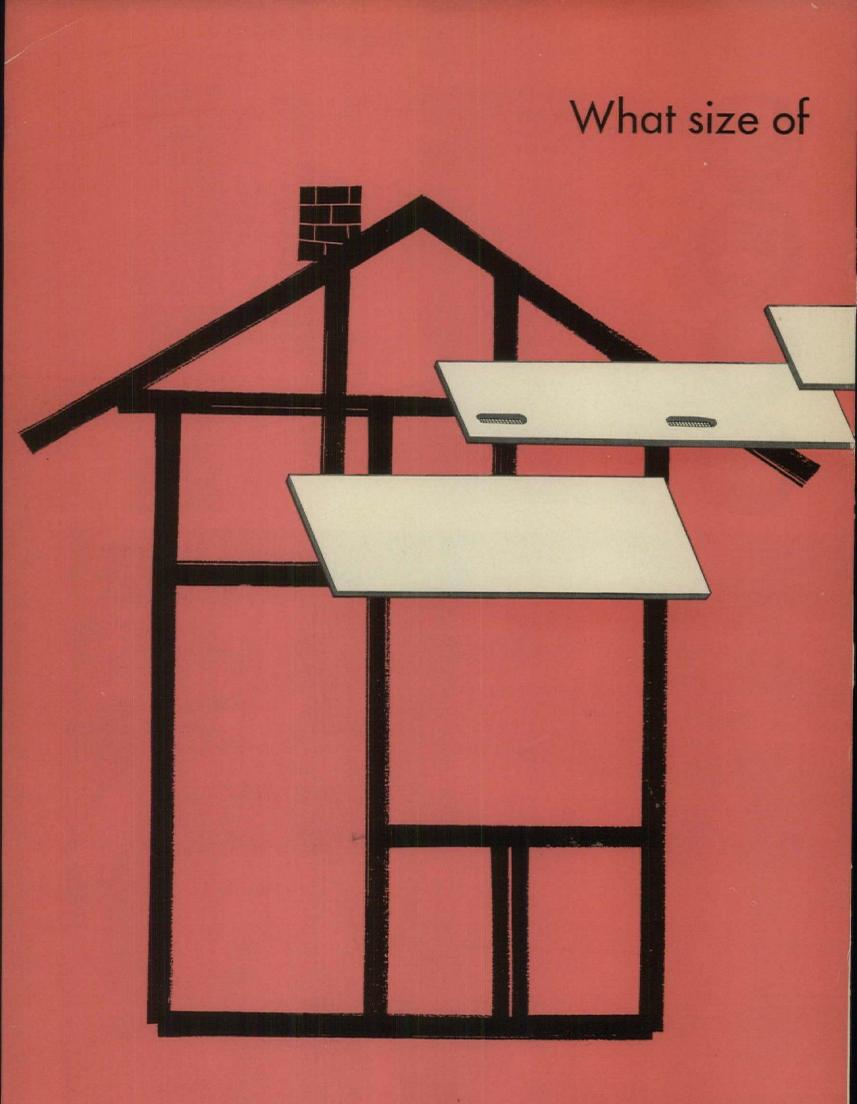
BullDog Electric Products Division, I-T-E Circuit Breaker Company, Box 177, Detroit, Michigan. In Canada: 80 Clayson Rd., Toronto, Ont. Export Division: 13 East 40th St., New York 16, N.Y.



BULLDOG ELECTRIC PRODUCTS DIVISION I-T-E CIRCUIT BREAKER COMPANY







READY-TO-APPLY soffits do you need?

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Primed, Vented, Screened • Immediate delivery of Standard Sizes from Stock • 12" -16" -24" -32" 36"-48" widths • 8' and 12' lengths

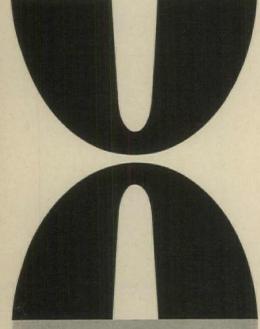
Savings on hundreds of projects are running 25%. Upson soffits won't crack, split or check. Delivered to your job cut to size, with or without screened vents. Waterproofed, white prime coat finish. Clean, straight edges. Aluminum "H" moulding supplied for strong attractive joint treatment. Excellent painting qualities.

Our technical staff will gladly consult with you on your requirements. Phone, wire or write. The Upson Company, Upson Point, Lockport, New York.

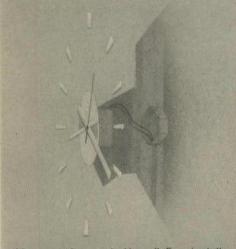


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HOWARD MILLER BUILT-IN WALL CLOCKS enhance any decor. Model 6734 . . . Aluminum or Brass ... 15" to 24" dial diameters . . . Retail \$50. A complete line of built-in wall clocks . . . 9" to 12" dial diameters from \$11,95 to \$17,95. UL Approved.



Movement is mounted in wall. Easy installation according to template and complete instructions furnished. WRITE FOR COM-PLETE, ILLUSTRATED LITERATURE.

BUILT-IN DIVISION

howard miller clock company ZEELAND, MICHIGAN

Publications

Steel doors and frames

New low-cost steel frames for use with wood residential doors are featured in Amweld's new catalog. Also new are colonial and louvered folding closet door units. Amweld's steel flush panel, rail and stile steel doors for all uses, complete with specifications and details, make up the bulk of the 24 pages.

Amweld Building Prods, Niles, Ohio. For copy, check No. 60 on coupon below

Full catalog of ceramic tile

American Olean's 32-page catalog shows the company's full line, highlights its new products-13%" Tile Gems, Master-Set and Perma-Bak mounted tile. Color charts show new colors added to Bright, Matte, and Crystalline glazed tile.

American Olean, Lansdale, Pa. For copy, check No. 61 on coupon below

start on p 294

Kitchen cabinet line

Bronzeglow Birch - Scheirich's popular wood cabinet line-is detailed in a brand new catalog. Sizes and shapes of all units are specified, construction details given, accessories photographed. A folder on the Scheirich vanity line is included with the Kitchen pamphlet. Price 10¢.

H. J. Scheirich Co, Louisville. For copy, write direct to manufacturer.

Builder lighting fixtures

Lightolier has put together a catalog of its "in stock" fixtures that is aimed at the builder-electrical contractor market. Types include pulleys, pendants, clusters, ceiling lights, kitchen and bath lights, outdoor lights. Lightolier has a special promotion program for residential builders. Lightolier, Jersey City.

For copy, check No. 62 on coupon below

Want more information?

The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

House & Home Room 1960, Time & Life Building Rockefeller Center, New York 20, N.Y.

33. Nutone all-in-one fixture
34. R&M-Hunter heater
35. Prescolite wall bracket
36. Union non-metallic fixtures
37. Energy Kontrol post lantern switch
38. Westinghouse package kitchen
39. Modern Maid twin ovens
40. New Youngstown kitchen
41. Weslock solid brass hardware
42. New Capri Continental door
43. Stanley bi-fold hardware
44. American-Olean mesh-mounted mosaic
45. Certain-Teed hardboard line
46. New Textolite patterns

47. Masonite design studies
48. Accordion folding door facts
49. Jay lighting catalog
50. How to install Kentile floors
51. All about Simpson plywood
52. Amos molded drawers
53. Rilco laminated wood products
54. Duo-Fast automatic tacker
55. Reichhold wood preservation
56. Where to use utility grade
57. Grade stamps for West Coast lumber
58. General Foam Plastics catalog
60. Amweld steel doors and frames
61. American Olean ceramic tile
62. Catalog of Lightolier fixtures

PUBLICATIONS

NEW PRODUCTS • April

- NEW PRODUCTS April
 Youngstown twin appliances
 Berlor wood switch plates
 Berlor wood switch plates
 Berlor wood switch plates
 Berlor truss machine
 Your A ducted electric heat system
 Weller electric furnace
 Berlor March Abare center dramates
 C. Ceraine Ceramates
 Berlor March Abare electric furnace
 Murlar electric furnace
 Murlar electric furnace
 Murlar ductes hoad
 Stantony ductless hoad
 Berlor Abare furthes hoad
 Stantony ductless hoad
 Berlor Atrike Neuro Center
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 Carrier Thermo-Center
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House & Home's servicing of this coupon expires July, 1960. In addressing direct inquiries please mention House & Home and the issue in which you saw the product or publication.

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HINES ALLWOOD SHADOBORD Latest sculptured effect for modern wall treatments

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18 18 2

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Page:		Page:	
241	Air Conditioning & Refrigeration Institute	281 170, 171	Majestic Co., Inc., The Major Industries, Inc.
189-190 195-198	Ajax Hardware Mfg. Co. Aluminum Company of America	165	Mastic Tile Div. (The Ruberoid Co.)
233	Aluminum Window Mfrs. Assoc.	244 304	Mears Electric Controls, Inc. Miller Clock Co., Howard
70 5	American Gas Association American Motor Corp. (Kelvinator Div.)	214, 215	Minneapolis-Honeywell Regulator Co.
4 28	American Sanitary Mfg. Co. American Screen Products	242 26, 27	Minnesota Mining & Mfg. Co. Minnesota & Ontario Paper Co. (Insulite Division
7 -10 7 -10	American-Standard Corp. American-Standard Corp. (Youngstown Kitchens	268 265, 266 274	Mississippi Glass Co. Moe Light Division (Thomas Industries, Inc.)
11	Div.) American Telephone & Telegraph Co.	54	Morgan-Wightman Supply Co. Mortgage Associates, Inc.
93-96 172, 173	Andersen Corp. Armstrong Cork Co.	221 260	Mueller Brass Co. Murray Corp. of America, Inc. (Eljer Div.)
14, 15	Arvin Industries, Inc.	188	National Bureau for Lathing & Plastering
187 311	Athens Stove Works Azrock Flooring Products Div. (Uvalde Rock	222, 223 312	National Gypsum Co., The National Homes Corp.
243	Asphalt Co.) Bell & Gossett Co.	272, 273 310	National Lumber Manufacturers Assn. National Manufacturing Co.
261	Besser Co.	247, 248 263	National Oak Flooring Manufacturers Assn. National Rubber Machinery Co.
62 186	Bestwall Gypsum Co. Bird & Son, Inc.	162	Norton Door Closer Co. (Div. of Yale & Town
253 72	Broan Manufacturing Co.	2A, 2B	Mfg. Co.) Nutone, Inc.
300, 301	Bruce Co., E. L. Bulldog Electric Products Co.	164, W6	Olympic Stained Products Co.
299	Cabot, Inc., Samuel	238	Orangeburg Manufacturing Co., Inc. (Div. Flink kote Co.)
280, 281	Caloric Appliance Corp. CARADCO, Inc.	284, 285 175-177	Overhead Door Corp. Owens Corning Fiberglas Corp.
250, 251 250, 251	Carrier Corp. Certain-Teed Products Corp.	164, W4, 5	Pabco Gypsum Div. (Fibreboard Paper Prod
291 290	Coleman Co., The Columbia Mills, Inc., The	164, W1	Corp.) Pioneer Mfg. Co.
239 45	Crown Zellerbach Corp. Cutler-Hammer, Inc.	199 286	Plextone Corp. of America
309	Delco Products Division (General Motors Corp.)	224	Plywall Products Co., Inc. Pomona Tile Mfg. Co.
225	Delta Faucet Corp.	235 209	Portland Cement Assn. Preway, Inc.
232	Easy-Heat, Inc. (Div. of Welcraft Prod.)	274	Progress Mfg. Co., Inc.
37-44 290	Edison Electric Institute Edwards Engineering Co.	187	Quaker State Metals Co.
258 164, W6	Electromode Division	211	Radio Corp. of America
26	Electro-Ray Mfg. Co. Eljer Division (Murray Corp. of America)	184	Ready Hung Door Corp.
71, 73, 75, 77	Emerson Electric Mfg. Co.	203 234	Red Cedar Shingle Bureau Reflectal Corp.
74 216, 217 164, W4, 5	Farley & Loetscher Manufacturing Co. Fedders Corp. Fibreboard Paper Prod. Corp. (Pabco Gypsum	292, 293 282, 283	Republic Steel Corp. Richmond Plumbing Fixture Division (Rheen Mfg. Co.)
	Div.)	231	Robbins & Myers, Inc. (Hunter Division)
238 270, 271	Flintkote Co., The (Orangeburg Mfg. Co. Div.) Flintkote Co., The (Tile Tex Division)	29-36 267, 269	Roddis Plywood Corp. Rolscreen Co., The
287 164, W2-3	Follansbee Steel Corp. Forest Fibre Prod. Co.	6 164, W8	Ruberoid Co., The
182, 183	Ford Motor Co.	229	Rylock Co., Ltd. St. Regis Paper Co.
16-23	General Electric Co.	191	Schlage Lock Co.
12, 13, 249 309	General Electric Co. (Hotpoint Div.) General Motors Corp. (Delco Products Div.)	226 252	Schlegel Manufacturing Co. Simplex Forms System, Inc.
245	Georgia-Pacific Corp.	299	Smith & Loveless, Inc.
98	Gold Seal Division (Congoleum-Nairn, Inc.) Goodyear Tire & Rubber Co. (Flooring Div.)	97 164	Sonoco Products Co. Stanley Works, The
306, 307	Hines Lumber Co.	252	Structural Clay Products Institute
185 230	Home Building Corp. Homasote Co.	178 270, 271	Thermador Electrical Manufacturing Co. Tile Tex Division (<i>The Flintkote Co.</i>)
88, 262	Home Comfort Mfg. Co.	168	Trade-Wind Motorfans, Inc.
12, 13, 249 210	Hotpoint Co. (Div. of General Electric Co.) HOUSE BEAUTIFUL MAGAZINE	299	Tyler Pipe & Foundry Co.
226, 305	House & Home	296, 297 302, 303	United States Gypsum Co. Upson Co., The
231 240	Hunter Division (Robbins & Myers, Inc.) Ida Products Co.	311	Uvalde Rock Asphalt Co. (Azrock Floor Product
227	Ideal Co.	194	Div.) Velsicol Chemical Corp.
3 228	Inland Homes Corp. Inland Steel Co.	169	Vermont Marble Co.
254, 255	In-Sink-Erator Mfg. Co.	174	Virden Co., The John C.
26, 27	Insulite Division (Minnesota & Ontario Paper Co.)	97 246	W. M. Products Washington Steel Products, Inc.
290 52, 275–278	Jay Lighting Mfg. Co., Inc. Johns-Manville Corp.	207 237	Weiser Co. Welsh Plywood Corp.
24, 25	Kaiser Aluminum & Chemical Corp.	179	West Coast Lumbermen's Inspection Bureau
5 76	Kelvinator Division (American Motor Corp.) Kennatrack Corp.	264 78-87	Western Red Cedar Lumber Assn. Westinghouse Electric Corp.
46	Kentile, Inc.	288, 289	Weyerhaeuser Co. (Lumber & Plywood Div.)
256, 257 208	Keystone Steel & Wire Co. Koppers Company, Inc. (Durathen Div.)	164, W7 166, 167	Weyerhaeuser Co. (Silvatek Div.) Whirlpool Corp.
295	Leigh Building Products Division (Air Control	259 89–92	Willamette National Lumber Co. Wood Conversion Co.
180, 181	Products, Inc.) Lennox Industries Inc.	162	Yale & Towne Mfg. Co. (Norton Door Close
298 279	Leviton Manufacturing Co.		Co. Div.)
63, 64	LIFE MAGAZINE Line Material Co.	7-10	Youngstown Kitchens (Div. of American Standard Corp.)



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