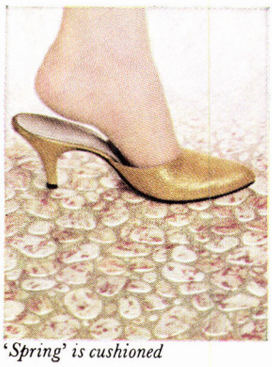
House & Home

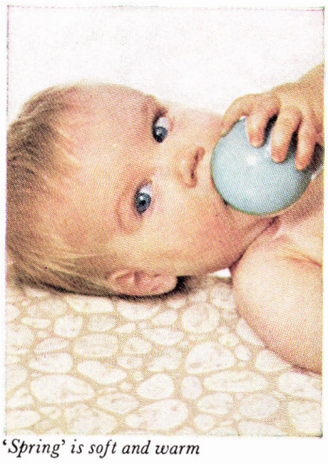
MANAGEMENT PUBLICATION OF THE HOUSING INDUSTRY JUNE 1965

1965's best custom houses . . . How to build volume — and profits — in the odd-lot market . . . How to turn cheap swampland into valuable homesites

'Spring' is quiet



'Spring' is cushioned



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HOUSE & HOME, June 1965, Vol. 27, No. 6. Published monthly by McGraw-Hill Inc. **Founder:** James H. McGraw (1860-1948). **Subscription rates for individuals:** U.S. and possessions and Canada, $6 per year; single copy, if available, $1; Latin America & Philippines, $15; elsewhere, $20. **Executive, Editorial, Circulation and Advertising offices:** McGraw-Hill Building, 330 West 42 Street, New York, N.Y. 10036. Telephone: 971-3333. Printed in New York, N.Y. Second class postage paid at New York, N.Y. and at additional mailing offices. Title ® in U.S. Patent Office. Copyright © 1965 by McGraw-Hill Inc. All rights reserved. The contents of this publication may not be reproduced either in whole or in part without consent of copyright owner. **Officers of McGraw-Hill Publications:** Shelton Fisher, President; Vice Presidents: Robert F. Marshall, operations; Robert F. Boger, administration; John R. Callaham, editorial; Ervin E. DeGraff, circulation; Donald C. McGraw Jr., advertising sales; Angelo R. Venezian, marketing. **Corporation Officers:** Donald C. McGraw, president, L. Keith Goodrich, Hugh J. Kelly, executive vice presidents; John J. Cooke, vice president and secretary; John L. McGraw, treasurer. Postmaster: Please send form 3579 to HOUSE & HOME, 540 North Michigan Ave., Chicago, Ill. 60611. **Member:** Audit Bureau of Circulations and American Business Press. This issue of HOUSE & HOME is published in national and separate editions noted or allowed for as follows: Western W1-W10; Eastern E1-E8; Midwestern M1-M8; North Central N1-12; Southern S1-S2; Swing SW1-SW2.

House & Home

A McGRAW-HILL/DODGE PUBLICATION VOL. XXVII NO. 6 JUNE 1965

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Cover: House in Cedar Rapids. Architects: Crites & McConnell. Builder: Berger Construction Co. Photo: Julius Shulman. *For story see p. 88.*

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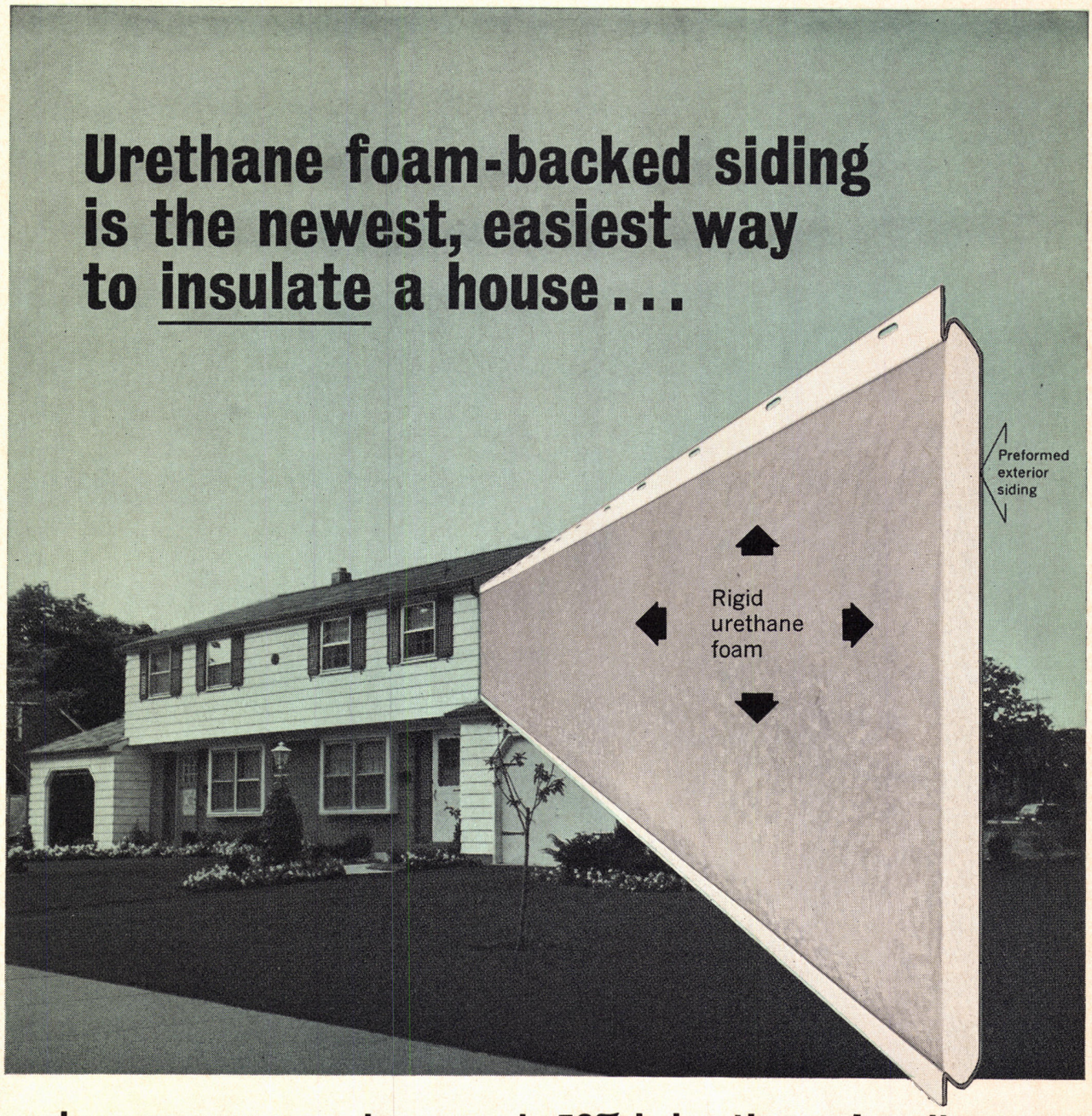
Urethane foam-backed siding is the newest, easiest way to insulate a house...



and can save your customer up to 30% in heating and cooling costs

This new, unitized siding was developed for the builder who finds himself dealing with home buyers who are getting a lot smarter about insulation.

Preformed interlocking panels are backed with closed-cell rigid urethane foam that is permanently bonded to the substrate to form a strong, weather-proof, moisture- and fire-resistant barrier that can save up to 30% in home heating and cooling costs. Urethane-backed aluminum siding is accepted by the Architectural Standards Division of the FHA.

Urethane foam's high efficiency as an insulating and structural material is well-known and established in the refrigeration and transportation fields. Now you can build its sales advantages into your structures with pre-finished panels that complete the painting, insulating and siding jobs in one quick operation.

This is another development from the fast-moving urethane foam industry that is engineering home-building improvements designed to give the home owner a better buy for his money and to put more of the profit dollar into your pocket.

Write for the full story about urethane building products and a list of urethane material suppliers who are ready to serve you with cost-saving methods you'll find hard to believe—until you check out the arithmetic yourself.

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Circle 11 on Reader Service Card

WASHINGTON INSIDE

Housing post by July Fourth?

President Johnson wants to sign the bill raising HHFA to a Housing and Urban Development Dept. on July 4. NAHB persuaded the House government operations committee to clear up fuzziness over FHA's status by requiring that one assistant secretary preside over "programs relating to the private mortgage market."

House passage is still unpredictable. Supporters claim 219 or 220 votes—one or two over a majority.

Insiders discount rumors that President Johnson won't press the issue for fear of harming Sen. John Sparkman's reelection chances in 1966. Sparkman tells HOUSE & HOME he is skeptical, and he doesn't rate it a major issue anyway.

More noise against renewal

A House appropriations committee blast at renewal ("The Congress has lost control . . . GAO reports have made valid criticisms") will be replayed across the nation for months by renewal's opponents.

Don't be misled by the uproar, which overlooks this committee statement: "The committee has not reduced the budget estimates by one penny. It is solidly behind the program."

Research money—at last

After three tries, HHFA finally has the green light for more money for housing research from the House. HHFA will get $750,000—half what it asked but double last year.

Shuffle at NAHB

New Executive Vice President Bernard Boutin told directors he is studying a realignment of staff and will report at the August board meeting. Two staffers resigned just before the spring board meeting. Multifamily director John Gallagher will open a Washington office for a Chicago law firm. Mortgage finance director Lon Rubin will join the Panitz Bros., builders.

Hanging the blame for wires

The White House conference on beauty may hear backward utilities—and not builders—blamed for all those ugly wires festooning new subdivisions. Builders are white hot over public lambastings. In California, Greater Eastbay builders are fighting a Public Utilities Commission rule that overhead wires are "standard."

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PRESIDENT JOHNSON GREETS NAHB'S BERNARD BOUTIN (c) AND PERRY WILLITS (l).

LBJ forges closer ties with builders by unprecedented 'live, in person' chat

In recent years the National Association of Home Builders has haltingly but perceptibly deserted the ranks of lobbyists who are automatically against the Administration.

Last month as NAHB directors huddled for their spring meeting, the change became clearly visible. Lyndon Baines Johnson dropped in for an unannounced home-folks chat with NAHB brass and 1,543 guests assembled for the builders' annual Congressional banquet.

His brief but far-ranging talk made the 36th U.S. President the first chief executive ever to so honor the builders' trade association.

"I wanted to come by for a brief visit tonight, live and in person," explained the President, because . . . "I wanted to say a very few words about you and your great industry and this country that you have helped to build."

Since "the longest and the strongest peacetime prosperity in American history" began 50 months ago, "you built about six million new housing units, helped to create more than a half million new jobs. And you and your associates have helped to hold down business costs and building costs." Typical house prices have risen from $16,000 to $20,400 in four years "but building costs over the past year have gone up only 2½%."

Prosperity can continue "if all elements show restraint and act responsibly, as your organization does," said the President. "Americans young and old are taking a new pride in doing what has too long gone undone . . . in our cities."

Among undone tasks he included beautifying America. "We are going to expect each of you to go back to your homes and your states and carry a message that we . . . want a beautiful America."

Concerning the housing industry, the President said this: "We hope that in the very next few days we can have one of the best housing bills to ever come out of committee to be reported to the House."

And President Johnson added this about foreign affairs: "Let this be clear. If choice must be made, we would rather that men quarrel with our actions to preserve peace than to curse us through eternity for inaction that might lose both our peace and our freedom."

The persuader. The man who persuaded the President to visit the banquet was NAHB's new Executive Vice President Bernard Boutin, until last November Johnson's General Services Administrator.

"I appreciate Bernie Boutin's invitation to come over here and see the men that he would rather work with than me," said the President in his five-minute chat. "Back last November, Bernie was in my office almost every day telling me about these poor little fellows who need him so badly, to help them out. Well, judging from appearances here tonight, Bernie must have done you a lot of good."

Door opener. Just how much good Boutin has done was shown by a less publicized incident during the NAHB directors' meeting in Washington.

Vice President Hubert Humphrey invited NAHB President Perry Willits and his executive committee to review their legislative aims. "We were scheduled for 25 minutes—and wound up staying an hour," reported Willits.

Mindful that the Vice President has endorsed a bill letting building trade unions picket construction sites even if they have a grievance with just one contractor at the site, Willits stressed that builders must have freedom to use components in building. Only through components could builders continue to hold housing costs in line, he argued. But legalizing site picketing would make component use more difficult.

"I think this shook him up," related Willits. "I don't believe he understood the seriousness of site picketing and I think he began to grasp the significance."

A sweeter housing bill: GOP adds no-down FHAs for vets

House Republicans have loaded the proposed 1965 Housing Act with enough new aids for builders to turn the bill now before Congress into the biggest housing package ever.

The GOP additions let the bill clear the House housing subcommittee with solid bipartisan support and virtually assure its passage by the House.

Rep. William Widnall (R., N.J.) led the Republican peace offensive by winning subcommittee backing for several innovations.

Aid for vets. Biggest potential aid for builders is Widnall's plan for no-down-payment FHA loans for veterans on houses costing less than $20,000. Vets would have to pay 15% of amounts over $20,000 (or a maximum $1,500 for a $30,000 house).

His plan could be the beginning of the end for duplication of FHA and the Veterans Administration loans. Reform moves in prior years have been blocked by Rep. Olin E. (Tiger) Teague, the Texas Democrat who heads the House veterans' affairs committee and who up to now has been determined to keep VA loans intact.

But Widnall sounded out Teague on an alternate: would he object to letting FHA insure loans for veterans if the VA loan guaranty* remained unchanged? Replied Teague: No.

When Widnall relayed Teague's shift to other housing subcommitteemen, some were so surprised that Chairman William Barrett (D., Pa.) telephoned Teague while the subcommittee was in session for confirmation. Teague again assented. No-down FHAs for vets went into the bipartisan bill.

Housing men expect few sudden changes if the new plan is enacted. But builders could expect an end to much of their dual processing if they could persuade veterans to use the FHA plan.

Land loans. The bipartisan bill would let FHA insure loans to buy and develop subdivisions. References to controversial "extensive new developments" (the so-called new towns) and a plan to put states into the land development business were stripped from the Administration proposal.

The bipartisan bill would let developers borrow up to 50% of land cost and 90% of improvement cost for seven-year terms. Loans could not exceed 75% of improved land value, and the outstanding principal could not exceed $12.5 million at any one time. Builders would have to certify all costs and could sell the loans to the Federal National Mortgage Association's secondary market.

The bill does not require builders to pay Davis-Bacon Act prevailing wages, a condition builders say would make the plan unworkable. Labor will try to add it.

Two rent aids. A pair of rent subsidy plans emerged in the bipartisan bill. Both would provide payments to builders and property owners serving families in the middle-income bracket ($3,500 to $6,000).

- The HHFA Administrator could pay any part of rent which exceeded 25% of a family's income.
- A Widnall plan would let local public housing agencies lease apartments from private landlords for one to three years. Owners could not lease over 10% of units in any one building.

* VA guarantees 60% of a loan to a maximum $7,500. Down payments are not required, although in practice lenders seek down payments on larger loans.

NAHB directors shout it louder: 'No' to FHA land loans

It was the wildest free-for-all anyone could remember at an NAHB directors' Washington meeting.

Former President Rod Lockwood (1949) cried, "Pork barrel."

First Vice President Larry Blackmon yelled, "Harasser."

Others joined the fray, and President Perry Willits found himself with a full-scale revolt on his hands. Before the tumult subsided the directors had recorded an emphatic 155-to-90 vote against the 1965 housing bill's scaled down plan to let FHA insure land loans (*see above*), but they balked at disapproving rent supplements.

Lockwood started it. He charged that Willits and fellow officers, testifying on the bill before Congress, had overstressed the directors' division of views on land loans. (Last year's "anti" stand was determined by a one vote margin, 114-to-113.)

"We are opposed to land development legislation, period," declared Knoxville's Jerry Wood, and Kimball Hill of Rolling Meadows, Ill., intoned: "I opposed it last year. I oppose it, but more so, now."

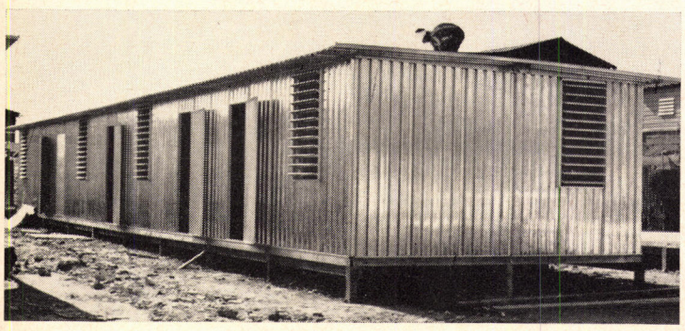
Another former president, Alan E. Brockbank (1952) of Salt Lake City, won an ovation with his emotional speech in support of the rebels.

"I plead with you," he said. "I beg of you. Leave the FHA as an insurance agency. Don't let's get it confused with a lot more fan-dangled ideas than it has now."

In vain did Vice President-Treasurer Leon Weiner stress Willits' success in reducing from $25 million to $12.5 million the mortgage limit in the land loan program. "The housing industry cannot stand with its head in the sand," Weiner cried. But in the showdown Lockwood won.

Rent supplements. Lockwood followed with an immediate attack on the 1965 bill's rent supplements. He proposed that assistance be restricted to families within public housing income limits (the bill covers mid-income as well as public housing families).

It was Lockwood's second assault that brought Blackmon to his feet with the challenge, "You're a harasser," and this time it was Blackmon who had the votes. The directors shouted down Lockwood's motion to modify rent supplement legislation.



Rx for fire and flood: a flame-resistant prefab and a house wrapped like a sandwich

The Puerto Rican government is erecting flame-resistant prefabs (*left*) for victims of a fire that razed 140 homes in Santurce. The house is made by Alsco Aluminum Corp. in Hato Rey, Puerto Rico, from .040-inch Alclad aluminum supplied by Kaiser Aluminum; only the floors are wood.

In Hastings, Minn., floodwaters brought forth a unique house-saving idea. When the Mississippi came rolling down on Peter Mitzuk's $10,000 home, he wrapped it up like a big lumber sandwich (*right*). He used heavy-duty polyethylene, working from eaves downward and anchoring the drape with sandbags. Water reached his window sills, but with the help of a basement pump (emptying through window at left) he kept dry.

Look at the holding power you get from every foot of

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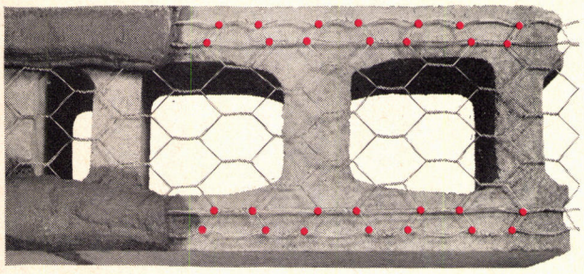

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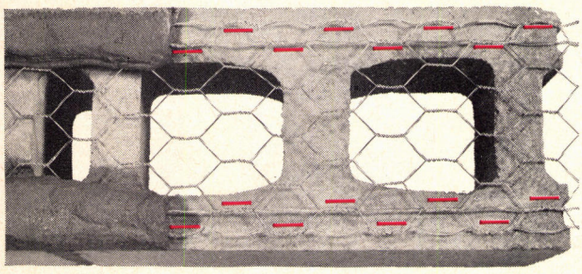

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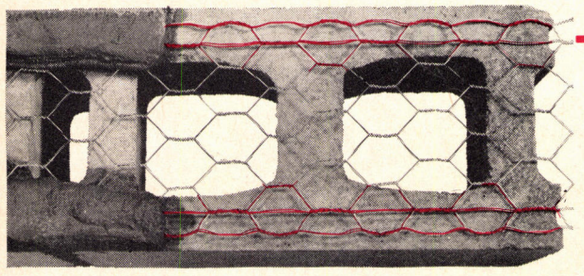

◇ *22 sq. in. of bonding surface*

The more metal in surface contact with the mortar, the better the reinforcement. Keywall's 22 sq. in. per foot of block is about 55% more than a pair of 3/16″ truss rods, about 96% more than a pair of 9-gauge truss wires.

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Circle 12 on Reader Service Card

Make-work dispute rages amid bomb threats and picketing

The case of William K. Westley, an Ohio manufacturer who is acting as contractor for his own new home, has turned into the nation's sharpest dispute over union efforts to dictate product use so as to make work. The situation:

Westley has 80% of his Romex* plastic-sheathed cable installed and is standing pat, even though all crafts have quit work on his $75,000 house in Cleveland's suburban Fairview Park.

Electrical Local 38 is standing just as pat. Says Business Agent George M. Chapple: "We are picketing because Westley is using a non-union contractor, not because Romex is being installed."

Westley's lawyer has promised to sue and seek federal help to stop "this secondary boycott."

The Cleveland Home Builders' 30 trustees have urged all members to expose the Cleveland home wiring situation as a scandal.

How it started. Westley and his wife wanted to work closely with their decorator in spotting lights and fixtures in their 11-room home. Non-metallic cable permits easy alteration, and Architect Andrew Burin favored it over the two other home wiring systems: knob-and-tube, in which the wires are pulled by hand through rigid porcelain tubes, and flexible metal conduit, sometimes called Greenfield.

The National Electrical Code (which Fairview Park follows) has approved non-metallic cable for years and Frank Stetka of Laurel, Md., code author, says it is as safe as the other systems. It is used in almost all cities except San Mateo, Calif., and Cleveland, and all but three of the municipalities in Cleveland's own Cuyahoga County have codes permitting it. The Cleveland Home Builders say it can be installed faster and cuts $145 from the cost of the average house.

* Registered trade mark of non-metallic sheathed cable made by General Cable Corp. sometimes applied incorrectly to all non-metallic cable.

Tony Tomsik, Cleveland Press

LONE PICKET patrols homesite where Cleveland unions quit job rather than permit installation of flexible plastic-coated electrical cable.

Warning and threats. But Westley says that Union Business Agent Donald C. Seeholzer told him: "You must put in knob-and-tube—or else."

Next an anonymous midnight telephone caller threatened that Westley's home would be bombed. The union disclaims the threat. Eight days later the business agents for 12 crafts descended on Westley and his wife at the homesite and demanded that he use knob-and-tube.

'Union contractor' issue. Westley stood fast on non-metallic cable.

"I was willing to have it put in by a union contractor, but when the union said no union contractor would do it, I had to get a non-union contractor," he says. The non-union sub put in the wires, but all other work ceased. Deliveries halted and picketing began. Westley got another midnight call promising that experts would "snip" the wires, that is, cut the copper wire inside the plastic without leaving a trace on the covering. Such cuts often go undetected until the wiring is plastered over, and repair expenses skyrocket.

Newspapers and radio took up Westley's story, and the Home Builders acted. "Builders Declare War on Union Wiring Curbs," said a page-one headline in the *Cleveland Press*. Westley called in Attorney Richard A. Ruppert, who promised legal action before the National Labor Relations Board and other federal agencies to settle the issue. Asked Ruppert: Can a union, by pretending the argument is over lack of union workers, actually control the kind of wiring that is used?

Setback in St. Louis. The cable dispute boiled in Florissant, a St. Louis suburb, where the city council stripped the National Electrical Code of its rule permitting non-metallic cable in residences. The Council adopted the changed code over the mayor's veto.

Forty members of the Electrical Workers attended the council meeting.

And in St. Louis itself, a major test of the city's pioneering performance building code (NEWS, May '61) was decided when the contracting concern of Thomas J. Sheehan Co. bowed to a plumbers' union and returned to the 400-year-old method of joining cast-iron pipe with hot lead and oakum. The plumbers had refused to use a rubber (Neoprene) gasket on pipes in three 28-floor apartment buildings. The gasket requires 40 seconds for installation, the lead joint five minutes.

Builders rally against new foe—vandals who wreck homes

Police dog and rent-a-cop patrols have joined the battle, and builders are asking new laws to halt kid-glove treatment of juvenile wreckers and to make parents pay damages. Some recent disquieting incidents:

Elementary school children smashed windows and spattered paint over 12 of Builder Pat O'Connell's 168 new homes in San Francisco's suburban Mountain View. Damage topped $3,000. O'Connell can file only a civil damage suit.

Youngsters broke windows stacked in Builder Ernest G. Fritsche's subdivision storehouse in Columbus, Ohio. Then they tore down the building in an almost hysterical contest to see who could do the most damage. Repairs will exceed $5,000, but Ohio is only now considering a parental liability law.

A Long Island teenager was seized for setting five fires at three houses. After a short confinement, he returned to set a sixth fire. Total damage: $7,000. But New York has no parental damage law.

The National Association of Home Builders has tried at times to put a price tag on nationwide new home damage but always finished by throwing up its hands. The total got too big to be believable. A Long Island Home Builders Institute survey showed $78,900 worth of destruction at 70 members' sites in 1964. In Ohio, 140 builders reported $90,000 in damages.

Pass a law? Only 32 states have parental liability laws against vandalism, and in many the penalty does not exceed $300. Long Island's builders are pushing a $250 parent liability measure in the state legislature again this year, although a similar bill died in committee at the last session. The Ohio association has passed a $500 bill through the house and expects victory in the senate. The Texas Association of Home Builders helped move a $5,000 bill through the senate and is optimistic about the house.

Private patrols. But more practical-minded building leaders say new laws are of scant help in today's permissive courts.

"Even when minors have been caught stealing or committing serious and costly acts of vandalism, the judges have released them without penalty," says President Gerald Monter of the Long Island builders.

So more builders are turning to private policing. Patrols have been organized in one Long Island community, and an Ohio builder patrols his own tract every night. Hallmark Security Service polices for several big San Francisco Bay Area builders, and others use rent-a-cop service. Two Hallmark guards with walkie-talkie radios and police dogs walk O'Connell's tract.

But Ohio builders are refusing to make use of police dogs.

"Some youngster might get badly mauled and we would lose our image in the community," says Executive Secretary William Safreed of the Ohio HBA.

Hydronic heat at warm air prices with a name that's a selling plus

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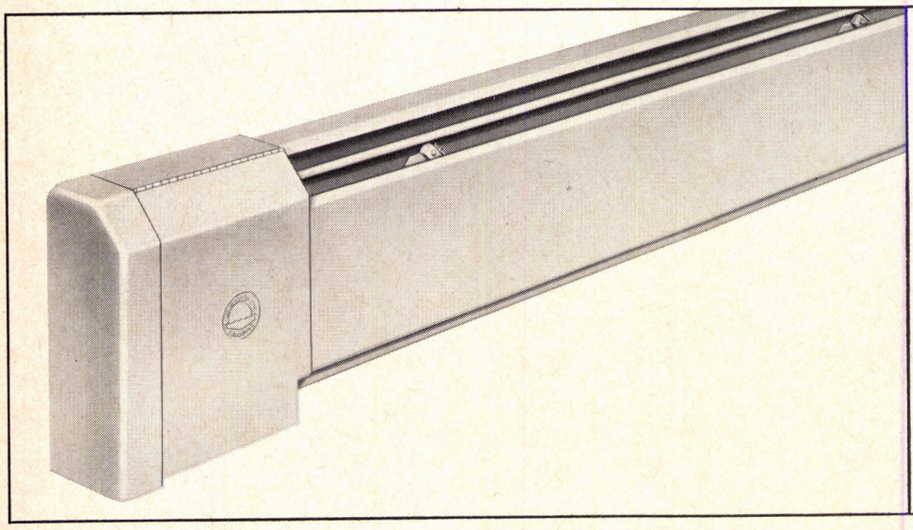

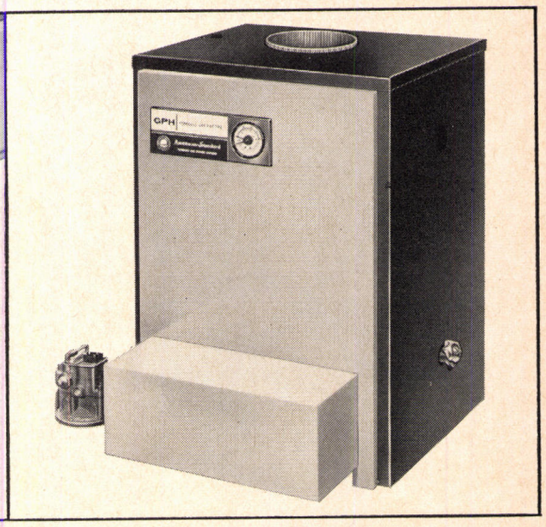

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Circle 13 on Reader Service Card

Planners hear: 'You can buy any zoning in half the U.S.'

Dennis O'Harrow, the normally mild executive director of the American Society of Planning Officials, dropped a bomb on the 2,200 planners at ASPO's convention in Toronto.

Said he: "It is time that we recognize publicly that a small—but still much, much too large—group of public officials are engaged in selling zoning favors for a price."

For months O'Harrow had been taxed with more and more frequent reports that zoning has become a "marketable commodity" in some cities. He was inclined—as are most of ASPO's members—to dismiss the reports as the derelictions of a few. But when a planning consultant who works in many cities told him zoning favors can be bought in half the communities in the U.S., O'Harrow decided to turn his annual report into an indictment of zoning frauds.

"I disagree with the consultant's statistics," he told the ASPO convention. "I do not believe the figure is near 50%. But I admit that I do not know what the correct figure is. And even if it is 1% or less—it is still too much.

"The iceberg effect is present in zoning finagling. We see only a small percentage of the cases."

Handful of Judases. "Most of the dishonesty you never discover because no one squeals, no one investigates," O'Harrow observed. "All that planners do means nothing unless we rout out our handful of Judases. What's needed," he said, "is a sort of national zoning crime commission" that would get answers to questions like these:

- *How prevalent is the sale of zoning?*
- *What are criminal methods of operation?*

H&H staff

ASPO's O'HARROW
"Rout out our handful of Judases"

- *How can bribery we know is going on be brought out into the open?*
- *How can bribery be prevented?*

The evidence. O'Harrow salted his report with examples of how zoning favors are dispensed:

- City councilmen solicited bribes from a developer. But the developer concealed a tape recorder in his hotel room, and the councilmen suddenly found their bribe attempt spread over page one of a local newspaper. One mayor, indicted in a similar case, lost his re-election bid last month (*see p. 27*).
- Another mayor just happened to buy property before a rezoning petition was submitted, then sold it back to the original owner when the zoning was changed.
- "If you want rezoning in County A, the word goes out that you must contract with a certain well-driller. Maybe you thought you needed only a 2″ well for a single-family house, but he will convince you that you need an 8″ well."
- "If you want a permit to build a service station in City B, you must hire a certain lawyer whose standard fee is $5,000."

Two-hat troubles. The planners flocked to an unprecedented session on conflicts of interest which are arising increasingly when builders, developers, realty men, architects, lawyers and engineers wear a second hat as members of an official (but advisory) planning and zoning board.

One likely solution is to gradually eliminate all such boards, said York Wilbern, head of Indiana University's Institute of Public Administration.

Not so, rejoined a chorus of two-hat men. "I have continued to serve since 1942 because I do not have to be elected," said one attorney. "I can say 'No' and do. I can shoot from the hip."

"Sure, every private planning commission member gets pressure," said a California commissioner. "It depends upon what you do. When someone starts talking to me, I listen and then tell him, 'I have a very poor memory. Write me a letter.' In nine years I've had only one letter."

"I'm a Realtor, a builder and a developer—and I've been an elected commissioner of Orange County, Fla., for a number of years," put in F. B. Surguine of Orlando. "But we have never had one case of conflict of interest. One man offered me part of the profits from a 270-acre subdivision. I took him to the airport and told him to get on a plane and never come back."

After zoning, what? A Briton's answer wins U.S. converts

"In 1947 the word 'zoning' was expunged from our law."

So said a peppery English barrister—Desmond Heap, solicitor and comptroller of London—at ASPO's annual convention (*story, above*).

"Zoning was so inflexible that it simply ceased," said Heap. His description of what followed drew the convention's biggest crowds and loudest applause because it suggested a positive exit from this country's zoning muddle. For two years leading U.S. planners have been saying zoning is a dead horse ready for the municipal glue factory. But there has been little or no agreement on what's to replace it.

In Britain, Heap said, "Control of building by local officials is very rigid under a development plan that is much wider than either zoning or your master plans. But this is accepted because we have a small area and a rising population.

"It seems to me that the large amount of open land you [Americans] have in the West is largely irrelevant because 70% of your people live in urban centers, and you face the same problems."

But even with these controls, Heap noted, land prices have gone up "quite shockingly," and Britain's new Labor government has announced its intent to deflate prices by nationalizing urban fringe land. A National Land Commission will buy urban land, develop it and lease it to private builders.

"If you have three bidders for a lease, you have the same result of higher prices," reasoned Heap. "I don't know of any way to bring the price of land down when most of the people want to live in one space."

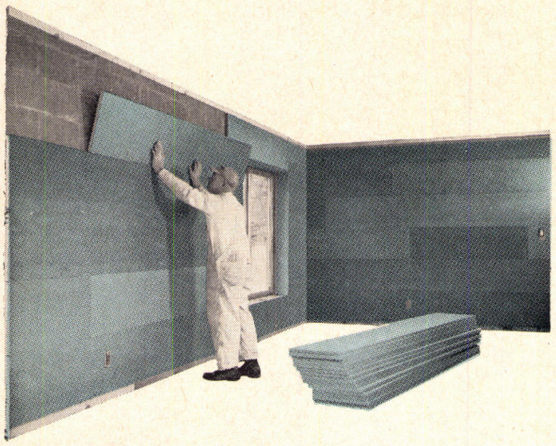
'Creaming' To get around this problem, Heap is pushing what he calls "creaming." When the official plan puts one piece of land in a development zone and an adjacent tract in a greenbelt, the owner of land for building is certain to realize a large profit while his neighbor's land is frozen forever in open space. Said Heap: "The government might have a creaming off of the profits—perhaps on a sliding scale up to 50%. This would give a fund to install facilities and to buy the greenbelt land from the owner so he shares in the other man's profits, too."

Whatever the outcome of Labor's new proposals, Heap left no doubt that the tight little island is due for still tighter land controls.

"The big idea," he said, "is not to let a town get any bigger than it ought to be."

Atlantic crossing? "We are moving toward that here," summed ASPO Executive Director Dennis O'Harrow. "Heap may have influenced a lot of thinking by his lucid description. By the end of his discussion, everyone was saying he wanted to move to Britain."

But not everyone is convinced. At month's end, HHFA Administrator Robert Weaver counseled, "We can learn much from the experiences with the British new towns. But our private enterprise context and federal system of government are sufficiently different to caution against drawing elaborate anologies."



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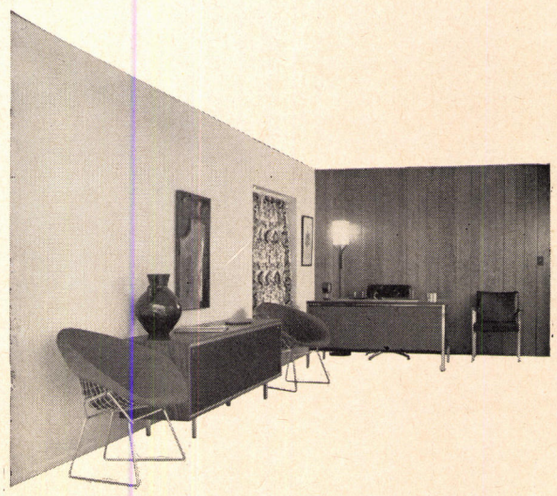

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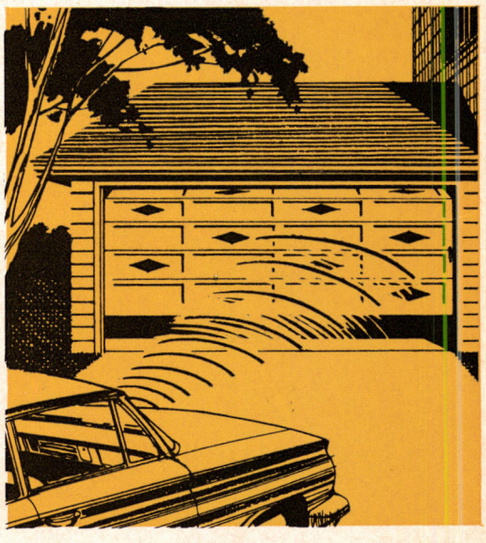

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Circle 15 on Reader Service Card

continued from p. 10

Housing strikes an upbeat as apartments show vigor

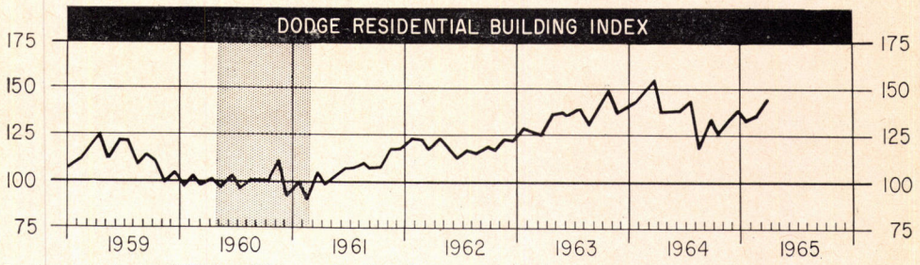
The graph below points up the turnaround now firmly under way in housing.

It summarizes the F. W. Dodge Co. index of residential building contracts, published here for the first time. The index, based on contracts signed before a house or apartment is actually started, hit a 12-month high of 146 in March; it bottomed in 1964's fourth quarter.

"Both single-family and apartment contracts scored better than seasonally anticipated gains," reports Dodge Economist George A. Christie Jr. "Significant improvement was shown in the West, where the housing cutback was most severe."

Most casual observers of housing have failed to spot the upturn because 1965 figures still trail the first months of 1964, when the housing cycle was at its peak.

Apartment building leads the comeback; new apartment plans, tabulated by *Engineering News-Record*, are up 17% through April, and apartment permits are spurting.



Based on contract value. 1957-59 = 100 (seasonally adjusted). Shaded area represents general business recession.

F. W. Dodge Co., a division of McGraw-Hill Inc.

KEY HOUSING INDICATORS

		DOLLARS (millions)	% Change from '64
Dodge resid. contracts	Mar.	$1,877	– 6
	3 mon.	4,443	– 7
ENR adv. resid. plans	Apr.	965	+ 45
	3 mon.	3,424	+ 13
ENR adv. apart. plans	Apr.	510	+ 49
	3 mon.	1,805	+ 17
ENR adv. house plans	Apr.	241	+109
	3 mon.	729	+ 13

		UNITS (000)	% Change from '64
Starts, priv. nonfarm	Mar.	117.6	– 8
	3 mon.	282.4	–13
Starts, ann. rate	Mar.	1,522	– 7
Permits, ann. rate	Mar.	1,293	– 5
New houses sold	Mar.	50	– 6
	3 mon.	128	– 7
Starts, one-family	3 mon.	177	– 9
Starts, apartments	3 mon.	105	–18

Sources: F. W. Dodge Co., division of McGraw-Hill; **Engineering News-Record**; Census Bureau; HHFA.

Fading worries. Latest quarterly reports tend to allay two recent worries:

Mortgage delinquencies "for over a year have been gradually improving," reports the Mortgage Bankers Assn. MBA found 2.94% of loans behind in payments on March 31, vs. 3.21% in December.

Apartment vacancies inside metropolitan areas are holding steady at 7.7%.

Quick adjustments. The national trend is up despite sharp cutbacks in two big but overbuilt markets.

Southern California housing has fallen to a 125,300-unit-a-year clip, off 45% from year-ago rates, reports Security First National Bank. Apartments are down 78% in Orange County (Anaheim-Santa Ana). And in competitive Dallas apartment permits sagged 58% through March.

But analysts view these slumps simply as the quickest way to correct overbuilding in areas with exploding populations. Washington and St. Louis are strong.

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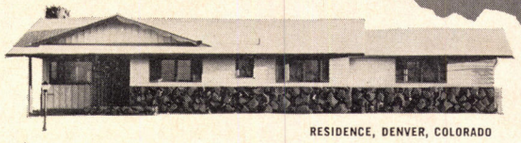
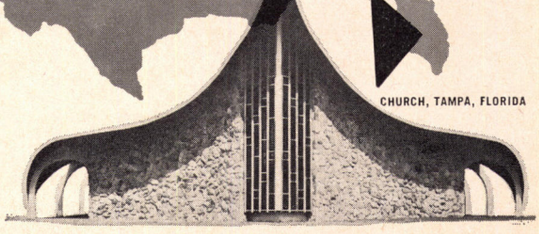


RESIDENCE, DENVER, COLORADO



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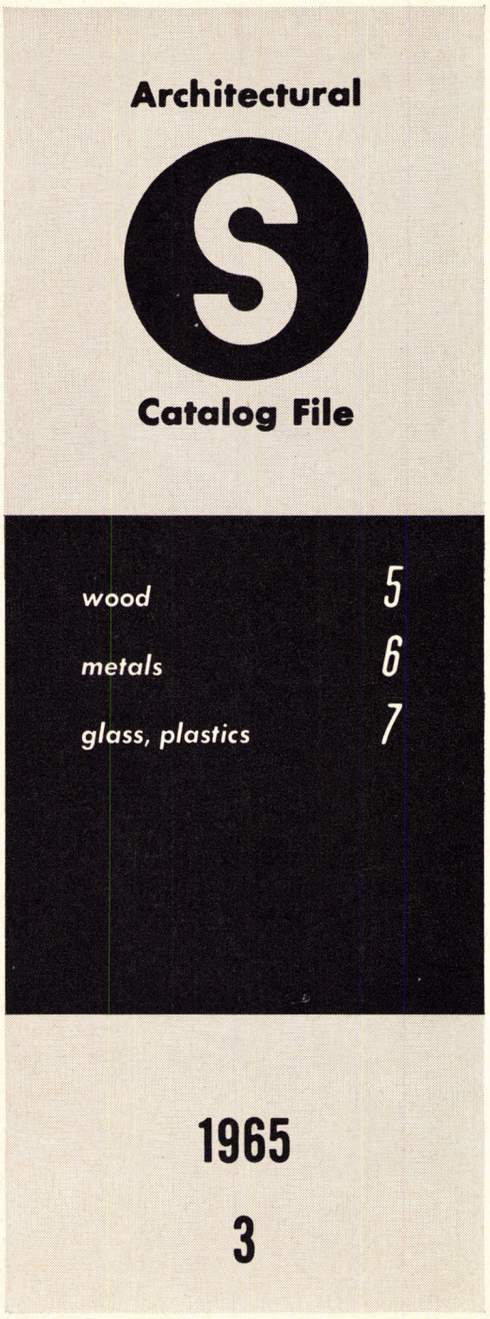

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Federal S&Ls get a looser rein for renewal lending

According to John W. Stadtler of the United States Savings and Loan League,* the new rules just issued by Home Loan Bank Board are a milestone in investment opportunity. They permit an S&L to become its own urban redeveloper and to provide almost any type of financing for new-home builders or remodelers in renewal areas.

The League, the nation's largest S&L trade group, has already programmed how-to-do-it lectures explaining the new rules into its four regional management conferences. The bank board and the Urban Renewal Administration have arranged joint seminars throughout the country.

The league has been compaigning for an entree into private renewal since its Miami convention (NEWS, Jan.), and Executive Vice President Norman Strunk says he will probably ask the National Association of Home Builders to join him in organizing lender-builder teams to take advantage of the enabling regulations.

New lending outlets. Chairman John E. Horne and his board, the government's S&L regulatory agency, have cleared the way

*And president of Washington's $185-million National Permanent S&L Assn.

Vincent Finnigan

HORNE

STADTLER

for the nation's 2,000 federals with $62 billion in assets to:

- Lend 80% for 30 years on multi-family, commercial or industrial renewal. The old limit was 75% for 25 years for private multi-family, 60% and 20 on commercial-industrial.
- Buy and sell redeveloped and rehabilitated properties in renewal areas or hold them for long-term investment.
- Buy vacant land and properties and become redevelopers.
- Participate with others in renewal loans.
- Use 5% of assets for such loans and participations, with 2% of assets in direct investment. Loans not made under the new rules do not figure against the 5%.

Horne's generous regulations are based on the 1964 Housing Act, which first permitted S&Ls to buy and own real estate in the manner of insurance companies.

Private trigger. Bank Board sources say private renewal will augment rather than compete with Commissioner William L. Slayton's Urban Renewal Administration program, now soaring past $4.75 billion in federal spending authorizations. Horne says his regulations may even invite wider renewal efforts by triggering changes in state laws to bring in state-chartered S&Ls.

Stadtler is more sanguine. He has ranged the country proclaiming private renewal as an opportunity and a challenge.

"It is time for private industry to move into the vacuum that exists in the fight to rehabilitate and save our cities," he says.

How it will be done. Senior Vice President T. William Blumenauer Jr. of Washington's $125-million Columbia Federal S&L says renewal has already aroused interest among builders and lenders in the capital. He predicts that associations will pool resources to pioneer the program.

Associations were hesitant about renewal under the old rules. Twenty-two Cleveland S&Ls teamed to finance 291 units in the cleared Longview slum in 1957, only to run into foreclosure in 1962 (NEWS, May '62). On the other hand, Chicago's Uptown Federal began an "Operation Pride" on six blocks of the mid-northeast lakefront in January. Its' doing well.

More builders get a break on lower mortgage discounts

Mortgage bankers in Dallas and Denver have followed Los Angeles in trimming a half point from the discount they charge builders for new-house mortgages. Builders still get par-plus on good Boston loans.

"It is a borrower's market and will remain so for the rest of the year," says Economic Consultant Miles F. Colean of the Mortgage Bankers Association.

But warning signs have appeared at the other end of the mortgage transmission belt. Upward pressure on yields has developed in the investor's secondary market for FHA and VA paper in New York, and the rate of return has risen to 5.03% to 5.17% from 5.00 to 5.12 in Boston. It is too early for builders to feel a reaction but a yield-rate increase eventually turns into higher discounts.

Savings bankers insist that today's FHA Sec. 203 is yielding 5.06% to 5.18%.

Insurance and pension fund spokesmen disagree. They maintain that yields are remaining steady at an average of 5% in their segment of the market.

NEW YORK WHOLESALE MARKET

FHA, VA 5¼s

Immediates: 97-97½ Futures: 97-97½

FHA, VA 5¼ spot loans (On homes of varying age and condition)

Immediates: 96½-97½

Note: Prices are net based on a servicing fee of ½%. Majority of loans being sold today include concessions made by serving agencies which would be reflected in higher prices. Prices cover out-of-state loans, reported the week ending May 14 by Thomas P. Coogan, president, Housing Securities Inc., New York City.

HOMEBUILDER's MORTGAGE MARKET QUOTATIONS

Reported to HOUSE & HOME in week ending May 7.

City	FHA 5¼s (Sec. 203b) Discount paid by builder: FNMA Scdry. Mkt.[xy]	Min. Down* 30-year Immed.[w]	Trend	FHA 207 Apts. Firm Commitment	Conventional Loan Rates: Comm. banks, Ins. Cos. 75%	Savings banks, S&Ls 80%	Savings banks, S&Ls Over 80%	Construction Loan Rates: Interest+fees All lenders
Atlanta	2¾	1-2	Steady	a	5½-5¾	5¾-6	6-6¼	6+1
Boston	1¾	par+1-par	Steady	par+1-par[b]	5¼-5½	5¼-5½	5½[b]	5¼-6
Chicago	2¼	1-2	Steady	par-½[b]	5-5½	5½	5¾-6	5½-6+1-1½
Cleveland	2¼	1-1½	Steady	a	5½-5¾	6	6[z]	5¾-6½+1-2
Dallas	2¾	½-1½	Down ½	par	5¼-5½	5¾	6-6¼	6+1
Denver	2¾	½-1½	Down ½	1-2	5½-5¾	5¾-6	6-6½	6+1½-2
Detroit	2¾	par-1	Steady	1-1½	5¼-5½	5½-6	5¾-6	6+½
Honolulu	2¾	1½-2½	Steady	a	5¾-6½	6¼-7	6¾-7¼	6½-7+1-3
Houston	2¾	1½	Steady	a	5⅜-6	6	6-6¼	6+1
Los Angeles	2¾	1	Steady	par+1-par+½	5½-6	5¾-6.6	6¼	6-6.6+1-2
Miami	2¾	1¾-2	Steady	½-1	5½-6	5¾	6	6+½-1
Newark	1¾	1	Steady	par-½	5½	5¾	5¾-6	6+1
New York	1¾	par	Steady	par+1-par	5½	5¾	6	5¾-6+½-1
Okla. City	2¾	1½	Steady	a	5½-5¾	5½-5¾	6-6¼	6-6½+1-1½
Philadelphia	1¾	par	Steady	par-1	5½-5¾	5¾-6	6	5-6+1
San Fran.	2¾	1-1½	Steady	par-1	5½-5¾	5¾-6	6-6¼	6¼-6½
St. Louis	2¾	1-2½	Steady	par-1	5½-6	5¾-6	5¾-6¼	5½-6½+1-2
Wash., D.C.	2¼	1	Steady	par	5½	5¾	6[b]	5½-5¾+½-1

SECONDARY MARKET FHA & VA 5¼%

Money center	Sec. 203b & VA houses Yield to Investor	Trend	Sec. 207 Apts. Yield to Investor	Trend
Boston	5.03-5.17	Up .03	a	a
Chicago	5.00-5.06	Steady	5.12-5.15	Static
New York	5.00-5.12	Firmer	5.13-5.15	Steady
San Fran.	5.00-5.12	Firmer	5.14	Weak

* Immediate covers loans for delivery up to three months, future covers loans for delivery in three to twelve months.

• Quotations refer to prices in metropolitan areas, discounts may run slightly higher in surrounding towns or rural zones.

• Quotations refer to houses of typical average local quality with respect to design, location and construction.

* 3% down on first $15,000; 10% of next $5,000; 25% of balance.

Footnotes: a—no activity. b—limited activity. w—for comparable VA loans also. x—FNMA pays ½ point more for loans with 10%. y—discounts quoted are net after seller pays ½% marketing fee and ¼% adjustment for stock purchase. Seller must pay 1% of mortgage for stock calculated in $120 units, of which $20 is contribution to FNMA capital and $100 is for a share trading at about $84. z—plus 1-1½ origination fee.

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, pres., Boston 5¢ Savings Bank; Chicago, Harry N. Gottlieb, vice pres., Draper & Kramer Inc.; Cleveland, David F. O'Neill, vice pres., Jay F. Zook Inc.; Dallas, M. J. Greene, pres., Southern Trust & Mortgage Co.; Denver, Allen C. Bradley, vice pres., Mortgage Investments Co.; Detroit, Sherwin Vine, vice pres., Citizens Mortgage Co.; Honolulu, H. Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, vice pres., T. J. Bettes Co.; Los Angeles, Christian M. Gebhardt, vice pres., Colwell Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Newark, William B. Curran, vice pres., Franklin Capital Corp.; New York, John Halperin, J. Halperin & Co.; Oklahoma City, M. F. Haight, first vice pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice pres., First Pennsylvania Banking & Trust Co.; St. Louis, Charles A. Keller, vice pres., Mercantile Mortgage Co.; San Francisco, Frank W. Cortright, sr. vice pres., Bankers Mortgage Co. of California; Washington, D.C., James C. Latta, sr. vice pres., Frederick W. Berens Inc.

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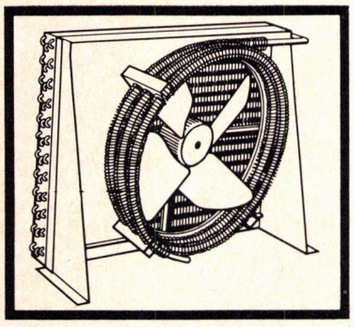
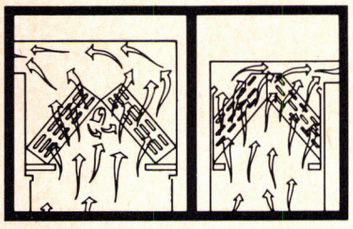


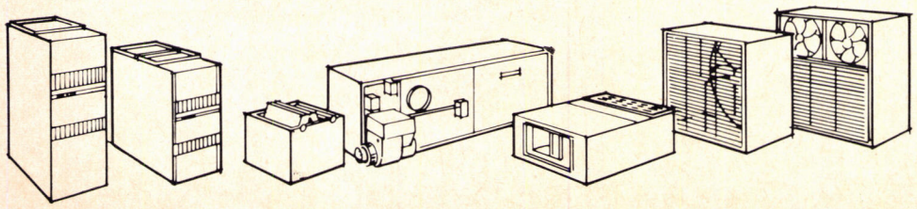
FIGURE "A"



ORDINARY "A" COIL HEIL "A" COIL

FIGURE "B"

And we really mean it! When you open a Heil air conditioning carton, you'll have one of the finest pieces of cooling equipment made today. ☐ Evaporators, condensing units, evaporator blowers . . . all with built-in advantages that help you sell. Take Heil's Hi-Q condensing unit for instance (figure A). Here an exclusive design permits a powerful fan to draw air straight through the unit and distribute it over a finned, coaxially wound "counterfoil" coil. This feature provides as high as 15% more Btuh per watt of electrical input than conventional designs. ☐ Now, check Heil's "Super" A coil (figure B). Its unique configuration provides high capacity with minimum resistance to air flow. Result—increased efficiency. ☐ If you'd like more information like this, just drop us a line and we'll have our District Manager show you the facts and figures. You'll enjoy talking to him about a cool one . . . over a cool one.



HEIL

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THE HEIL-QUAKER CORPORATION • 647 THOMPSON LANE • NASHVILLE, TENNESSEE 37204 • A SUBSIDIARY OF THE WHIRLPOOL CORPORATION

Credit giant enters housing by buying prefabber; will offer new loan plan

ATLAS CREDIT CORP., the Philadelphia home improvement financier which has grown into a major supplier of mortgage money, has become an active producer of housing by buying HILCO HOMES, also of Philadelphia.

Atlas Executive Vice President Norman Wolgin verified reports (NEWS, May) that his company would take over Hilco, whose

McGraw-Hill World News

WOLGIN

COHEN

$8 million in sales last year made it the fifth largest prefabber. Atlas paid $937,000 (or $1.28 a share) for 80% of Hilco's 915,000 shares and will offer to buy the remaining shares at that price. President Martin Cohen remains at the helm of Hilco, which becomes an Atlas division.

"Hilco had a red year," said Wolgin, "due primarily to their financing program. Through its Equity Acceptance Corp., it financed homes with an add-on type of loan. Then it tried to place the loans with permanent lenders and had poor results. Our financing will not include this type."

Atlas expects to double Hilco's 1964 production (560 houses shipped to 14 states). "We're going to concentrate on building homes for both the individual lot owner and the tract builder, and we'll provide financing for both," said Wolgin. "We have a unique financing plan — 6% on a 20-year mortgage that includes closing costs."

Atlas is now negotiating with General Electric to make Hilco homes all-GE homes.

As part of its new policy, Hilco will sell only finished houses; formerly it sold houses at any stage of construction.

A year ago an Atlas subsidiary, the mortgage banker Colonial Mortgage Service Co., bought $2.6 million of mortgages from a Hilco finance subsidiary and agreed to make construction and permanent loans on Hilco Homes.

Atlas started as a home improvement credit company in Philadelphia in 1955 and is now a holding company operating West Jersey Title & Guaranty Co., Colonial Mortgage, an equipment leasing operation and Atlas Financial Corp., which finances residential home improvements in 30 states.

Refinancing completed. TECHBUILT INC. of Cambridge, Mass., announced it has refinanced all but $48,000 of $300,000 of its debentures. "We are moving," said President Franklin Hobbs, who took over a year ago. "We not only have survived but expanded while working with a rather complex voluntary refinancing."

Over 80% of the debenture holders agreed to take 14 shares of common stock for each $100 debenture plus a 6% promissory note, due in ten years, for half the face amount of the debentures. A month ago the company was declared in default of debentures whose holders did not agree. As part of the refinancing, two stockholders contributed 35,000 shares.

With refinancing completed, Hobbs reported Techbuilt earned $49,000 last year, up 113% from 1963. Sales advanced from $826,000 to a record $1,190,000. Techbuilt is pushing a wooden vacation house and continues as Eastern distributor for Techbuilt Products Division of Armco Steel Corp., makers of an all-steel house.

Overseas hop. A third prefabber, SWIFT HOMES INC. of Elizabeth, Pa., is joining Netherton Building & Construction Ltd. of Peterborough, England to begin prefabbing homes near Liverpool. Swift will hold a minority interest and provide technical know-how. Netherton President Eric Clayton will head the new concern, Swift Homes Ltd., and expects to produce between 500 and 800 houses a year priced from $18,000 to $20,000. He says British building societies will finance up to 95% of the house price for 25 years at 5½% to 6¾% interest. Later Clayton hopes to expand to Common Market countries.

Swift produces both one-family homes and apartments and has not ended one-family production as intimated last month.

Seventh loan insurer. EXCEL MORTGAGE INSURANCE, 1831 State Street, Bettendorf, Iowa, becomes the seventh private mortgage insurance to register stock with the SEC. Through Excel Investment Co., Excel is offering 500,000 shares at $3 a share to begin a subsidiary, Arsenal Life Insurance. Organized in 1963, Excel insured 911 houses last year and operates in ten states.

Stocks steady. HOUSE & HOME's housing stock average dipped slightly under the depressing impact of financial ills at WEBB & KNAPP. Trading in W&K stock was halted and then Midland Marine Trust Co. of New York City asked a federal court to reorganize the company under bankruptcy laws. President William Zeckendorf assented. The averages:

	Mar. 8	Apr. 12	May 11
Building	5.48	5.51	5.53
Mortgage banking	10.74	11.40	12.42
Prefabrication	6.34	6.36	6.11
S&Ls	13.63	13.36	12.53
Land development	6.27	6.24	6.13
AVERAGE	8.64	8.64	8.46

NEWS continued on p. 26

HOUSING'S STOCK PRICES

COMPANY	May 11 Bid/ Close	Chng. From Prev. Mo.
BUILDING		
• Adler-Built Inc.	25¢	+ 5¢
• Capital Bld. Ind.	$1.00	—15¢
Cons Bldg. (Can.)	5⅞	— 1
• Dev. Corp. Amer.	3¾	+ ½
Dover Const.	3⅛	....
Edwards Eng.	8⅞	+ ½
Edwards Inds.	1⅛	+ ⅜
Eichler Homes[h]	3½[d]	— ¼
First Nat. Rlty.[b]	2⅛	+1 1/16
• Frouge	5¾	— ¼
General Bldrs.[b]	2⅝	+ ¼
Hawaiian Pac.	9¼	....
Kavanagh-Smith	2	—1⅛
Kauffman & Bd.[b]	14½	— ½
Lou Lesser Ent.[b]	3⅞	— ⅞
Levitt[b]	7¾	— ⅛
Lusk	1⅜	— ⅛
Pac. Coast Prop.[b]	11¾	+1⅜
Pres. Real. A.[b]	9½	+ ⅝
• Sproul Homes	4⅛	a
U.S. Home & Dev.	⅞	+ ⅛
Del. E. Webb[c]	5⅞	— ⅜
Webb & Knapp[b]	m	....
PREFABRICATION		
Admiral Homes	1½	— ⅛
Albee Homes	3[d]	— ½
Gt. Lakes Homes	2¾	+ ½
Hilco Homes	1⅛	....
Inland Homes[b]	8⅜[d]	+ ¼
Madway Mainline	10½	— ¼
Modern Homes	3⅝	— ⅜
Natl. Homes A.[g]	3⅞	— ⅛
Richmond Homes	3½	+ ½
• Scholz Homes	2¼	— ⅜
• Seaboard Homes	¼	....
Steel Crest Homes	8½	—1
Swift Homes	3	+ ¼
• Western Shell	⅜	+ 1/16
Jim Walter[c]	23⅝	—2⅛
S&Ls		
American Fin.	14¾	— ¼
Brentwood	6¾	—1
Calif. Fin.[c]	47⅞	....
• Columbia	6	—1
Empire Fin.	12¾	—1
Equitable S&L	22¼	+1¼
Far West Fin.[c]	13⅜	—2¼
Fin. Fed.[c]	26⅜	—3
First Char. Fin.[c]	23¼	....
First Fin. West	7¼	— ¾
First Lincoln Fin.	20¾	— ⅞
First Surety	5⅛	— ⅞
First West Fin.[c]	9	—1⅜
Gibraltar Fin.[c]	23⅝	+ ¾
Great West. Fin.[c]	10⅝	— ⅝
Hawthorne Fin.	7½	— ⅞
Lytton Fin.	13¾	—1¼
Midwestern Fin.[b]	4	+ ⅛
San Diego Imp.[c]	7¾	— ⅛
Trans-Cst. Inv.	6	—1¾
Trans Wrld. Fin.[c]	11¼	— ⅞
Union Fin.	8	— ¼
United Fin. Cal.[c]	10⅝	—1⅝
Wesco Fin.[c]	18½	—2⅝
MORTGAGE BANKING		
Advance	8⅝	+ ⅞
Associated Mtg.	7⅞[d]	+ ⅛
Charter	1	....
Colwell	14¾	— ¼
Cont. Mtg. Inv.	26¼	+2⅜
• Cont. Mtg. Ins.	9½[d]	+ ⅛
• FNMA	85¾	— ½
First Mtg. Inv.	15⅞	+2
• Kissell Mtg.[b]	5¾[d]	— ½
MGIC	28¾	+3⅜
• Southeast Mtg. Inv.	10⅜	+ ¼
United Imp. & Inv.[b]	4¾	+ ¼
Wallace Invests	4⅜	+ ⅜
LAND DEVELOPMENT		
All-State Prop.[b]	1⅝	— 1/16
• American Land	1½	....
Am. Rlty. & Pet.[b]	2¾	— ½
Arvida	5¼	— ½
Atlantic Imp.	21½[d]	+1
Canaveral Intl.[b]	1⅞	— ⅛
Christiana O.[b]	5	— ½
Coral Ridge Prop.	2¼	+ ⅛
Cousins Props.	13¾	— ½
Crawford	3	....
Deltona Corp.[b]	14	— ½
• Disc Inc.	2⅝[d]	....
Fla. Palm-Aire	1⅝	— ¼
Forest City Ent.[b]	5⅛	+ ¼
Garden Land	5⅞	+ ⅝
Gen. Devel[b]	5	....
Gulf American[b]	7⅜	— ¾
Holly Corp.[b]	⅞	— 1/16
Horizon Land	2¼[d]	— ¼
Laguna Nig. A.[h]	10⅛[d]	— ⅜
• Laguna Nig. B.[h]	5⅛	— ⅜
Lake Arrowhead	8¾	— ⅛
Macco Rlty.	8¼	+ ½
• Major Rlty.	26¢	— 7¢
• McCulloch Oil[b]	10¼	+1⅝
So. Rlty. & Util.[b]	1½[d]	— ⅛
Sunset Int. Pet.[b]	7¾	— ¼

a—stock newly added to table. b—closing price ASE. c—closing price NYSE. d—not traded on date quoted. g—closing price MSE. h—closing price PCSE. m — American Stock Exchange suspended trading May 4. •—not included in averages

Sources: New York Hanseatic Corp., Gairdner & Co., National Assn. of Securities Dealers, American Stock Exchange, New York Stock Exchange, Midwest Stock Exchange, Pacific Coast Stock Exchange. Listings include only companies which derive a major part of their income from housing activity and are actively traded.

SHORT-TERM BUSINESS LOAN RATES

Percent interest and (net change) in year

LOAN SIZE (000)	New York City	7 other Nothern & Eastern cities	11 Southern & Western cities
$1-10	5.62 (—.04)	5.85 (+.04)	6.02 (+.11)
$10-100	5.36 (—.03)	5.55 (+.01)	5.68 (+.06)
$100-200	5.10 (+.04)	5.26 (+.02)	5.36 (+.05)
$200 & over	4.62 (—.04)	4.85 (—.03)	4.99 (—.09)

Source: Federal Reserve Board, March, 1965.

Can this be asphalt tile? It is—exclusive, new Kentile® Gravelle. Color: Brownstone with accenting feature strips. 4 other colors. 9″ x 9″ x ⅛″.

KENTILE FLOORS

Stone-like look! Asphalt Tile price! Full ⅛″ thickness! New Kentile Gravelle—a full ⅛″ thick for the deeper texture that emphasizes the look of real random-size stones set in deep relief. A striking addition to the decor of your model home. Easy to keep clean, too. Ask your flooring man about Kentile's thrifty Gravelle Asphalt Tile.

If Queen Anne were here today...

She'd want Moe Light in her dining room

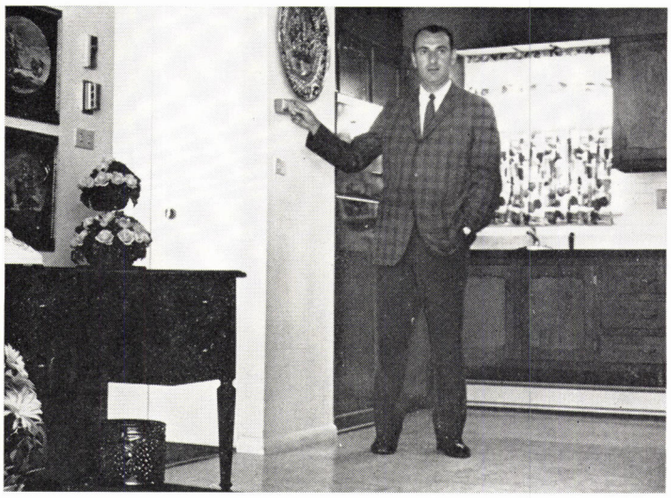
A Moe Light chandelier adds a touch of royalty to any type of decor . . . gives modern day queens something special to remember about your homes. For more ways to give your homes extra appeal with lighting, write to Moe Light, Thomas Industries Inc., 207 E. Broadway, Louisville, Ky.

MOE LIGHT

Circle 19 on Reader Service Card

Here's how G-E Central Air Conditioners solved the problem of even cooling in the multi-room apartments of Robert Schmertz

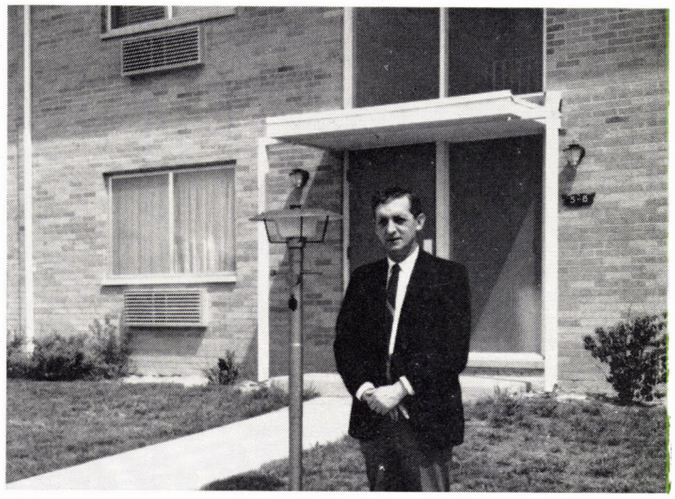
"Our apartments, which range up to 1,000 sq. ft. and have as many as four rooms, are laid out so that we prefer 1½- and 2-ton G-E Central Systems to give us even distribution of cooling through ductwork at a low operating cost," says Bob Schmertz of Leisure Village, Lakewood, N.J.



"Because some folks feel the heat more than others, they appreciate the fact that with individual central systems, each apartment has its own separate climate control.

"Of course," Mr. Schmertz says, "we chose G.E. in the first place because we know G.E. makes the most reliable products. And with G.E.'s top engineering design, we can count on the most dependable equipment. We're selling well, thanks in great part to G.E."

Quiet, low-cost G-E Zoneline Air Conditioners solved Ben Cogen's Sherwood Park Apartments cooling problems



"G-E Zoneline through-the-wall air conditioners are amazingly quiet, and their low-installation costs fit our needs perfectly," says Ben Cogen, owner of handsome, new low-rise apartments in Lima, Ohio. "Zonelines are attractive, too, both on the exterior and the interior."

"Our apartments are laid out so that a single G-E Zoneline can air condition our three-room suites, and two G-E through-the-wall units take care of our larger four-room apartments. Each tenant can control the temperature in his own apartment. If repairs are needed, it requires shutting down just one unit, and it slides out of its through-the-wall case in seconds. Actually, we're so satisfied with G-E Zonelines, we're putting 40 more in our new apartments."

There's a General Electric air conditioning system that's right for your installation. Get full details from your G-E representative or write Air Conditioning Department, General Electric, Appliance Park, Louisville, Kentucky.

GENERAL ELECTRIC

OWENS-CORNING FIBERGLAS • HOME BUILDING PRODUCTS DIVISION • TOLEDO, OHIO

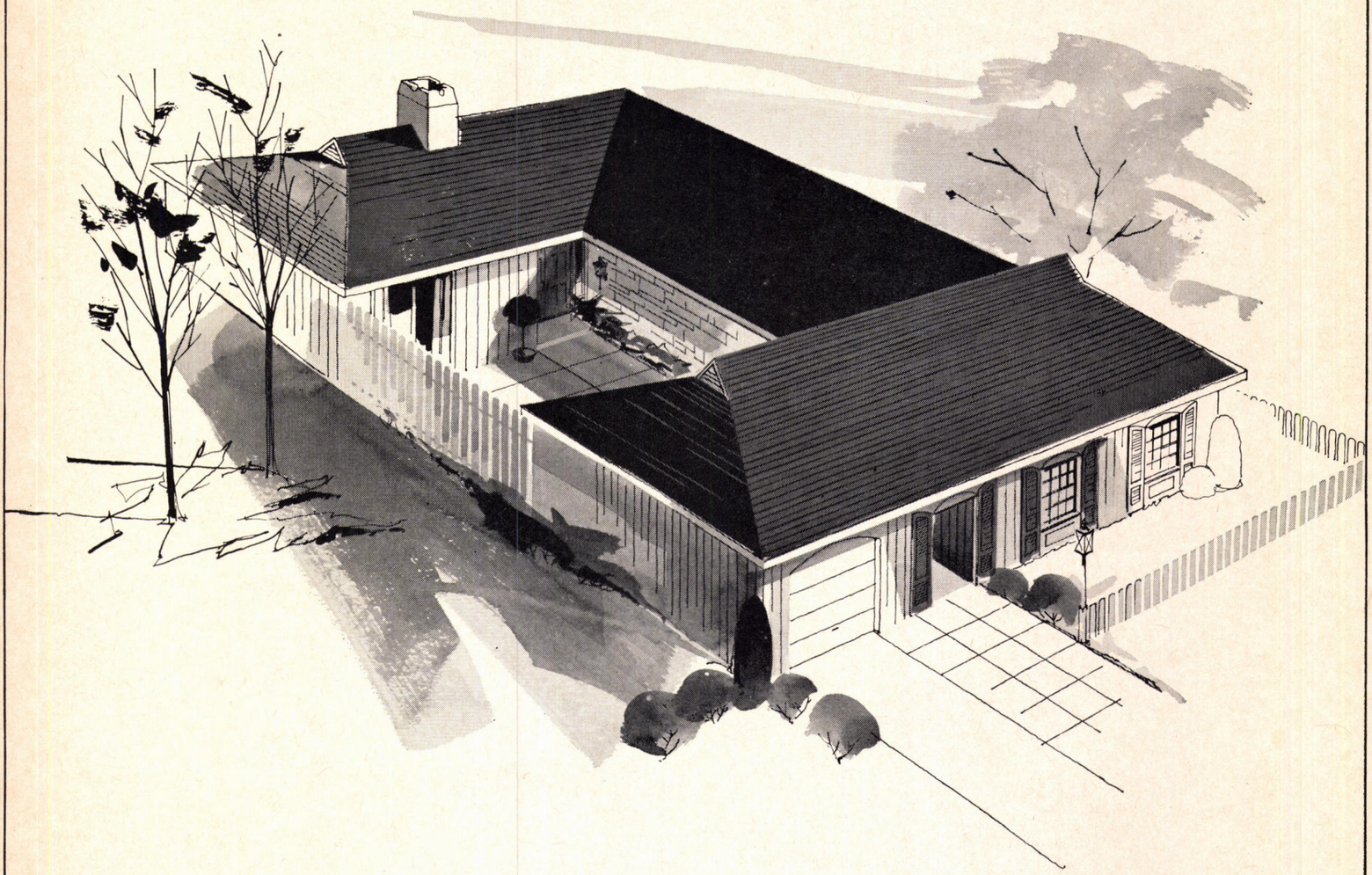
This is somebody's baby. Pretend it's yours when you think of insulation.

When it comes to quality, we're ruthless. If you install or specify or have anything to do with insulation, we suggest you be ruthless, too. Pretend it's your own home the insulation is going in. Our insulation is tested constantly. By our own inspectors. Every two hours, we have them check the insulation in a quick "K" machine. (We developed it.) If the thermal performance isn't what we say it is, it isn't shipped. Our tests are then verified by Pittsburgh Testing Laboratories. This is Verified Insulation Performance. (VIP for short.) Owens-Corning Fiberglas insulation is competitively priced. Why take a chance on anything less?

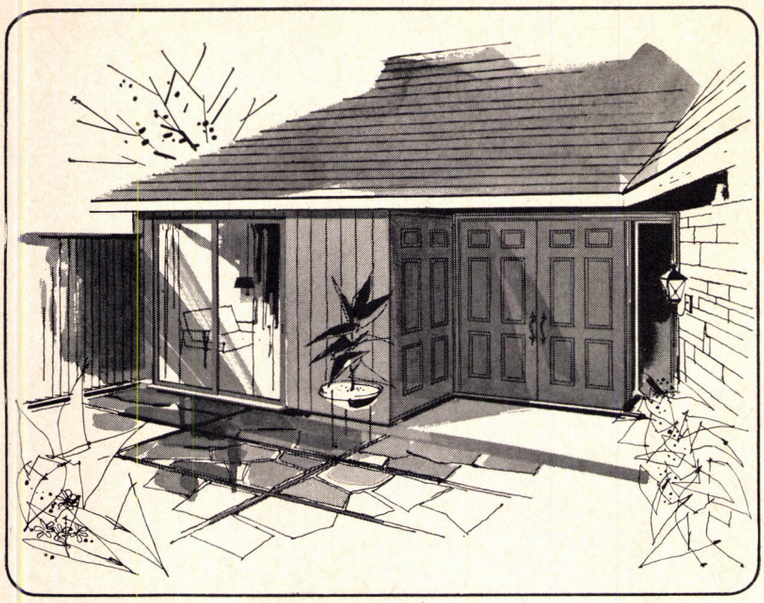
OWENS-CORNING
FIBERGLAS
with Verified Insulation Performance

Circle 21 on Reader Service Card

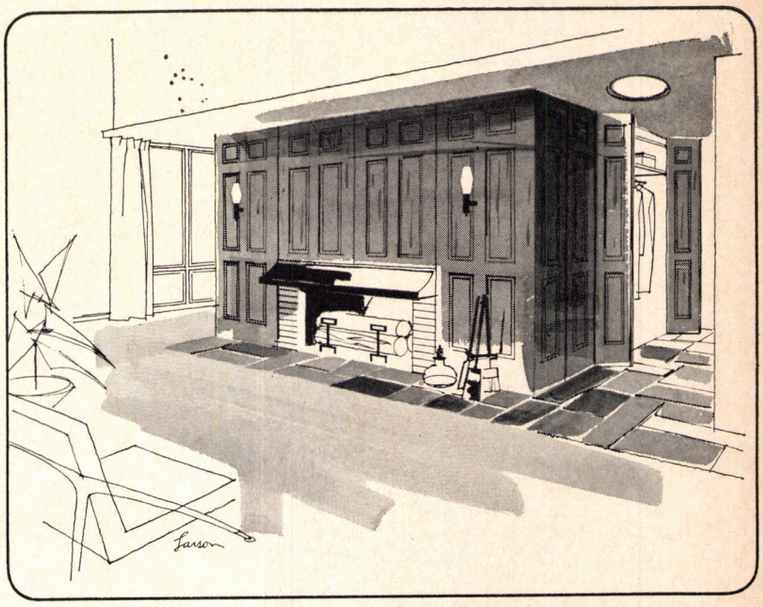
Unit #5 in an award-winning series from Ponderosa Pine Woodwork



a narrow lot house...

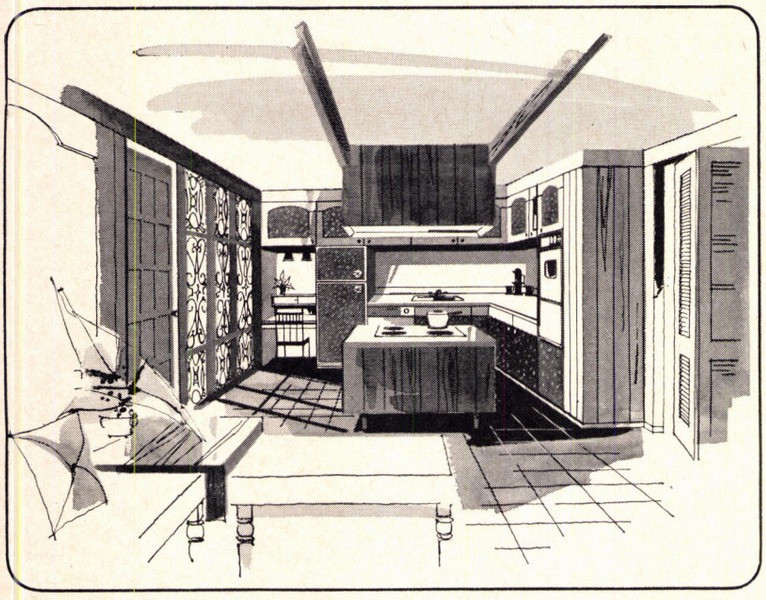


Idea No. 1—Sheltered Entry: matching double panel doors and sidelights set back from eave to create practical privacy . . . smart sales-appeal.

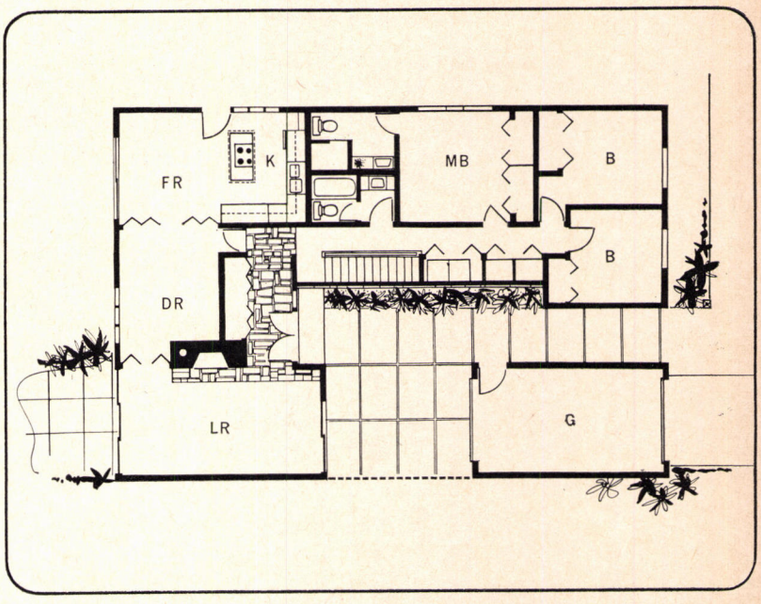


Idea No. 2—Panelled Fireplace: fixed panel doors add an intimate elegance to the living room, and continuity to the entrance hall.

Idea No. 3—Decorator-Designed Kitchen: built-in desk, island cooking center with hood, wall oven, Hacienda model Kelvinator Original in simulated leather.



Mediterranean Courtyard House Floor Plan: a Better Homes & Gardens Approved Value Design.



full of new ideas!

The Mediterranean Courtyard House...a 1685 sq. ft. house with the sparkle and charm of the Riviera...and the ability to fit it all on a 50 foot lot.

Packed with ideas that buyers want...that builders have asked for. You don't have to take our word for it. Better Homes & Gardens looked at the plans and immediately gave them their "Approved Value Design" recognition.

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5-HH-1

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Ponderosa Pine Woodwork creates these award-winning plans to show the newest, most popular uses of Ponderosa Pine products. Feel free to use any ideas you see.

Make your windows a selling point with these stars

The PPG TWINDOW® stars make your windows visible—remind home-buying prospects of the advantages of wood windows glazed with PPG TWINDOW Insulating Glass.

The stars tell your prospects they'll never need storm windows. They'll have less fogging and frosting. Rooms will stay cooler in summer. And warmer in winter—for lower heating bills. That's why it will pay you to feature TWINDOW Glass Edge Insulating Glass in wood windows in your homes. Contact your wood window supplier today.

Pittsburgh Plate Glass Company
Pittsburgh, Pennsylvania 15222

PPG makes the glass that makes the difference

continued from p. 18

Builder takes over U.S. Chamber with demand to localize renewal

Robert P. Gerholz says that flying over urban renewal sites gives him the same feeling he had on viewing Europe's bombed-out cities after World War II.

Gerholz's initial proposal after becoming the first builder ever elected president of the U.S. Chamber of Commerce:* give control of renewal back to the states and cities.

"Decrease the federal share of the costs," he proposes. "Limit support to loans or guaranties on self-liquidating projects that communities demonstrate are sound.

"Develop and implement plans for a transition to full local and state responsibility for community development subsidies."

Gerholz headed the National Association of Home Builders in 1944, but his proposal to phase out federal renewal conflicts with the builder group's policy. NAHB supports increased federal spending for renewal although it has shunned controversy over details of dispensing the aid.

*A federation of professional and trade associations with 3.5 million members, including heads of 3,000 business concerns.

Wide World Photos

CHAMBER's GERHOLZ
Target: federal renewal

Bob Gerholz heads Gerholz Community Homes of Flint, Mich., and builds $2 to $5 million worth of houses a year. A self-made businessman and an outspoken conservative, he has belonged to 50 civic and trade organizations and has been president of many of them. At 68 he still lives proudly by this credo:

"A resurgence of local effort, of the once-famous booster attitude and can-do determination that caused men to organize Chambers of Commerce, will do more to invigorate the country than all the new forms of succor pouring from Washington."

Planners elect a city manager

He is **Herbert W. Starrick,** city manager of Dayton for the past 12 years. The American Society of Planning Officials last month elevated him to its presidency, succeeding **Eric Thrift,** general manager of the National Capital Commission in Ottawa.

Starrick expects ASPO to take the lead in getting practicing planners to pull their noses out of zoning and subdivision maps and come to grips with the multiple social revolutions in U.S. cities.

So strongly did he believe that planners must be doers that he forsook a successful city planning career to become city manager of Middletown, Ohio in 1950. Three years later he went to Dayton.

More than any other force on today's municipal scene, Starrick says, urban renewal has made planners face up to the impact of education, race and poverty on physical plans.

His city of Dayton is coping with these by pushing three renewal projects. By the year's end he expects to sell 80 acres of residential land in East Dayton and 80 acres of downtown business land. In another 700-acre neighborhood the city has persuaded citizens to spend nearly $3 million to improve their homes.

H&H staff

ASPO's STARRICK
Planners must be doers

HOUSE & HOME issue wins Loeb citation

HOUSE & HOME's first issue as a McGraw-Hill publication has won a special achievement citation in the annual Loeb Awards for business and financial journalism. The winner was a September 1964 special report on land problems facing the housing industry.

The Loeb committee cited Editor **Richard O'Neill** and staff members who had a major hand in the issue, including Managing Editor **John Goldsmith,** Senior Editor **James Gallagher** and Associate Editors **Maxwell Huntoon, Robert Seigel** and **Clarke Wells.**

It marked the third Loeb Award for H&H since the awards, administered by the University of Connecticut, began in 1957.

Mortgaging's man of many facets: Morgan heads savings bankers

Bob O'Shaughnessy

SAVINGS BANKERS' MORGAN
Still hurrying

Once a storm was battering Wayland, Mass., and the trains were not stopping. But Wayland's **Robert M. Morgan** had to get to Boston.

"I just flagged down a train," he explains, "and we got on, though it was not supposed to stop."

Bob Morgan is mortgaging's man in a hurry, and that is a sample of the way he gets things done. Nineteen business and civic organizations already claim him as an active, working executive. Now, at 63, he steps up to yet another assignment: president of the National Association of Mutual Savings Banks, whose 500 members have $55 billion in assets ($38 billion in mortgages).

Morgan's bluff good humor and mortgage know-how have made his name familiar to the profession in every section of the country. He is president of the Boston Five Cents Savings Bank (assets: $603 million) and chairman and policy maker for the Massachusetts Purchasing Group, which buys FHA and VA loans for 190 member mutuals and holds $1.48 billion in government-insured loans. His dual role keeps him in constant touch with the Boston and national markets, and he is universally regarded as one of the nation's top authorities on prices in secondary trading.

So crowded is Morgan's schedule that he has learned to telescope time. He speaks in a kind of shorthand, saying more in a sentence than many men's speeches.

Omaha unseats mayor accused of zone bribe

In Omaha's largest voter turnout, Businessman **A. V. Sorensen** polled 65% of 99,689 ballots to oust Mayor **James J. Dworak.**

The mayor is under indictment on charges of taking a $25,000 bribe from Chicago Builder **John B. Coleman** to speed townhouse zoning (NEWS, Feb.). Sorensen campaigned on the indictment and the mayor's silence before the investigating grand jury.

Sales-minded engineer heads Kingsberry

Since **Jerome B. Nowak** became general sales manager of Kingsberry Homes in 1961, sales have soared 294%. For his work Kingsberry last month elevated Nowak to its presidency.

The new boss expects no letup in the sales drive which has made Kingsberry the nation's second largest prefabber. Nowak is shooting for $19 million in sales vs. $16 million in 1964.

An administrative engineering graduate of Syracuse University, Nowak, 42, joined Kingsberry in 1956.

Nowak succeeds **Albert P. Hildebrandt,** the former New York City investment banker and financier who guided Kingsberry's explosive growth. Hildebrandt takes on a special project for Boise-Cascade Corp., the Boise, Idaho materials producer which bought Kingsberry (NEWS, Dec.).

BUILDERS: **James B. Selonick** moves up to executive vice president of Reston, the planned community **Robert E. Simon Jr.** is building near Dulles Airport outside Washington. Reston reports selling 52 townhouses since opening models last fall. A 61-unit high-rise apartment is nearly complete.

Clifford A. Smith moves in as president of Great Lakes Homes Inc. of Sheboygan Falls, Wis. Smith, former executive vice president of National Homes, succeeds **Robert Werner,** who resigned to become a Great Lakes dealer. Great Lakes sold $13.9 million of components last year.

President **George J. Achenbach** of Lifetime Homes, Saybrook, Conn., has been elected a member of Young Presidents' Organization, the national group for company presidents under 40. He is 36. Achenbach founded Lifetime 11 years ago, has made the company Connecticut's largest homebuilder. He now builds in seven locations at prices from $16,000 to $55,000 and has 320 apartments either built or under way. His completely integrated operation includes the state's fourth largest real estate agency and a road and sewer builder.

DIED: **Sidney L. Aubrey,** 48, vice president of Mercantile Mortgage Co. in St. Louis and mortgage correspondent for HOUSE & HOME for many years, April 16 following a heart attack.

Not all patio doors can display this selling shield.

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HERCULITE® K TEMPERED SAFETY GLASS
PITTSBURGH PLATE GLASS COMPANY

Only safe ones.

And home buyers recognize the shield. It's in PPG's national advertising campaign.

They look for it. It means quality and value in the home you show them.

Specify HERCULITE® K Tempered Safety Glass in your sliding glass doors. Then you can display this nationally advertised safety shield, too. Get the shield—and safe doors—from your patio door supplier.

Pittsburgh Plate Glass Company
Pittsburgh, Pennsylvania 15222

PPG makes the glass that makes the difference

It's a long life and a full one for the Westinghouse Apartment Laundromat®

Automatic Washer

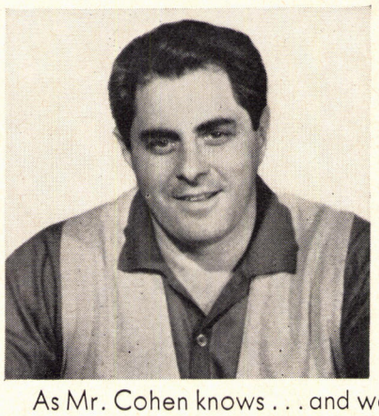
Apartment house mothers give laundry room equipment the sort of continuous workout that requires special heavy-duty construction.
(Laundry room, London Park Terrace Apartments, New York City.)

It makes sense that a washer specifically built for heavy use will stand up far longer in an apartment house laundry room than a standard domestic unit. And the Westinghouse RAM-8 Apartment Laundromat has the same long-life commercial construction that's been proven in thousands of self-service laundries all over the country.

Installed in apartments or motels, the Westinghouse Apartment Laundromat saves money in operating costs, too. It has a faster wash cycle to accommodate more users. It uses less heat and water. And it keeps tenants happy with its simple operation and ability to get clothes cleaner.

Pair the Apartment Laundromat with a Westinghouse coin-operated electric or gas dryer—also designed especially for commercial use.

Leading builders like to do business with Westinghouse. To quote Julius Cohen, builder of apartments throughout the Midwest: "The products, the service, the help in advertising, and finally, availability of financing. This is an unbeatable combination."



Julius Cohen, Apartment builder, Columbus, Ohio.

As Mr. Cohen knows . . . and we hope you do soon . . . one call puts you in touch with a complete line of residential products. Appliances, heating and cooling equipment, lighting, wiring, elevators, laundry equipment, even Micarta® plastic surfacing.

One call also can get you valuable help in merchandising and promoting your project. All specially tailored to your needs. (As we've said: One Man, One Plan, One Brand.)

Call your Residential Sales Manager at your Westinghouse Major Appliance Distributor. Get the new 1965 Residential Catalogue. Or look it up in Sweet's Light Construction or Architectural Files.

You can be sure if it's Westinghouse

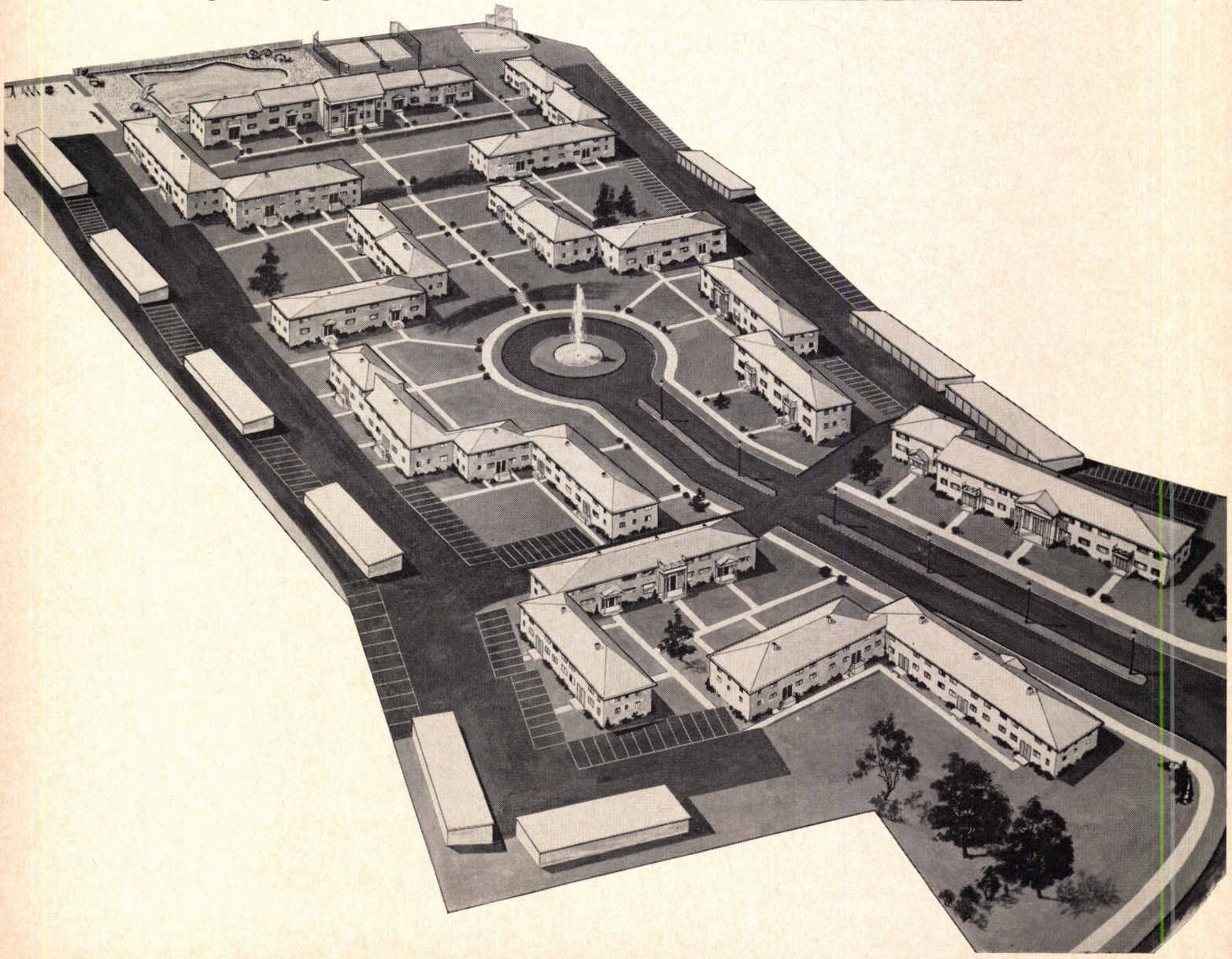
Circle 24 on Reader Service Card

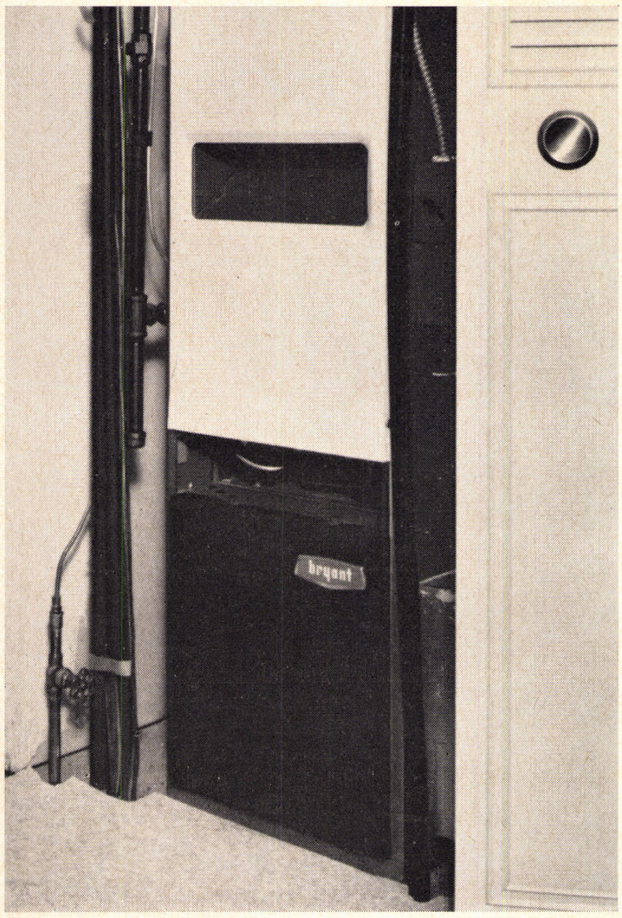
▼ **A BRYANT BUILDER REPORT**

How Berdan Court solved the cost problem on air conditioning

Based on an interview with J. C. Chalemian, President of J. C. Builders, Inc.

The 176 suites at Berdan Court, Wayne, New Jersey's newest prestige apartments, were rented in record time. And no wonder. Berdan Court offers apartment dwellers luxury, convenience, and the flick-of-a-switch convenience of Bryant heating and cooling.





Central vs. individual system

In deciding on the heating/cooling system, J. C. Builders, Inc. weighed the pros and cons of two types: (1) a central hot water boiler for heating plus window air conditioning units vs. (2) individual warm air heating and air conditioning for each apartment.

Cost comparison

When the bids were in, here's how the costs of the two systems stacked up:

Cost of central boiler with baseboard, $425 per suite plus $300 for two window air conditioning units, $725

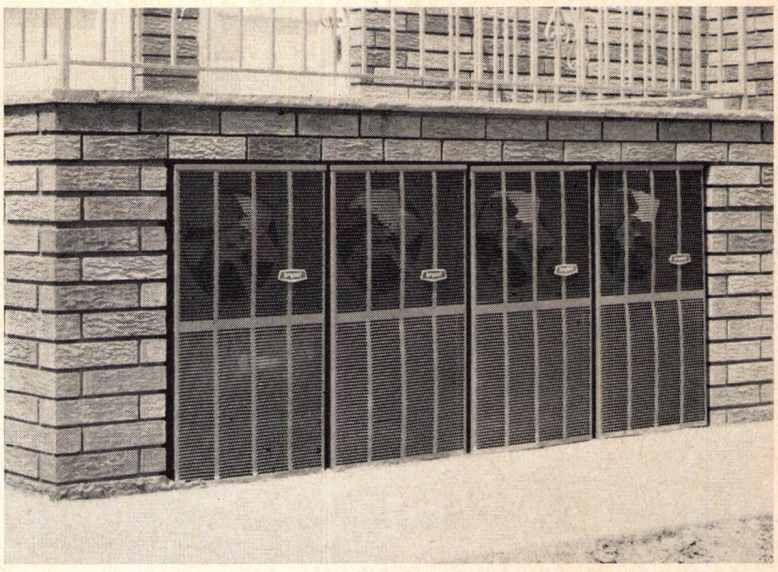
Cost of Bryant individual warm air heating and air conditioning, per suite $670

The builder's decision?

Equip each apartment suite with an 80,000 Btu Bryant furnace and a 2-ton Bryant Quietline air conditioner. And the savings made on the cost of the equipment was just the beginning of the Bryant benefits.

Rental advantages

With custom comfort, the apartments rented faster. The central hot water system would have required heating a complete unit of 20 apartments before tenants could move in. But with the Bryant individual system, a tenant was able to select his apartment and move in as soon as the furnace in his suite was hooked up.



Installation advantages

In the Berdan Court apartments, all the outside wall space is usable for furniture placement. The heating/cooling equipment is under inside stairways.

Not only does the under-the-stairway placement make use of space that would otherwise have been wasted, the central location of the equipment closet permits shorter duct runs to various rooms in the suite.

In working out installation plans with the builder, the Bryant representative came up with another way to make functional use of space. His suggestion: put the condenser units outside the building under the rear entrance stairwells. Here, access for service is easy. There is plenty of air circulation to carry off exhaust heat. And the out-of-the-way location permits undisturbed runs of refrigerant lines to coils.

Everyone benefits with Bryant

Certainly the builder did. He got lower costs. Faster installation. *The apartment owner profited, too,* with faster rentals; utility bills paid by tenants. *And the tenants* were given a wider choice of suites and apartment location, heating and cooling adjustable to their needs, and utility bills based on actual use not pro-rated.

On your next building project, do as J. C. Builders, Inc. did. Call in Bryant. Take advantage of what we have to offer in advanced products, realistic pricing and technical assistance. Call your nearest Bryant distributor or factory branch or write Bryant Manufacturing Company, Indianapolis 7, Indiana.

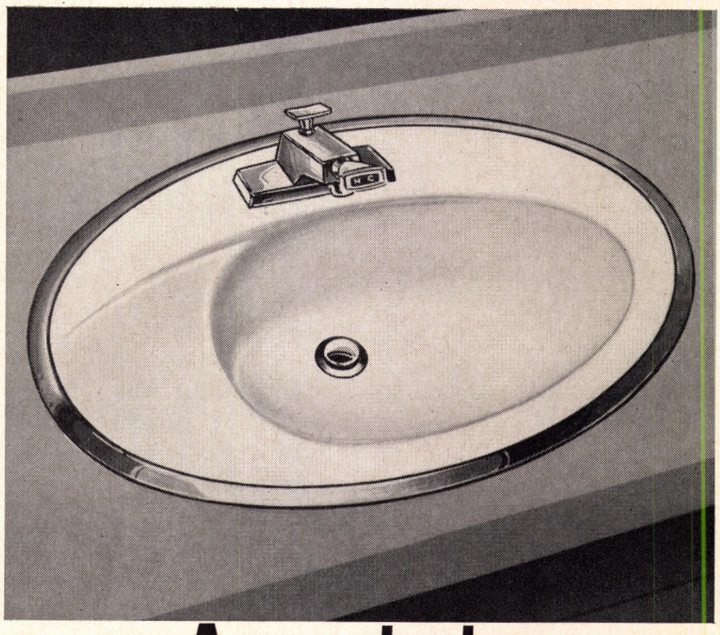
bryant

Heating and Air Conditioning

Circle 25 on Reader Service Card

And now American-Standard brings you

Two new lavatories shaped to help you sell



Stands alone in its price class

Here's American-Standard quality and styling for your homes at a *low* price. This is the new 1965 version of our famous Comrade* lavatory, in gleaming vitreous china. All surfaces have been streamlined for greater beauty, easier cleaning. Show prospects the handy ledge back, cast-in soap dish, self-draining sides. And, for even more appeal, include a modern washerless, single-control faucet. 20 by 18 and 24 by 20-inch sizes; comes in white and seven high-style bathroom colors.

A countertop that thinks double

The luxurious (26 by 18 inches) Fairlyn* lavatory has twice the convenience, twice the cleaning ease. The only thing with more prospect appeal than one Fairlyn is a *double* installation. Fairlyn is priced so that twin lavatories—and washerless faucets—are practical for most new homes. Design extras that give this enameled cast iron lavatory distinction are the sculptured, off-center bowl and a spacious ledge inside the rim for toiletries in use. Available in white and seven bathroom colors.

See your plumbing contractor now or write American-Standard, Plumbing and Heating Division, 40 West 40th Street, New York, N.Y. 10018.

AMERICAN-STANDARD

American-Standard and Standard are trademarks of American Radiator & Standard Sanitary Corporation

AMERICAN-Standard
PLUMBING AND HEATING DIVISION

*TRADEMARK AR&SS CORP.

BUSINESS IN THE MAKING

HOUSE & HOME *presents locations, sponsors, architects and estimated costs of representative new projects costing over $500,000 as gathered by* ENGINEERING NEWS-RECORD *and F. W. Dodge Co., division of McGraw-Hill Inc. to alert builders, lenders and contractors to new business.*

CONNECTICUT—MADISON: 100 houses, $2 million. Builder: Horreck Bros. c/o Henry H. Rosinus. NEW CANAAN: 85 houses, $2.1 million. Builder: Scott Allen Homes, Westport. NORWICH: Ten garden apartments, $1 million. Sponsor: Master Builders Inc., Groton.

DELAWARE—DOVER: 100 houses, $1.5 million. Builder: Pullella & Baldini, Wilmington. WILMINGTON: 74 houses, $1.5 million. Builder: W. Percival Johnson and Luigi Fortunato Inc.; 243 houses, $2.5 million. Builder: Rutherford Corp., Newark, N.J.; 67 houses, $1 million. Builder: Frank Tigani.

FLORIDA — FORT LAUDERDALE: Condominium apartments and townhouses, $27 million. Sponsor: General Builders. Plans: Harold M. Liebman & Assoc., New York City; Condominium apartment, $500,000. Sponsor: George McCulloch. Plans: Hedges & Scoville, Pompano Beach. TITUSVILLE: Six garden apartments, $600,000. Sponsors: Clyde Allen and Frank Zuzak, Cocoa Beach.

ILLINOIS—DES PLAINES: 41 houses, $15 million. Builder: O'Hare Park Homes. Plans: Tuchschmidt & Assocs., Chicago; 60 houses, $1.5 million. Builder: Szczesny & Son, Chicago. Plans: Tuchschmidt & Assocs., Chicago. GALESBURG: Eight garden apartments, $838,000. Sponsor: Galesburg Construction. Plans: Blivas & Page, Chicago. LISLE: 300 houses, $5 million. Builder: Klepler & Clark c/o G. Hugh Tsurouka, Chicago.

INDIANA—CROWN POINT: 284 houses, $3.2 million. Builder: Meadowland Annex. KOKOMO: 160 houses, row houses, apartments, shopping center and swimming pool, $6 million. Sponsor: R. D. Robbins. Plans: Swennson & Kott, Nashville, Tenn. SPEEDWAY: 288 row houses, apartments and swimming pools, $4 million. Sponsor: Emanuel R. Farley.

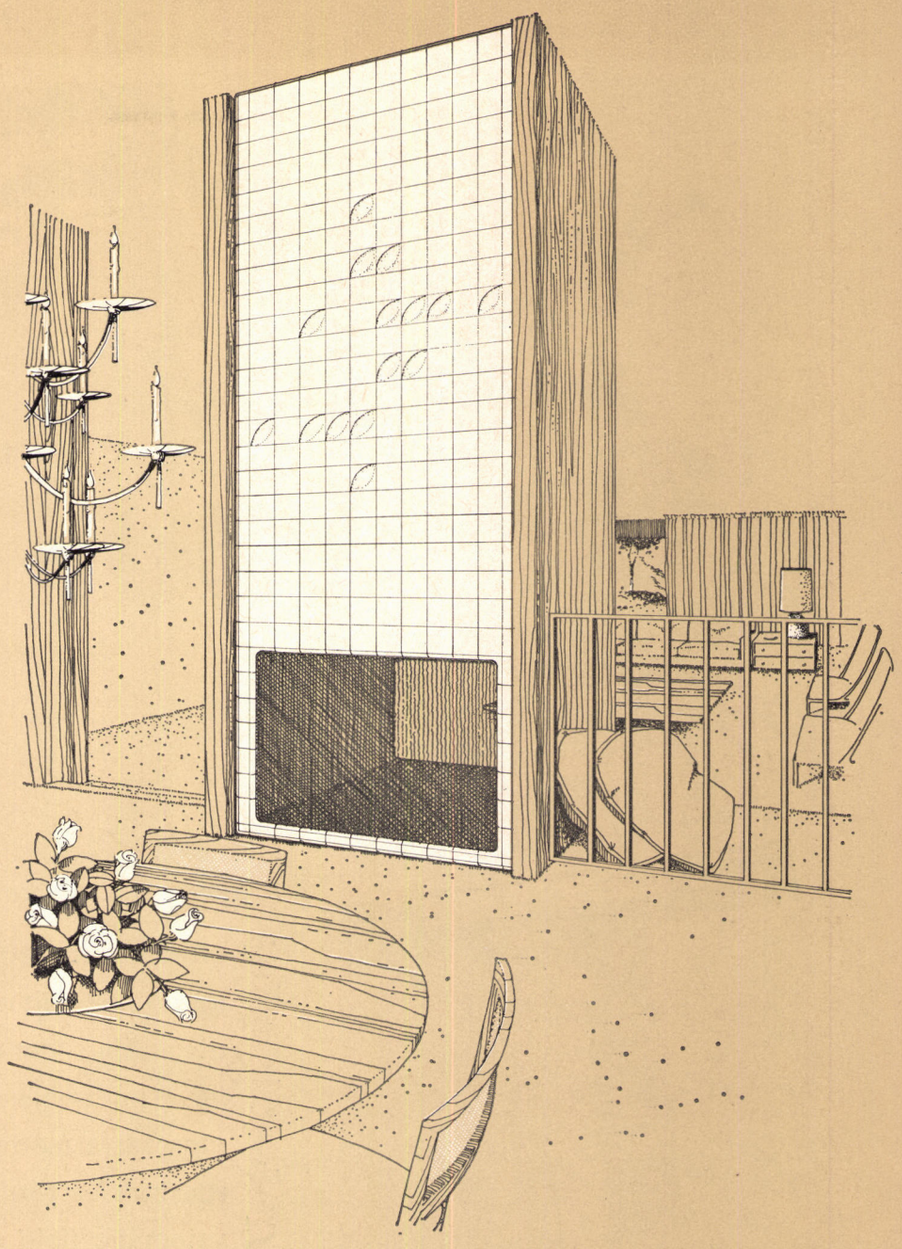
KENTUCKY — COVINGTON: Garden apartments, $1,250,000. Sponsor: Town Properties, Cincinnati, Ohio. Plans: Bakee, Cates & Roth, Cincinnati, Ohio. LOUISVILLE: 70 houses, $1,540,000. Builder: Kenneth Allen.

MARYLAND—LAUREL: Garden apartments, $1 million. Sponsor: Kay Construction, Silver Spring. Plans: Bartley-Davis & Assocs., Wheaton. NORBECK: 400 houses, $9 million. Builder: Yeonas Development, West Vienna, Va. ROCKVILLE: 89 houses, $2,047,000. Builder: Robert Bloom Inc., Silver Spring. Plans: Bartley-Davis Assocs., Wheaton. UPPER MARLBORO: Housing development and swimming pool, $25 million. Sponsor: B. Saul Co., Washington, D.C.

MASSACHUSETTS — BARNSTABLE: 90 houses, $1.5 million. Builder: Lads Investors, West Yarmouth. HOLLISTON: 300 houses, $6 million. Builder: Kenwood & Holliston. Plans: Ralph I. Williams, Dedham.

MICHIGAN—DETROIT: Eight townhouse apartments, $1.8 million. Sponsor: S & R Parcel. Plans: Hausner & Macsai, Chicago, Ill. MELVINDALE: Eight garden apartments, $1 million. Sponsor: O. D. Ind., Detroit. Plans: Michael S. Downes Assocs., Detroit. NANKIN: Townhouses, $2 million. Sponsor: Kaufman & Broad, South-

Business continued on p. 38



Pomona Tile Turns Ideas into Inspirations

...that's the beauty of it. ☐ And the beauty of Pomona Tile is that your creative ideas don't have to be limited to the kitchen or bathroom. ☐ Most home-buyers know what they're looking for in a house. But it often takes something creative and eye-appealing to complete the sale. ☐ With Pomona's unique designs and wide variety of colors in Sculptured, Textured or Decorator Tile; a den, an entry, a fireplace, a patio...any room ...can become a masterpiece of creativity. ☐ It could be the focal point that creates *excitement* in a house. The beauty that turned your idea into an inspiration.

POMONA TILE

Pomona Tile Manufacturing Co. • Los Angeles • Pomona • Anaheim • Van Nuys • Baldwin Park • Colton • San Francisco San Jose • Sacramento • Seattle • Chicago • Oklahoma City • Salt Lake City • Nashville • Arkansas City • Wichita • N. Kansas City • Las Vegas • Denver / Representatives: New York, Vanderlaan Tile Co. / Distributors: Dallas, Fort Worth, F. E Biegert Co. / Milwaukee, Butler Tile Sales / Minneapolis-St. Paul, R. B. Child, Inc. / Honolulu, Lewers & Cooke, Ltd. St. Louis, Ceramic Tile Services, Inc. / Cleveland, State Ceramic Tile, Inc. / Fort Wayne, Roderer Distributing Co. Oklahoma City, Monarch Sales Co. / Albuquerque, King's Distributors, Inc. / Lincoln, Neb., Midwest Tile Supply / Co.

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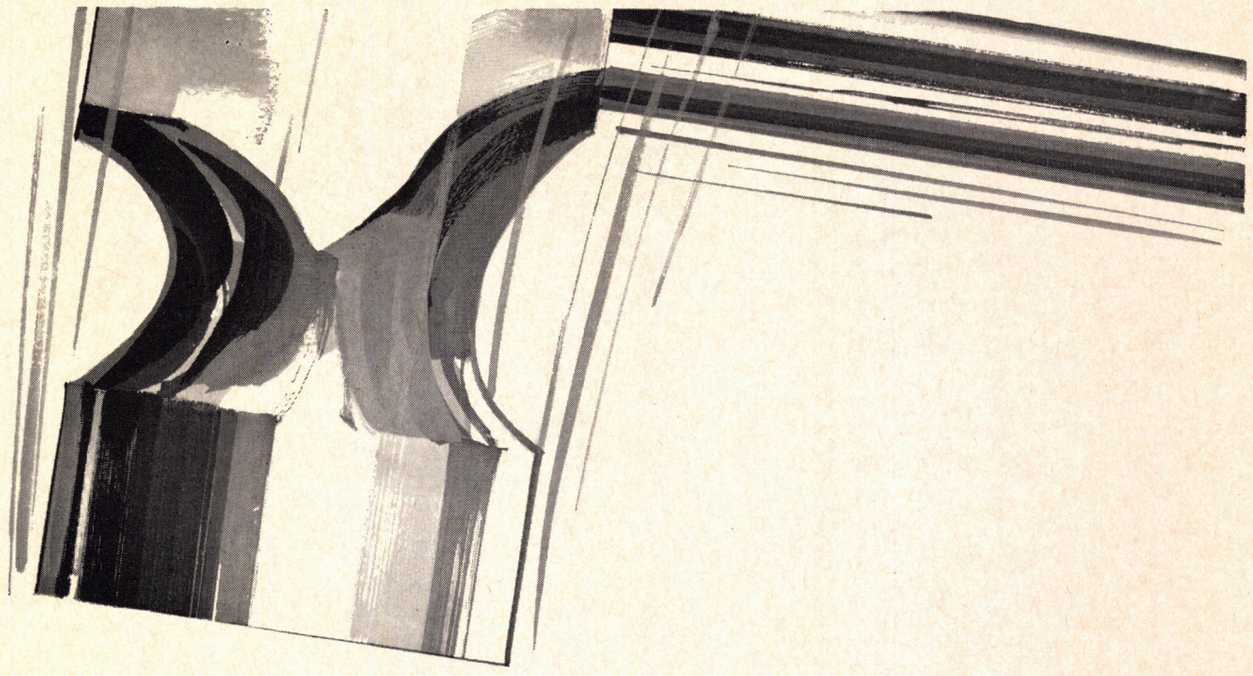
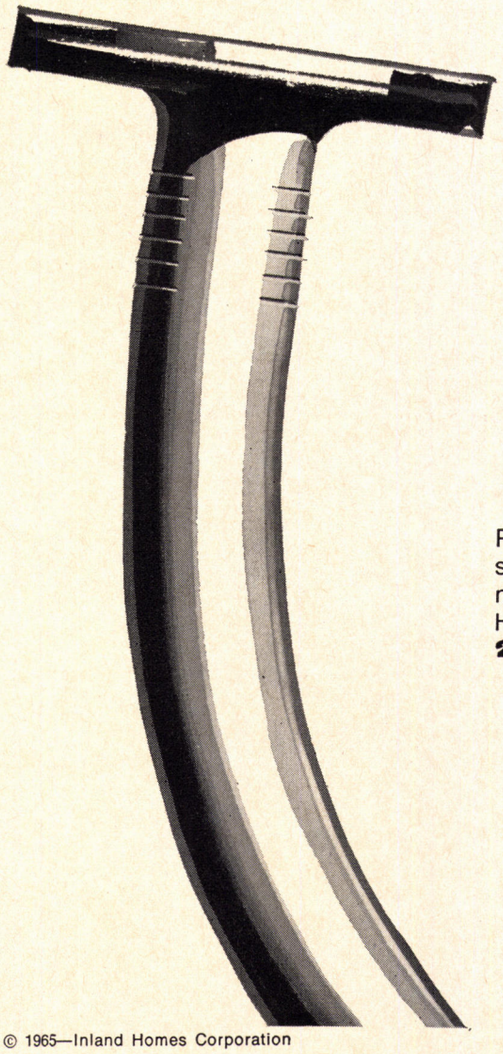


NO BENT NAILS IN INLAND'S PROVEN PRODUCT!



Proven product means:

PROFITS ($)

P erfection in engineering
R igid quality standards
O utstanding manufacturing techniques
F inest materials and craftsmanship
I mpressive model range and acceptance
T rue builder profit projections
S ystematic field erection

Put the Inland Homes Team to work for you! The personalized in-the-field assistance we offer can mean more profit for you! Write Director of Sales, Inland Homes Corporation, Department H-6, Piqua, Ohio. ☎ 513—773-7550.

INLAND® HOMES

"The Homes Teamwork Builds"

Plants in: Piqua, Ohio
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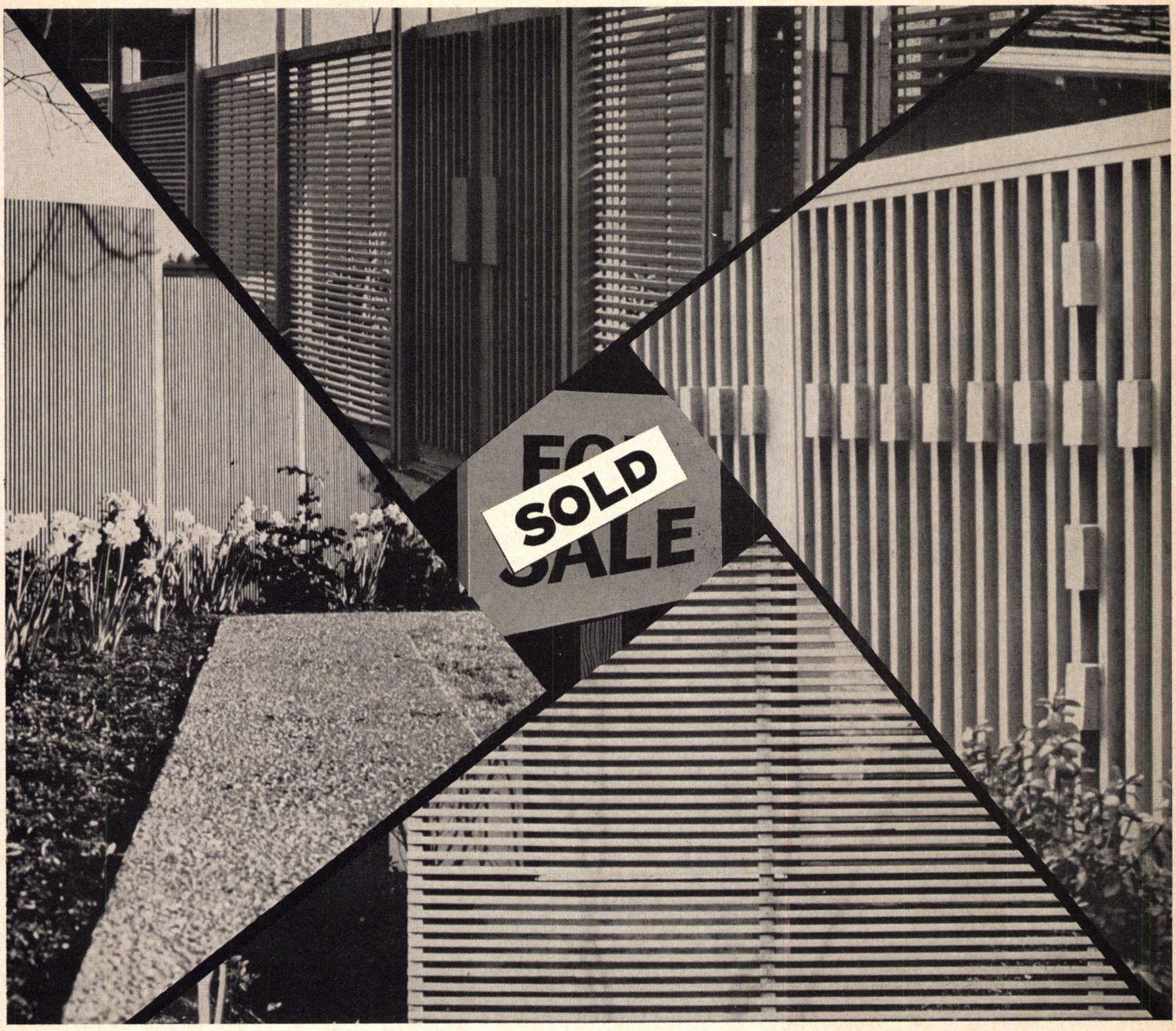

Complete the home and clinch the sale with a fence of Western Wood.

A well-designed fence is an open invitation to prospects to stop and look. It's the finishing touch that turns an ordinary model into a fast-selling home. It increases value appearance, at little added in-place cost. It can give definition and character to the lot and show buyers extended living space they can actually see. When included in the initial design, a fence can become part of the home and do such things as make it appear larger, or lower.

Western Wood is natural for fences because it's a complement to any building material . . . and never looks like an after-thought. You can buy Western Wood fence stock pressure-treated for a lifetime of durability or, if conditions allow, you can treat it with preservatives on site. You can paint it, stain it or just let nature do her beauty work. And it is available everywhere.

We have a four-color booklet filled with fence ideas to help you move your homes faster. Clip the coupon and we'll send it to you, along with the informative Western Lumber Technical Manual.

Please send your free Western Wood Fence Booklet – featuring 39 different fence ideas – and the Western Lumber Technical Manual.

Name

Address

City State Zip

WESTERN WOOD PRODUCTS ASSOCIATION

Dept. HH-665, Yeon Building
Portland, Oregon 97204

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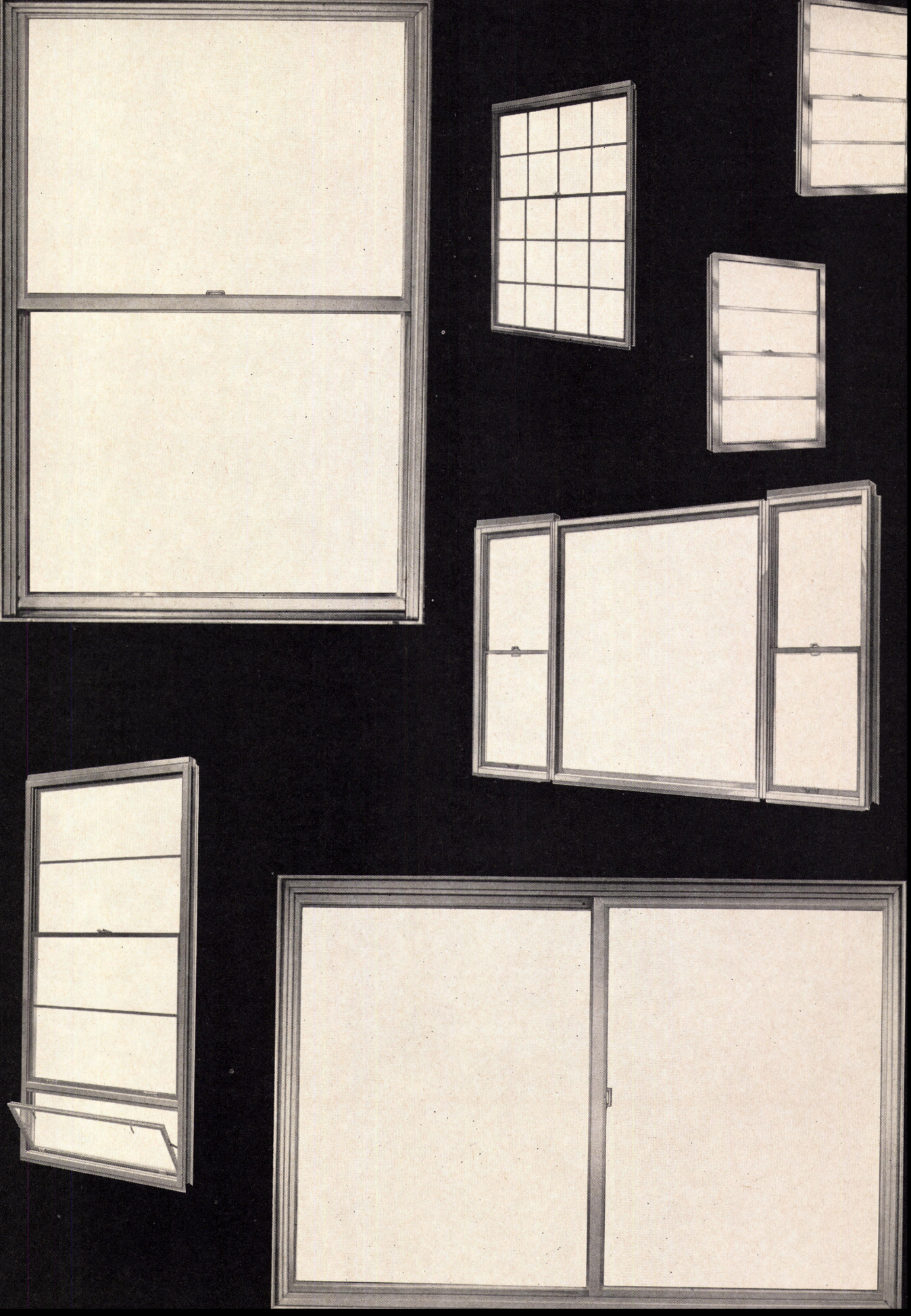


What's behind the new Freedom Stainless Steel look?

Just about any *other* kind of window you want!

Slim, elegant, indestructible FREEDOM Stainless Steel Windows are the absolute latest way to upgrade the quality and salability of virtually any structure. Besides looking better than anything else you can use, they're *strong*—won't rack, twist, swell, or shrink, ever. And they'll stay new-house beautiful for something close to forever—no rusting, etching, filming, bleeding, or pitting, ever.

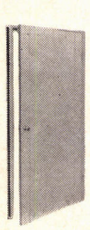
You can get FREEDOM Windows in single-hung, double-hung, or horizontal sliders. Sure they cost a little more—at first. But the way they protect your pocketbook and your reputation means they'll cost a *lot less* in the long run.

Now, for those *other* window requirements, we offer you the finest and most complete line of steel windows in the industry, ranging from double-hung, Vision-Vent curtain wall styles, Donovan awning types, casement, top-hung inswing, and projected windows.

Before you accept anything less, why not check with us about your window needs. Just tell us what kind of building you're thinking about and we'll send appropriate catalogs—or have our man stop around.

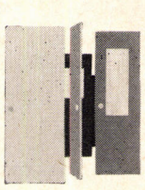
MODERN
VERSATILE
ECONOMICAL

COUNT ON YOUR MAN FROM MANUFACTURING TO DELIVER THESE, TOO:



NEW! FACTORY MUTUAL APPROVED FIRE DOOR! Now rated for up to three-hour fire resistance in 1¾" sizes. Prompt delivery, all styles, from complete warehouse stocks. UL labeled fire doors, too. New descriptive literature available—write!

REPUBLIC STANDARD DOORS—in the most complete selection, for residential, commercial, and public buildings. All are five-step rust-inhibited and are furnished with a high quality baked-on prime coat. Our full line catalog describes them all.



NEW REPUBLIC IMPERIAL DOORS—come with a glass frame section including snap-in glazing bead for easy conversion to any glass treatment. Thus, a standard IMPERIAL Door can meet many, many requirements. Honeycomb core controls sound perfectly. More information? Ask for new IMPERIAL Door Catalog.

MANUFACTURING DIVISION

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CALL THE MAN FROM MANUFACTURING!

We'd like to know more about:

- ☐ FREEDOM Stainless Steel Windows
- ☐ Republic Steel Windows
- ☐ IMPERIAL Doors
- ☐ Republic Standard Doors
- ☐ VISION-VENT® Curtain Wall (Type of Building) _____
- ☐ Have a representative call

NAME _____ TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____

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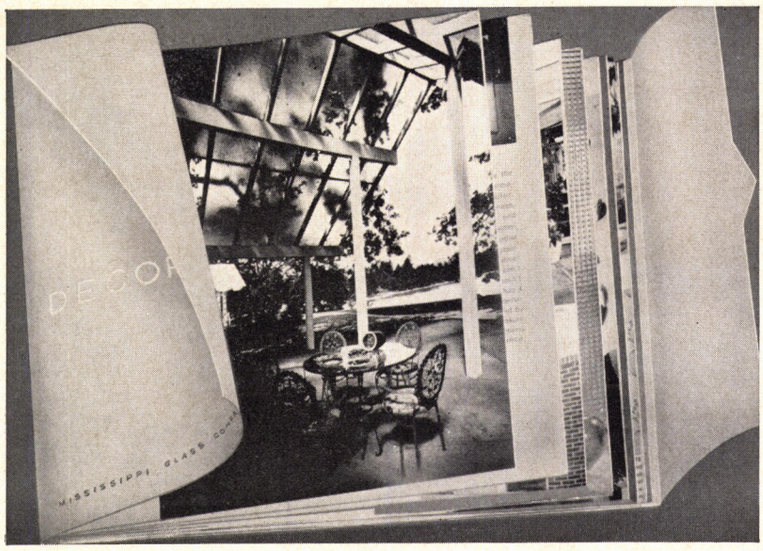
FREE GLASS BOOKLET OPENS THE DOOR TO NEW CONCEPTS IN DECOR BEAUTY



Get this exciting new booklet featuring dramatic textures in patterned glass. Actual photographs, many in color, illustrate countless ways to brighten and beautify homes with translucent, light diffusing glass by Mississippi. Plan now to add lustre to living for your clients with Mississippi Glass . . . the modern material that makes daylight a vibrant, interesting part of any home interior . . . in every room in the house. Send today. Request booklet, "Decorative Glass". Address Department 9.

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KEEP AMERICAN WORKERS BUSY BUY UNITED STATES GOODS

LARGEST DOMESTIC MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

BUSINESS

starts on p. 33

field. Plans: P. F. Assocs., Oak Park. WEST BLOOMFIELD: 400 houses, $15 million. Sponsor: Frankel Construction, Orchard Lake.

MISSOURI—ST. CHARLES: 150 houses, $3 million. Builder: Corvair Realty. ST. LOUIS COUNTY: 135 houses, $2.5 million. Builder: J. Massey Realty, Afton; 34 houses, $850,000. Builder: George Moellering Construction, Ferguson; 500 houses, $12 million. Sponsor: Alfred H. Mayer, Florissant. Plans: Ralph A. Fournier & Assocs.; 210 houses, $2.5 million. Builder: Durable Homes, Moline Acres.

NEW JERSEY—BAYONNE: Five garden apartments, $900,000. Sponsor: Ted Lough. Architect: Joseph Bronikowski. BUTLER: Garden apartments, $930,000. Sponsor: William Missonellie, Hawthorne. MONTVALE: 42 houses, $1,680,000. Builder: Montvale Woods, Fort Lee. Plans: O. Daniel Winter, Maywood. OCEAN: 25 garden apartments, $3 million. Sponsor: Arasam Corp. Architect: Walter Weiss, Newark. SOUTH BOUND BROOK: Garden apartments, $1 million. Sponsor: Van Steuben Corp., Architect: Anthony D'Elis, Martinsville.

NEW YORK—COMMACK: 69 houses, $1.5 million. Builder: Burr Ridge Estates; 64 houses, $1 million. Builder: W. G. Development Corp., West Islip. HUNTINGTON: 58 houses, $1.1 million. Builder: Roundtree Estates, Babylon. NEWBURGH: Seven garden apartments, $1.3 million. Sponsor: P A B Construction, Farmingdale. NYACK: Garden apartments, $1.25 million. Sponsor: Ivanhoe Apartments. Plans: Samuel Malkind, Nanuet. PIERMONT: Garden apartments, $1 million. Sponsor: Pierlan Corp. Architect: William Eli Kohn, Spring Valley. ROSEDALE: 40 houses, $1.2 million. Builder: Naiuth Realty, New York City. Plans: Saltzman Gleckman Assocs., New York City. SCHENECTADY: Six garden apartments, $1.2 million. Sponsor: Wade & Rose Lupe. SUFFERN: 87 houses, $2,175,000. Architect: Seymour Gurlitz, Nanuet.

OHIO—DAYTON: 16 townhouses, nursing home and three apartments, $3.5 million. Sponsor: Dayton View Terrace, Miami, Fla. Architect: Vogt, Ivers & Assoc., Cincinnati; 36 houses, $1.8 million. Builder: Rengers Construction; 81 houses, $2,187,000. Builder: Skeet Builders. GAHANNA: 400 houses, $8 million. Builder: Brookside Builders. NORTHFIELD: Condominium and townhouse apartments, medical building and swimming pool, $5 million. Sponsor: Nero Enterprises, Euclid. UPPER ARLINGTON: 200 row apartments, $6.4 million. Sponsor: Sheaf Construction, Columbus. Plans: Urban & Calabretta, Columbus.

PENNSYLVANIA—CHURCHILL: 37 houses, $1,295,000. Builder: Reicher Co., Pittsburgh. MOUNT LEBANON: 70 houses, $2,450,000. Builder: Jaret Co., Pittsburgh. WHITEMARSH: Apartment, $1.4 million. Sponsor: The Fox Companies, Jenkintown. Plans: Marvin I. Bornfriend.

TENNESSEE—BARTLETT: 193 houses, $3.5 million. Builder: Lynbar Construction, Memphis. Plans: Grief & Lawrence, Memphis. CHATTANOOGA: 42 houses, $1 million. Builder: Art Construction. MEMPHIS: 236 houses, $5,074,000. Builder: Evans Construction. RALEIGH: 93 houses, $1,441,500 and 92 houses, $1,426,000. Builder: Wallace Johnson.

VIRGINIA—LEESBURG: 92 townhouses, $1 million. Sponsor: Hallmark Construction, Washington, D.C. Plans: Bucher, Meyers Assocs., Silver Spring, Md. STERLING: 300 to 400 houses, $8 million. Builder: Sterling Park Development.

Leaders start on p. 58

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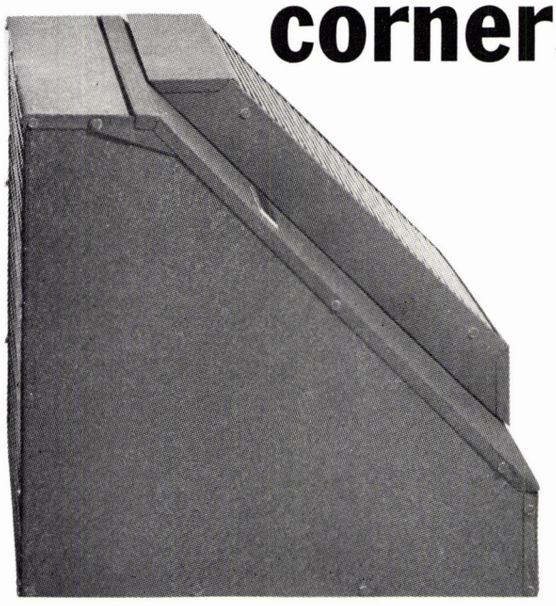
Circle 32 on Reader Service Card ➤

We don't mind cutting a few corners.



Not if it means a cooling system that makes homebuyers happier.

Luxaire influences people, by design. Remember the bulky look in condensing units? Well forget it. We've cut a few corners around here to take care of that little matter.

Meet the new Luxaire slant cooling unit, designed to make a lasting impression on homebuyers looking for the newest ideas around the house. And that's not the only beauty of it.

Our slant shape has an important function, too. It sends hot discharge air up and away. Your buyer doesn't get burned up over a parched lawn or dried-out shrubbery.

And there's no chance of hot air getting into a vicious circle — bouncing off the eaves and cycling back into the unit before it's had a chance to cool off.

Now please notice the big slanted lid. It opens wide, much like a trunk. This gives the installer plenty of elbow room to do his job faster, easier—and more thoroughly.

If you like the sound of things so far, wait till you hear the Luxaire in operation. With a rubber-cushioned compressor, all you get is a loud whisper.

For an even better slant on this patented new cooling unit, look up your Luxaire wholesaler in the phone book. He knows his business. And he's a good friend to have when it comes to prices, service and delivery of cooling.

Luxaire®

The C.A. Olsen Manufacturing Company • Elyria, Ohio

Circle 33 on Reader Service Card

"WE BUILT 'NASSAU BAY' FOR GRACIOUS LIVING...AND THAT CALLED FOR CONCRETE STREETS"

Says ***Jake Kamin,*** *President,*
Nassau Development Company, Nassau Bay, Texas

"A little more than 2 years ago, Nassau Bay was a 667-acre dream. The site, near Houston and adjacent to NASA's new Manned Spacecraft Center, was range land and virgin forest. Today, it's a thriving, planned community designed to take every advantage of its natural beauty. For the gracefully curving streets, we never considered anything but concrete. In fact, concrete and concrete products have contributed beauty, as well as solved construction problems, throughout the community. Concrete is used not only for streets but for underground conduits, marinas, docking facilities and in homes, commercial structures and decorative community walls as well."

Builders everywhere are finding that concrete streets are a sound investment in quality that helps sell more homes. Concrete's initial cost is moderate, upkeep cost is low. It offers true economy both for the builder and the taxpayer. More and more, the presence of concrete streets is an important factor in home-buying decisions. Write for free copy of *"The Design of Concrete Pavements for City Streets."* (U.S. and Canada only.)

PORTLAND CEMENT ASSOCIATION

Dept. A6-94, 33 West Grand Avenue, Chicago, Illinois 60610

An organization to improve and extend the uses of concrete, made possible by the financial support of most competing cement manufacturers in the United States and Canada

1 **Use crystalline glazed scored tile** in stripes carried down the wall and across the floor. Crystalline glazes have a rich, lustrous texture that gives the room a look of luxury for little extra cost. Tub wall and floor is scored design SD-4 in 350 Cr. Gray, 355 Cr. Pink and 365 Cr. White. Vanity top: SD-1, 350 Cr. Gray. Side Wall: 66 Hydrangea. Fixtures: American Standard Venetian Pink. Plate 156.

2 **Feature octagon floors and decorated tile** behind the tub to give a touch of individuality that impresses home buyers. Tile to the ceiling around the tub is a practical feature that costs very little more. Wall: 76 Sage Gray. Decorated tile: Galaxy K-3. Vanity top: Scored design SD-1, 76 Sage Gray. Floor 4¼" octagon. 390 Cr. Salt & Pepper with dots in 76 Sage Gray. Plate 147.

3 **Get dramatic color effects** by using small ceramic mosaics on walls, as well as on floors, in small bath and powder rooms. A sure way to put an immediate stamp of luxury on your home. American Olean has dozens of patterns and a wide range of colors from which to choose. Walls here are Cerulean, Emerald, Haze, Cobalt, Pepper White and Teal. Floor and vanity: Teal. Fixtures: American Standard Fawn Beige. Plate 158.

3 Ideas for bathrooms that will help sell homes

Ceramic tile bathrooms are regarded by home buyers as an essential feature in a quality home. Give your bathrooms extra selling punch with American Olean . . . the best tile made!

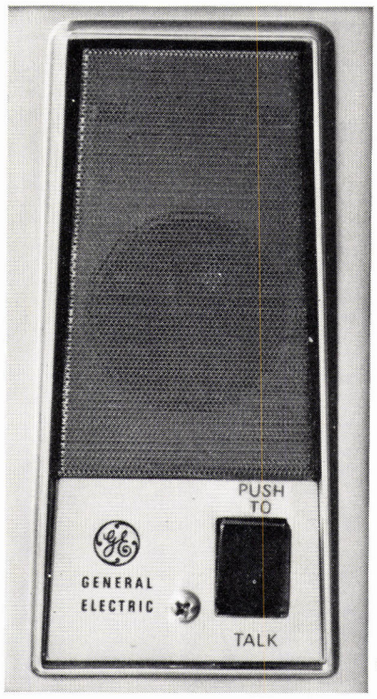
For lots more sales-building ideas, write for new booklet 470, "New Decorating Ideas."

CERAMIC TILE
American Olean

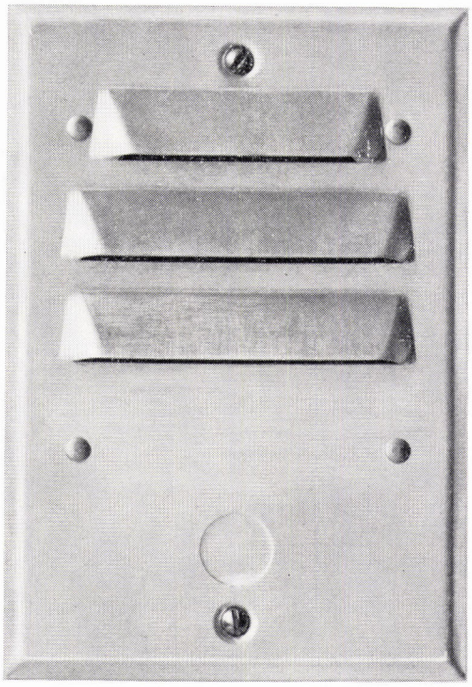
AMERICAN OLEAN TILE COMPANY—EXECUTIVE OFFICES: 2000 CANNON AVE., LANSDALE, PA. • MANUFACTURERS OF GLAZED TILE, CERAMIC MOSAICS AND MURRAY QUARRY TILE • A SUBSIDIARY OF NATIONAL GYPSUM CO.

Circle 34 on Reader Service Card

Which intercom door speaker will really help sell a home?

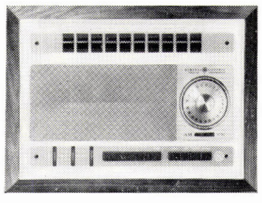


This one?



Or this one?

You don't have to be an architect to know that the new General Electric intercom door speaker adds a touch of elegant styling to the entrance of any home. A prospective home buyer's first impression is an important one, and G.E. has recognized this in bending over backwards to design products that have a smartly styled quality look. No cheap stamped-metal appearance. And that's not all.



Witness the G-E deluxe FM/AM master station to the left. Handsome, isn't it? Mounts flush with wall. Nothing protrudes to catch dust and grease. The elegant wood frame blends with any decor.

Compare these looks with any other intercom system made. And while you're at it, compare the performance, the service and the price. Complete General Electric FM/AM systems start as low as $85.

For more information, contact your General Electric Major Appliance Distributor or write: General Electric Company, Built-In Electronic Products, 1001 Broad Street, Utica, N.Y.

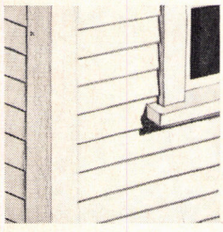
Radio Receiver Department, Utica, New York

GENERAL ELECTRIC

There are plenty of so-called "maintenance-free" products on the market

but none so completely maintenance-free, so completely appealing to consumers as the new Bird product line.

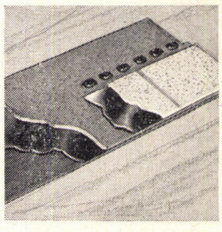
Bird solid vinyl siding won't peel, dent, pit, or rust. Won't rot or feed termites. Won't show scratches. Won't conduct lightning. Won't need paint, patching.



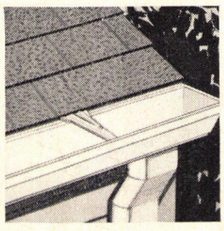
Will save homeowners fix-up bills, add resale value. Guaranteed for 20 years by Bird.

Bird solid vinyl shutters have all the no-maintenance qualities of Bird solid vinyl siding (above). Easy to install. With color matched screws.

Bird Architect® Mark 25 shingles are hurricane-proof. New design (no cutouts) gives homes the long-line look. New colors to choose from. Jumbo granules 290 lbs. per square for extra life, richer texture. Guaranteed by Bird for 25 years.



Bird solid vinyl gutters and downspouts can't rot, rust, peel. Won't show scratches. Won't be affected by rain, melting snow, rotting leaves.



For information about Bird product line
BIRD & SON, inc., Box HH-65
East Walpole, Mass.
(Bird products available East of the Rockies only)

Please tell me about
- ☐ Bird solid vinyl siding
- ☐ Bird solid vinyl shutters
- ☐ Bird solid vinyl gutters, downspouts
- ☐ Bird solid vinyl roof edgings
- ☐ Bird Architect Mark 25 shingles

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County ..... State ..... Zip .....

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Bird & Son, inc.— The Classic Name in the Building Field

Circle 36 on Reader Service Card

Got dirt to move?

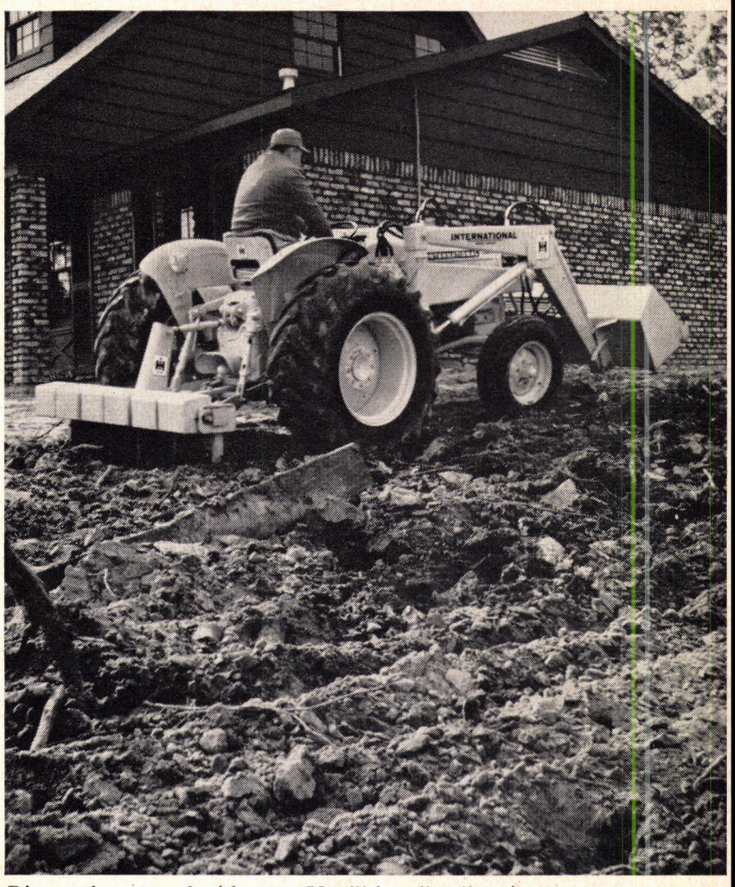
Now there's a sixth International compact to slug out jobs in the tight spots

New 2424 tractor outmaneuvers every other tractor in its class: • Turns in an 8.5′ radius • 70″ wheel base • Hydrostatic power steering • Fast reversing • Differential lock

Ask your dealer for a demonstration of the 2424—or any of these other husky International earth-moving rigs. 3414 loader: 43.5 hp. Torque converter with Hydra-Shuttle® transmission. 2404 tractor: 47 hp standard and Lo-Boy® models. International Cub® tractor: 13.5 hp. Versatility for small utility jobs. T-6 crawler tractor: 52 hp gas, Diesel optional. T-340A crawler tractor: 47 hp gas, Diesel optional. Set the date for a test on your toughest job—soon. There's a "pay as you earn" finance plan worth investigating, too. International Harvester Company, Chicago, Illinois 60601.

International Harvester

the people who bring you the machines that work

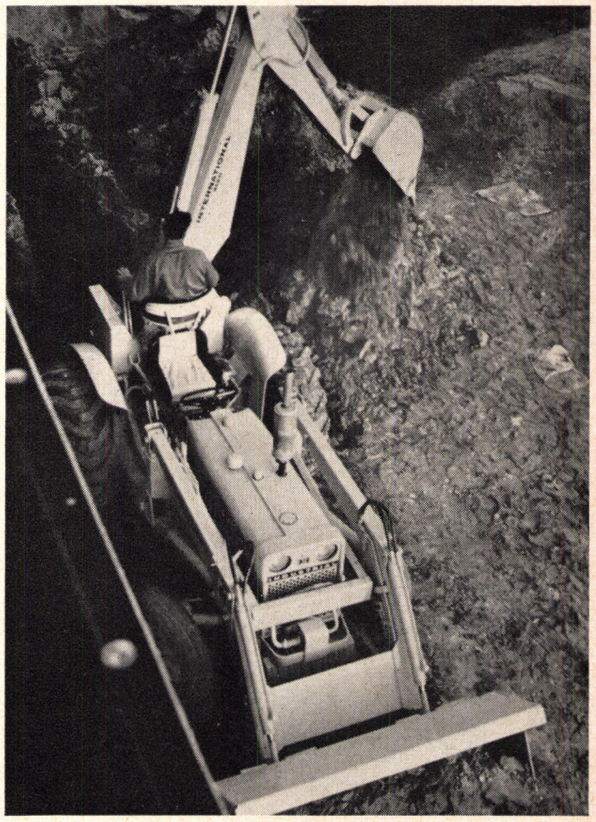


Rip up the ground with ease. You'll handle all assignments, raw site to finish grade, with the 2424. Proven 4-cylinder engine. Manufacturer's rating: 47 hp (gasoline), 43.5 hp (diesel). Delivers big power for scarifying, lifting and digging; smooth power for precision grading.

Grade to a fraction of an inch. Automatic draft control makes a pro of any operator. 2-way sensing 3-point hitch adjusts itself up or down instantly for a perfect job.

Load up to a ton—no sweat. Full-length subframe carries loading shocks direct to rear axle carriers. Protects engine and power train. Visibility? Unbeatable. Towers are 6½″ lower than earlier models.

Snake this scraper through the narrows, around the corners, maneuverability is the payoff in the 2424. Pick your transmission: 8 speeds forward, 2 reverse—or optional 8 and 8.



Dig a big bite in comfort. Pick your backhoe: 16′ reach with 13′ digging depth, or 17′ reach with 14′ depth. Only split console on the market. Makes plenty of room for legs and feet. No hot housing to straddle.

Step by step, wood demonstrates its all-around beauty and versatility in these stairs, beamed ceiling, banisters, floors and walls. Paneling conceals built-in storage space. Architects: Skidmore, Owings & Merrill.

Build well to sell well . . . with WOOD

When high quality is important, so is wood. When cutting construction time is important, so is wood. When providing the most-wanted features in your home is important, so is wood.

This handsome ski lodge is both a shelter and a showplace. Its board and batten exterior, overhang, and balcony complement the rugged beauty of its wooded setting. Owner: Dr. Sidney Weiss. Architect: Joseph Stein, A.I.A.

The quality features that sell your homes faster are made of wood. Builders and buyers agree: wood is best, all around. Builders find wood easily workable, and easily available.

Buyers find wood truly enjoyable in so many ways, for so many years. In wood siding, paneling, flooring, beams, and built-ins . . . there's a charm that is wood's alone; and, a value that is wood's alone. Your prospective buyers are well acquainted with and highly appreciative of wood . . . from their own experiences, or from what they have seen and read in NLMA's full-color, national magazine advertising.

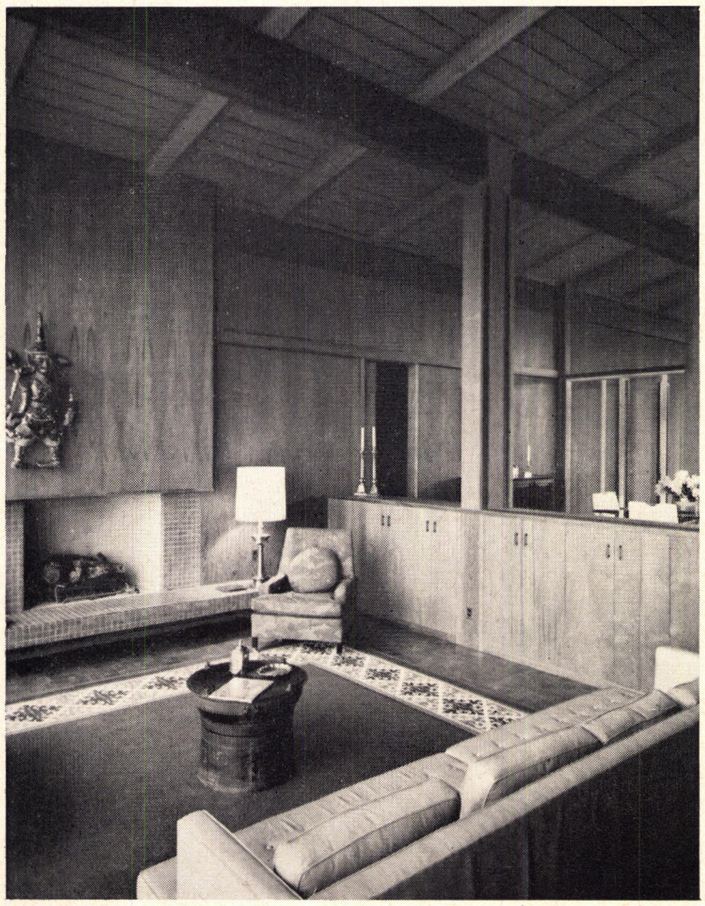
There's one more important reason for building with wood. With the UNICOM system of modular construction, wood saves you more time than ever, and more money than ever, on the site. Precut and preassembled sections go into place faster . . . in any style home.

For more information on UNICOM, and how you can build well to sell well with WOOD, write:

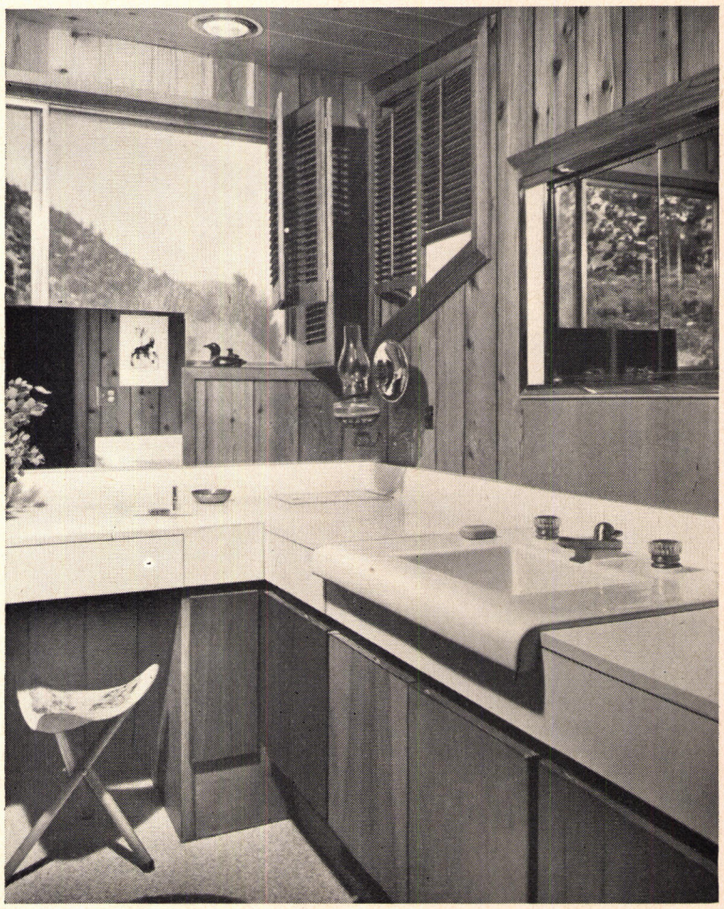
NATIONAL LUMBER MANUFACTURERS ASSOCIATION
Wood Information Center, 1619 Massachusetts Ave., N.W., Washington, D.C. 20036

nlma

It's built to sell when it's built of **wood**



The enclosed cabinet room divider between living room and dining area accentuates the massive beams which run the length of this wood home's many-sided beauty. Developer-Builder: Simonds & Stringer, Inc. Archt: Ian MacKinlay.



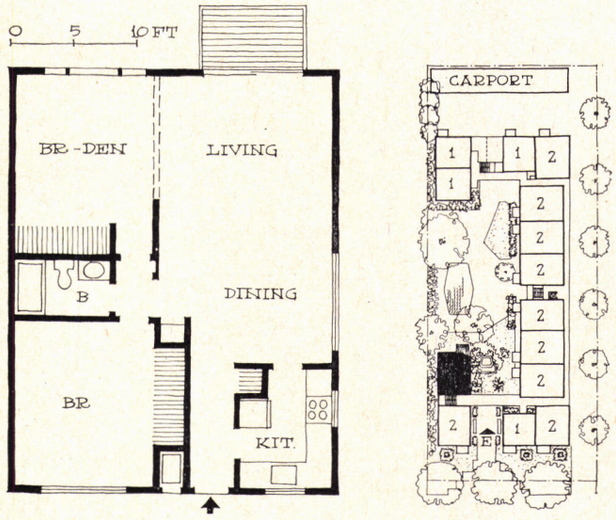
Bathrooms in today's homes don't have to have the antiseptic look of hospitals. Here, wood paneling, cabinets and shutters are used imaginatively for this charming effect. Architects: McFarland-Bonsall, A.I.A.-F.A.I.A.

John Gorman

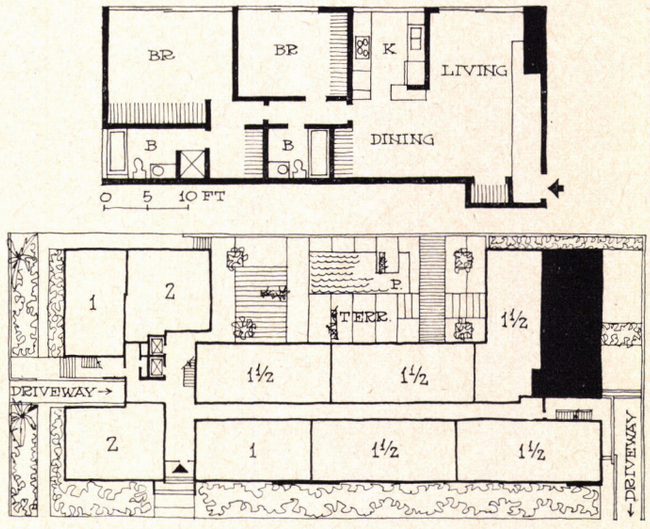
REGULAR SPACING of decorative roof columns, plus vertical detailing on balcony railings and fascia, increases facade's apparent height.

Julius Shulman

STAGGERED PLACEMENT of projecting balconies and slot windows breaks up vertical lines, accentuates length.



SIX SEPARATE BUILDINGS, all under one roof, contain 32 units, 11 with the two-bedroom plan shown. Project is wrapped around recreation area.



SINGLE U-SHAPED BUILDING has 30 apartments. Most of the 21 two-bedroom units have a view of the pool or a public park across the street.

Two three-story garden apartments with unusual detailing

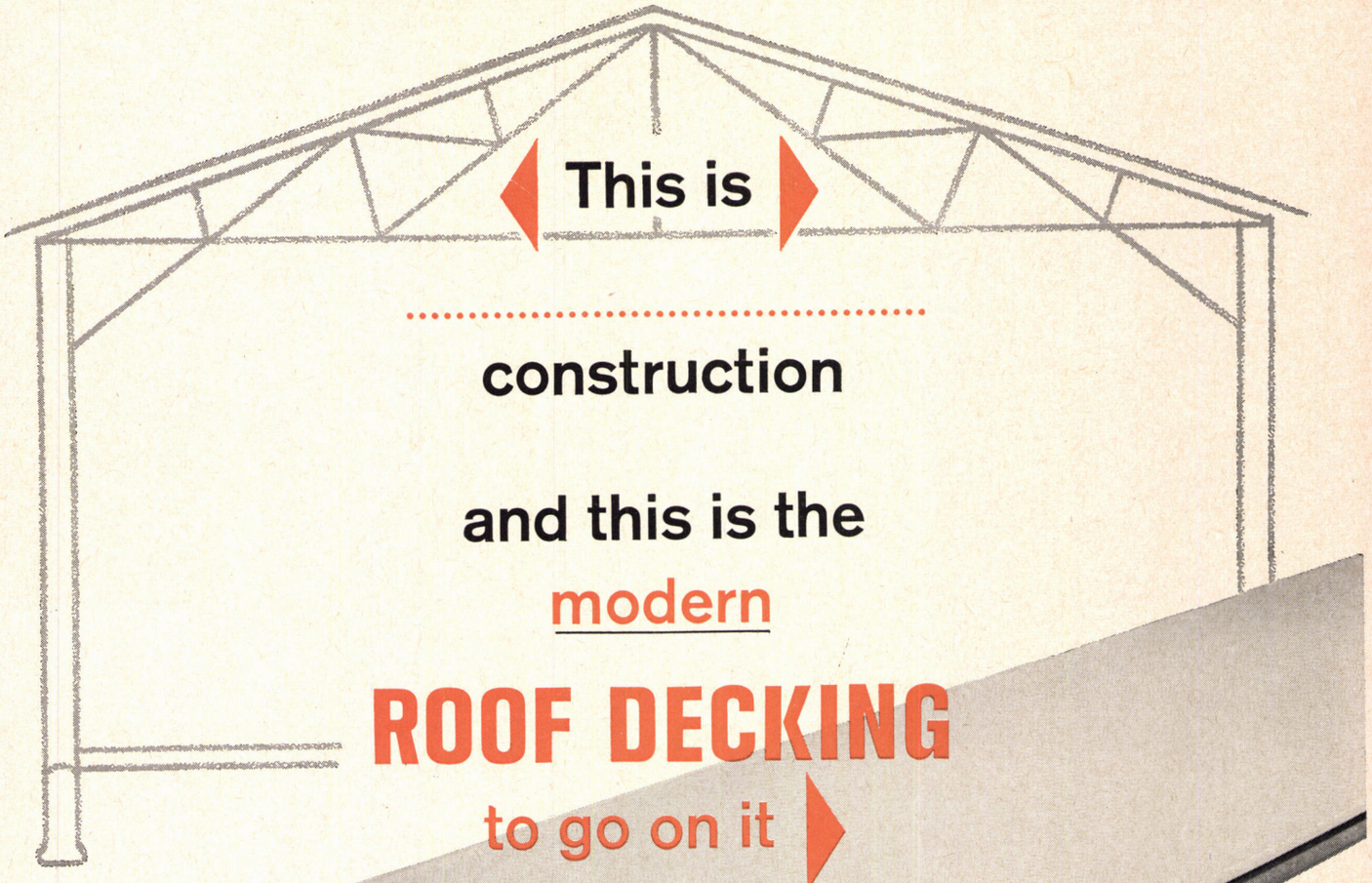
Both of these projects are contemporary, yet each has its own distinct character.

The apartment at left, designed by Architect Paul Wilson Bosholm for a one-acre site, has an imposing three-story entrance passage leading through to a pool and putting green. Open stairways, decks and bridges connect the upper two levels. Most units have views of the recreation area or the nearby hills. There are 43 parking spaces under the side and rear units and in an adjacent carport. Rents range from $145 for a 700-sq.-ft., one-bedroom unit to $165 for an 850-sq.-ft., two-bedroom apartment. Features include fireplaces and individual storage rooms and heating systems. This Palo Alto project is fully occupied in a county which has an average vacancy rate of 20%. Contractor: Garth O. Wilkinson. Developer: Im-Pac Co.

The apartment at right, designed by Architect Henry H. Hester, has a one-story street entrance sheltered by a projection similar to the three balconies. Because of the small site (less than a half-acre), parking is in two subterranean areas. Rents are from $195 for an 880-sq.-ft., one-bedroom unit to $425 for two 1700-sq.-ft., three-bedroom units. Builder: Mabie & Mintz.

Letters start on p. 58

HOW WELL DO YOU KNOW YOUR BUILDING?



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and this is the

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in four thicknesses and for spans up to 60" o.c.

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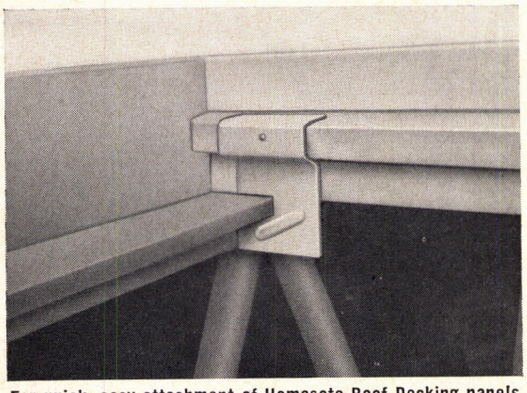

For quick, easy attachment of Homasote Roof Decking panels to steel frame, special profile clip hooks to joist and is nailed onto tongue of roof deck panel.

On metal frame building you speed completion time with Homasote roof decking. In one application you have a structural deck, constant insulation and an interior finish that needs no decorating. Attachment is simple—nail directly to wood nailers on the frame—or fasten to frame with special Homasote profile clips. Ceiling-side finishes are available in color-coated white, white kraft with vapor barrier, vinyl film, white polyethylene film or fire-retardant paint. Approved by B.O.C.A., I.C.B.O. and S.B.C.C. Get to know more about Homasote Roof Decking on all types of roofs: bonded built-up, metal-frame, conventional and A-frame sidewalls . . . write for technical bulletins to Dept. F-2.

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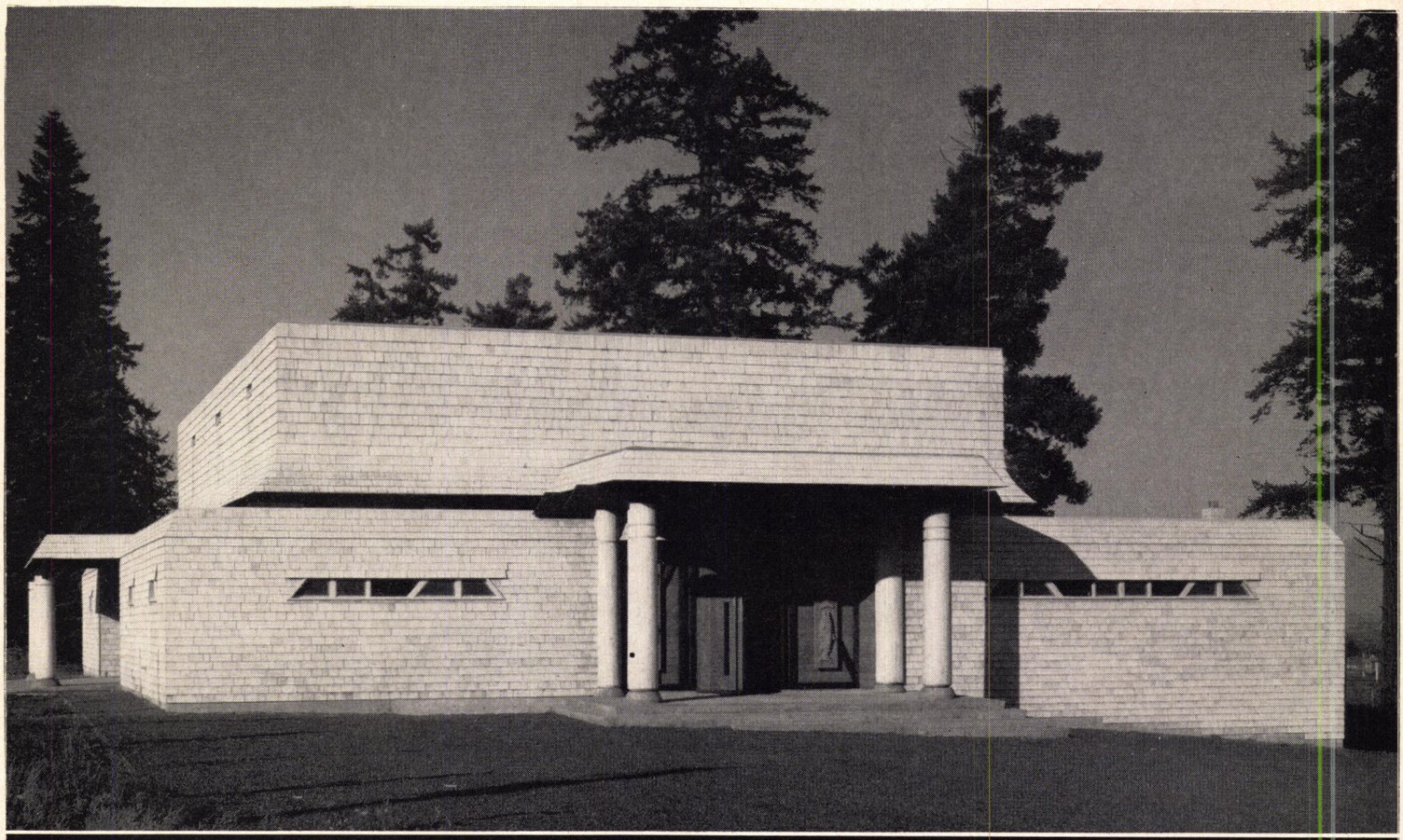
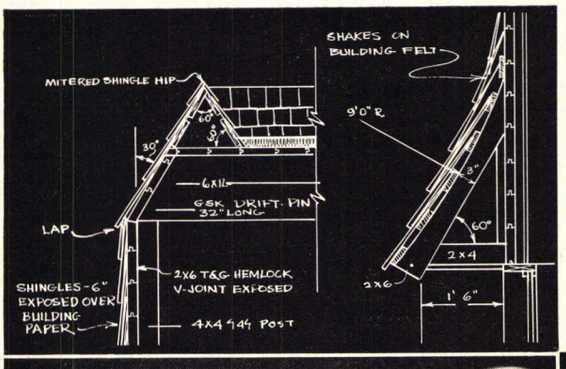


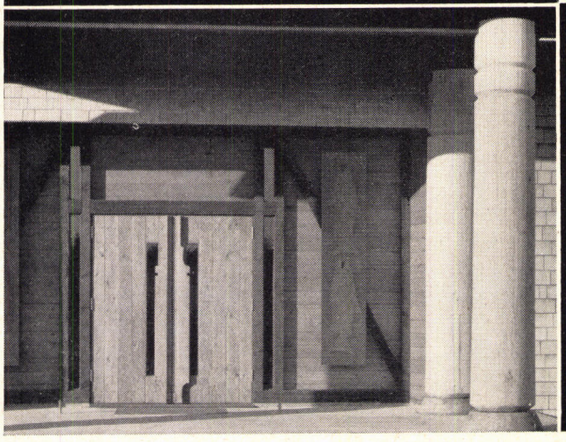
They'll talk your language:

Red Cedar Shingles and Handsplit Shakes

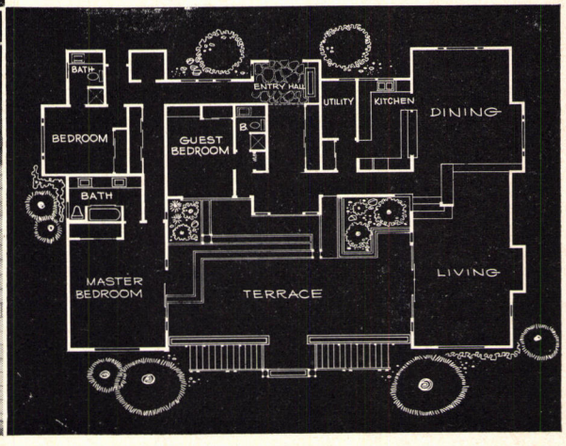
Whether you are building a dignified-but-rustic Indian community hall or a posh lakeside vacation home, you'll have no trouble getting the roof to look exactly right — if it's Red Cedar Shingles or Handsplit Shakes. Consider the selection you have. All the way from highly textured split shakes to smooth sawn shingles. In varying lengths and thicknesses. And aside from good looks, there isn't another roofing material available that *combines* all these practical, salable advantages: light-weight but strong, durable in the worst weather, dimensionally stable in spite of temperature and humidity variations, highly efficient insulation. Properly applied, a red cedar roof is never a call-back problem. For any information on these products, write Red Cedar Shingle & Handsplit Shake Bureau, 5510 White Bldg., Seattle, Wash. 98101. (In Canada: 1477 West Pender St., Vancouver 5, B.C.)



This Swinomish Indian Community Hall in northern Washington carries Certi-Split handsplit-resawn shakes (24" x ½"- to - ¾" with 9" to weather) on upper sidewalls, and Certigrade No. 1 shingles, 16" long with 6" to weather below. Architect was Henry Klein. Builder was Dawson & Strengholt.



The Tahoe vacation house designed by architect James D. Morton is roofed with Certigrade No. 1 shingles, 16" long, with 4¾" to the weather. The builder was Ernest Hoxsie.



Any of these labels under the band of a bundle of Red Cedar Shingles or Shakes is your guarantee of *graded* quality. Cuts waste of material and lost time on the job. More than 250 mills subscribe to our standards in order to use these labels. And our inspectors run constant quality checks, both at the mills and jobsites. These labels are good profit insurance. Don't pay for less.

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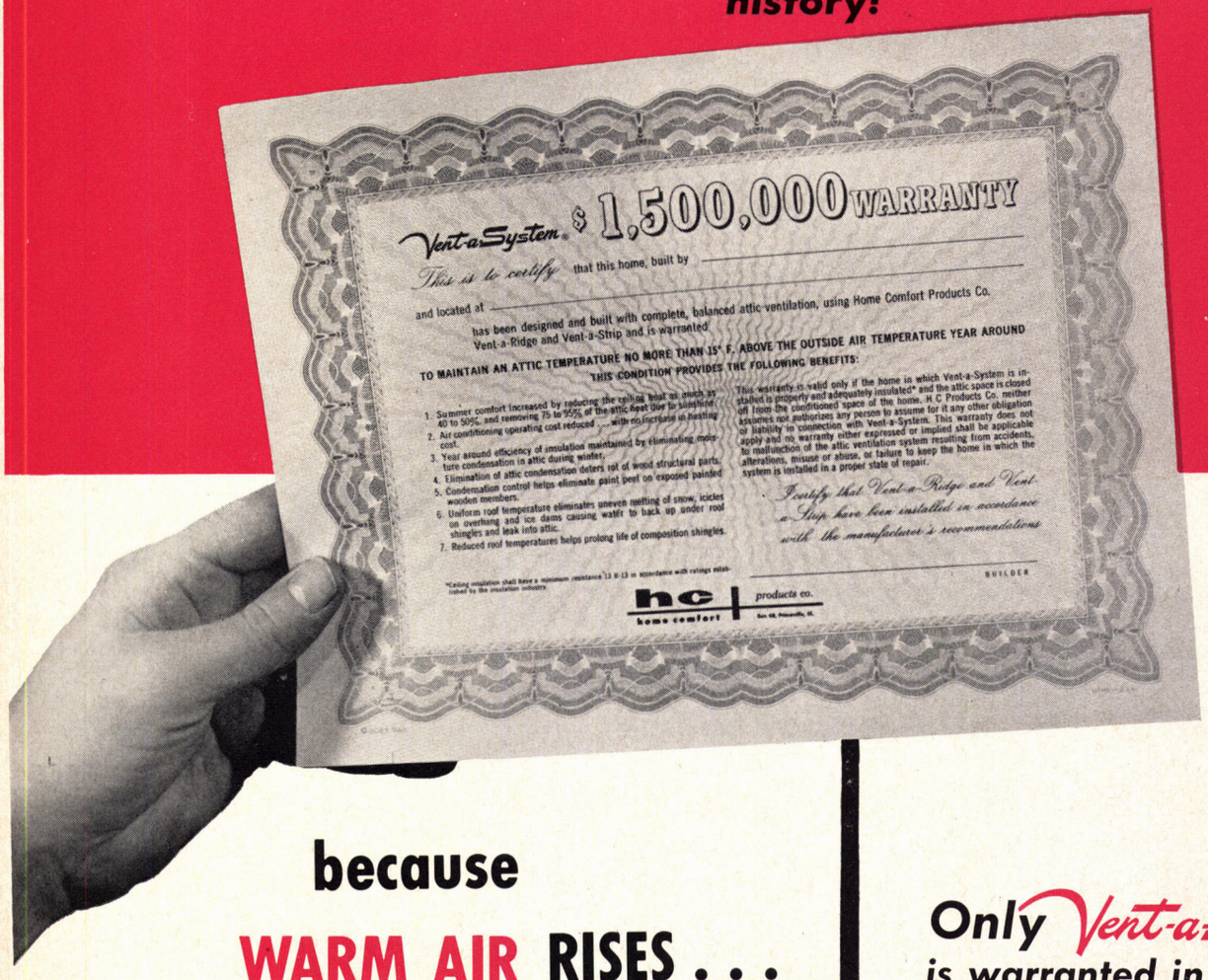
NOW! FOR THE FIRST TIME in construction history!



because WARM AIR RISES . . .

V.A.R. Vent-a-Ridge® AT THE TOP

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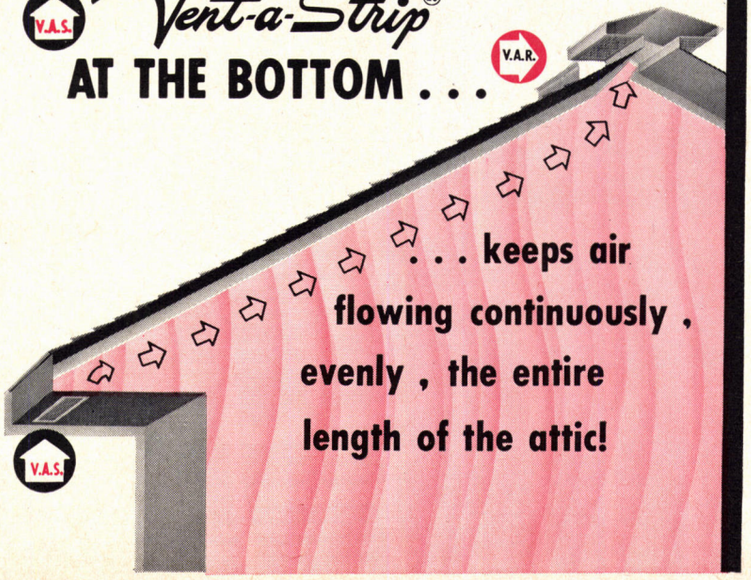
V.A.S. Vent-a-Strip® AT THE BOTTOM . . .



Only Vent-a-System® is warranted in writing to keep attic temperatures low enough to reduce summer ceiling heat by as much as 40 to 50% . . . and to eliminate winter condensation! This $1,500,000 written warranty specifically states that by keeping attic temperatures within 15° of outside air, Vent-a-System:

- Increases summer comfort.
- Reduces air conditioning costs.
- Eliminates the condensation that can cause wood rot and paint peel . . . and wet, inefficient insulation.
- Maintains a uniform roof temperature . . . to avoid uneven melting of snow, icicles on overhang, ice dams, leaks from water backing up.
- Prolongs roof shingle life by reducing roof temperatures.

THIS WRITTEN WARRANTY STATES THAT

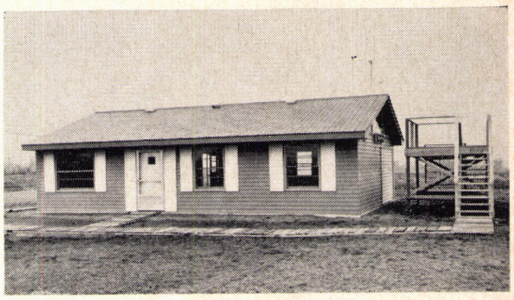
Vent-a-System®

KEEPS ATTIC TEMPERATURES WITHIN 15° OF OUTSIDE AIR!

No other ventilating system does!

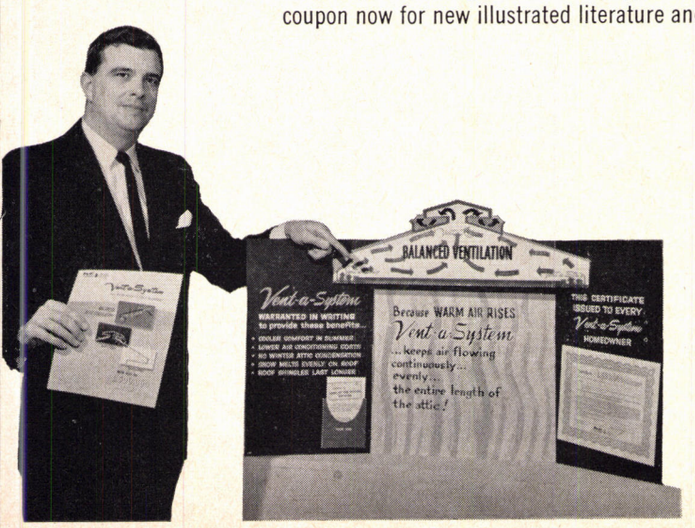
Only Vent-a-System® provides BALANCED ATTIC VENTILATION

In the exclusive Home Comfort Products Co. Research Residence, test after test proved that when 50% of the vent area is in continuous Vent-a-Strip and 50% in continuous Vent-a-Ridge there is constant and uniform air flow over attic surfaces. Even with no breeze, the natural rising action of warm air takes it out the top through Vent-a-Ridge . . . replaced by fresh air entering through Vent-a-Strip.



Only Vent-a-System® helps you sell homes

with a written warranty of balanced attic ventilation . . . plus special customer literature that can be custom-printed for **you** . . . plus display material, advertising mats, radio copy — a complete merchandising package. Send coupon now for new illustrated literature and complete facts.



H&H

Please send new literature on Vent-a-System — plus other information on proven Home Comfort Products:

☐ X-Panda shelf for closets ☐ Louvers & shutters

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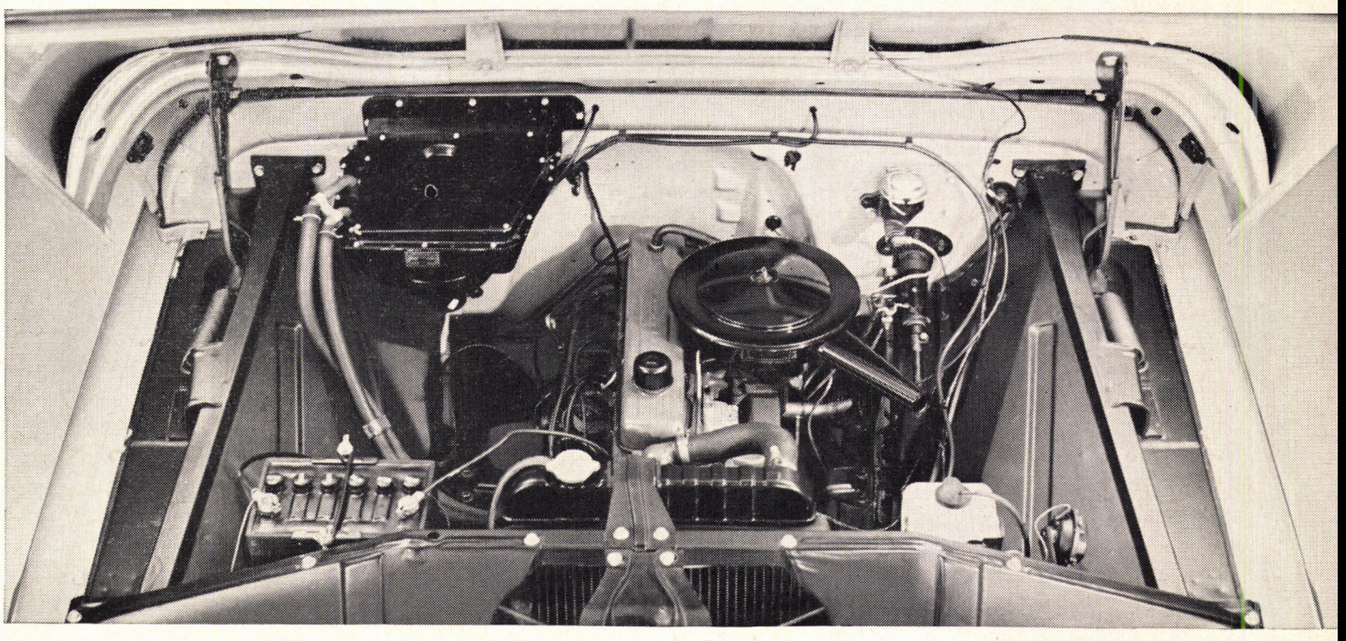
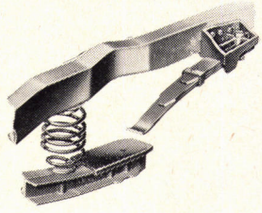
CHEVROLET workpower



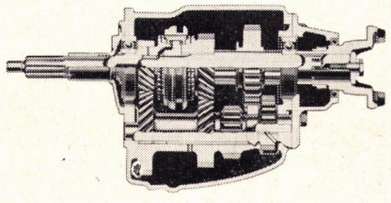
High Torque Engines—Standard equipment is the 140-hp 230 Six, an engine that gives a work-proved balance of power and economy. But if you want even greater economy in a ½-ton truck, you can order a special economy carburetor and rear axle with 3.07 gear ratio. This combination can cut fuel costs significantly with only a small decrease in high-speed power.

But, if more power and performance is what you're after, order the big 170-hp 292 Six or the 175-hp 283 V8.

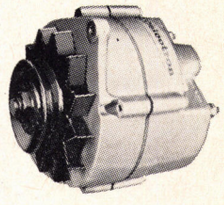
Whichever your engine preference might be, there are several pieces of power plant equipment you'll want to consider ordering. Among them are a dual air cleaner system with oil-bath pre-cleaner for use in dusty areas; a positive engine ventilation system and extra fuel filter to increase engine life; a wide selection of engine governors; and an electric tachometer.



Auxiliary Rear Springs—For ½- and ¾-ton trucks you can order special cantilever auxiliary springs to supplement the regular coil springs under temporary overload conditions or during hard jouncing on rough roads. They help to reduce bottoming and sway so that the truck is easier to control under severe conditions. For 1-ton trucks, rear springs are offered with regular leaf-type auxiliaries.



Transmissions—Half-ton and ¾-ton models feature a 3-speed Synchro-Mesh transmission with steering column control lever as standard equipment. To suit your particular requirements, you can specify a 4-speed or a 3-speed wide-ratio Synchro-Mesh transmission or an automatic Powerglide. For ½-ton trucks you can even specify an overdrive on the standard transmission to give you extra operating economy.

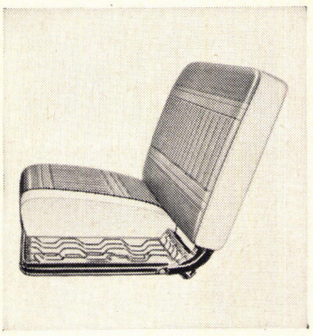


Delcotron Generators — All light-duty Chevy trucks have modern Delcotron generators of 37-ampere output as standard equipment. For increased electrical needs—extra lighting, 2-way radio, electric winches—you can order higher output units in capacities up to 62 amperes. All have high output at low engine speeds to keep batteries well charged even in service calling for a lot of idling time.

CAN BE TAILORED TO YOUR JOB!

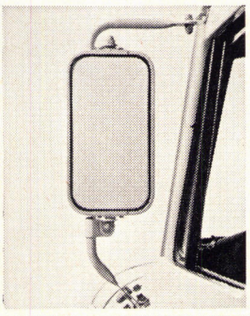
Extra power . . . extra load capacity . . . extra convenience . . . extra comfort . . . you can get them all from the big choice of equipment offered for light-duty Chevy trucks!

In the long strong line of light-duty Chevy trucks you're sure to find the size and type of truck that's right for your kind of work. But just as important, you can order many items of equipment that will tailor your Chevy to your own special needs. Just a few popular selections are shown here, but there are many others, such as Positraction rear axles, power brakes, Soft-Ray glass, towing hooks, tachometers and heavy-duty shock absorbers. When you order your new Chevy, check over the full list of extra equipment with your Chevrolet dealer. . . . Chevrolet Division of General Motors, Detroit, Michigan.



Full-Depth Foam Seat— To ease long hours of driving, you can order a seat with a full-depth foam cushion. It's available with standard vinyl upholstery or with luxurious custom nylon-and-vinyl upholstery. Whichever way you get it, you'll be pleased with the extra riding comfort.

Auxiliary Seat for Panel Models—To accommodate a passenger or driver's helper, an auxiliary seat which folds forward out of the way when not in use can be specified. Construction and upholstery materials are of the same high quality as those of the standard driver's seat.



Rearview Mirrors — Both right and left side mirrors can be ordered in a variety of sizes and types. In addition to circular mirrors, there are the popular "West Coast" type mirrors such as the one illustrated. These large rectangular mirrors are available in either 6″ x 11″ or 7″ x 16″ sizes.

Full-View Rear Window—For all cab models you can order an oversize rear window to give you greenhouse visibility in all directions. With the Full-View rear window you get well over twice the glass area of the standard rear window for an extra measure of driving ease and safety. You can also specify other window equipment including Soft-Ray glass to reduce heat and glare inside the cab, and metal frames to protect the glass in the side windows.

THE LONG STRONG LINE CHEVROLET

Circle 42 on Reader Service Card

Standards and codes . . . loans . . . foreclosures

Standards and codes

H&H: I was interested in news of Uncle Sam entering the building code picture [NEWS, Apr.]. The federal government seems to be determined to enter the code picture in more ways than one. The National Bureau of Standards has plans for setting up a commodity and system standards approval, and now HHFA appears to be entering in all phases of building code work, including zoning.

This is not to say that some guidance and motivation should not be directed to the code industry. The national building codes have made a half-hearted attempt toward unity but have never made any inroads for fear of losing their own identity.

The move by the federal government to enter the building code and zoning regulation area should be sufficient to shake the national code organizations into reality. It has been proven by past experience that when the federal government enters a field such as building-code regulation more confusion and chaos will come from their action than any good.

The Bureau of Standards claims the local building code official would be inclined to accept immediately any innovation or new product system without hesitation, merely because it would be endorsed by SIUSA. It is obvious that the Bureau knows absolutely nothing about local code organization temperament.

The system generally—that is, a central approval agency for new products and materials—is good and should be pursued by the national proprietary code organizations on an independent private basis.

LOUIS J. KRUEGER, architect
Topeka, Kan.

H&H: Your recent editorial on standards [Mar.] apparently refers to a report of the panel on engineering and commodity standards of the Commerce Technical Advisory Board. The panel was chaired by Dr. Francis L. LaQue, vice president of the International Nickel Co., and was composed almost entirely of standards experts from industry and from private organizations. The Secretary of Commerce is now considering the recommendations of the panel.

Among the panel recommendations was a proposal for creation of a new national standards coordinating body. The panel made it clear that the *development* of standards should continue to be done by the many private organizations currently performing this task in the United States. The proposed new Institute for Standards would *coordinate* international standards activity and *promulgate* standards submitted to it as U.S. standards.

The panel further recommended that the commodity standards program of the Department of Commerce be continued, as long as there are industry groups which desire to use this mechanism of promulgations of industry standards.

Nowhere in the report of the panel is there any suggestion that the proposed Standards Institute could rescind the right of manufacturers to write their own standards.

J. HERBERT HOLLOMON,
Assistant secretary of commerce
Washington

Developers' loans

H&H: Please advise if the new rules for Small Business Investment Companies [NEWS, Apr.] put any limit on developers' loans and whether the one-third limit applies to all types of developers' loans.

SOL D. KUGLER
Globe Mortgage Co.
Hackensack, N. J.

SBA *can use* SBIC*'s to finance a developers capital costs—bulldozers, etc.—but* SBIC*'s are limited to a one-third investment in real estate development.*

SBIC*'s cannot just hold property, nor can they invest in property that requires just a little management. They can invest in real estate developers and builders.*

Funding a developer creates problems, however. The SBIC *investment must be at least five years. Obviously, any* SBIC *will require repayments of 20% a year* plus *returns from parcels that are sold by the developer to builders. Yet usually a developer finishes and sells off a tract within two years. And most developers finish one tract before undertaking another. But* SBA *cannot permit an* SBIC *to make a less than five-year loan.* SBA *can permit an* SBIC *to invest in a developer if—"using good judgment and good faith"—it appears the developer will undertake another project before his first is fully sold off, or if any repayments beyond 20% per year are put in escrow to be used for acquiring the next tract.*—ED.

Forecasting foreclosures

H&H: There are, three factors that should be considered before projecting foreclosure factors [NEWS, Apr.] too far into the future.

First, a study should be made of the number of married couples reaching the age of 23 to 24 years from 1958 to 1964.

Second, plot a graph of the increase in apartments available beginning with 1958.

Third, if available, determine the number of properties on which there were FHA or VA loans with initial equity of 5% or less, on which, at time of foreclosure, there were one or more liens for home improvements.

From our experience in the Cleveland area, the first two items have much to do with the foreclosure rate. We find the third item present in one out of five foreclosures.

There is one other part of the foreclosure picture, true in Cleveland. From the time an owner is advised that the lender is foreclosing, it takes 12 to 18 months to complete the foreclosure. If the owner's payments are $110 a month, it can readily be seen that he can walk away from the property with $1,320 to $1,980 in cash. In as much as his property would not sell in the open market for as much as his mortgage balance, this money represents a nice windfall.

I am of the opinion that a veteran could be held for deficiency judgment if his property did not sell for enough to pay off his mortgage indebtedness. I have yet to hear of such a judgment being taken locally. If word went around that such a judgment could be taken—and a few of them were taken—it would make other owners realize that they would be better off to stay with their homes.

F. ROSS ELLIS, president
Ross Ellis & Assoc.
Lakewood, Ohio

Selling foreclosures

H&H: The following is a whimsy evoked by George Holstein's milestone in house merchandising [NEWS, Apr.].

Warn 'Em Barnum–

Oh, give me a home on the compacted loam
Where the windows are missing or shattered
And the flags as they fly seem to force me to buy.
Possession is all now that matters.

How often at night will I offer to fight
Or suggest other forcible strictures
To the meddlesome bore who invested next door
And is eyeing my wife and my fixtures.

Home, home on the tract
Where I'm secretly irked by the fact
That the drawers that I snatched
In our house are mismatched
And from two blocks away they were packed!

T. DUNCAN STEWART, builder
Corona del Mar, Calif.

Errata

Dan Dowling's cartoon, "The Landscape Painter" [NEWS, Apr.], was mistakenly credited to the *New York Herald Tribune* which first printed the artwork. Publishers Newspaper Syndicate holds the copyright and distributed the cartoon.

Our apologies to Architect Nicholas M. Roman & Assoc., AIA, for misspelling its name in the Mentor, Ohio, apartment story [Apr.].

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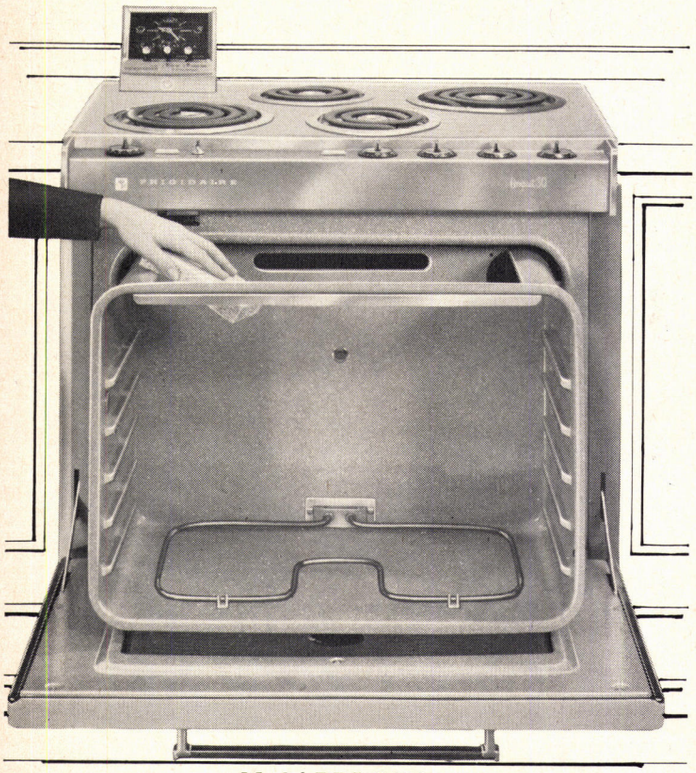
The only cost that matters is cost installed.

That's why you can offer Frigidaire Extra Value... like this new Compact 30 Range with Pull 'N Clean Oven ...and still come out ahead!



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Instant installation pays off! Saves time, cuts cost. Unit shipped completely assembled with generous 48″ length of supply cable attached. Just make simple electrical connection, slip range into counter opening, tighten four thumb screws, and it's done—that fast! Wide overlaps, adjustable end caps on control panel hide irregular cutouts.

Makes your kitchens look bigger. Gives homemakers more usable counter space, too. Range only 30″ wide, yet has family-sized oven. Great for kitchens where inches count!

Sells itself in seconds! Oven slides out like a drawer for stand-up cleaning. Women can see instantly that the new Frigidaire Compact 30 with famous Pull 'N Clean Oven cleans like a dream—all over. They'll like the big window in the oven door, the elegant General Motors styling, and color choice, too.

That's what we mean by Frigidaire "Extra Value." Offer it in your homes, economically, thanks to low *cost installed!*

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PRODUCT OF GENERAL MOTORS

GOLDEN 50 ANNIVERSARY

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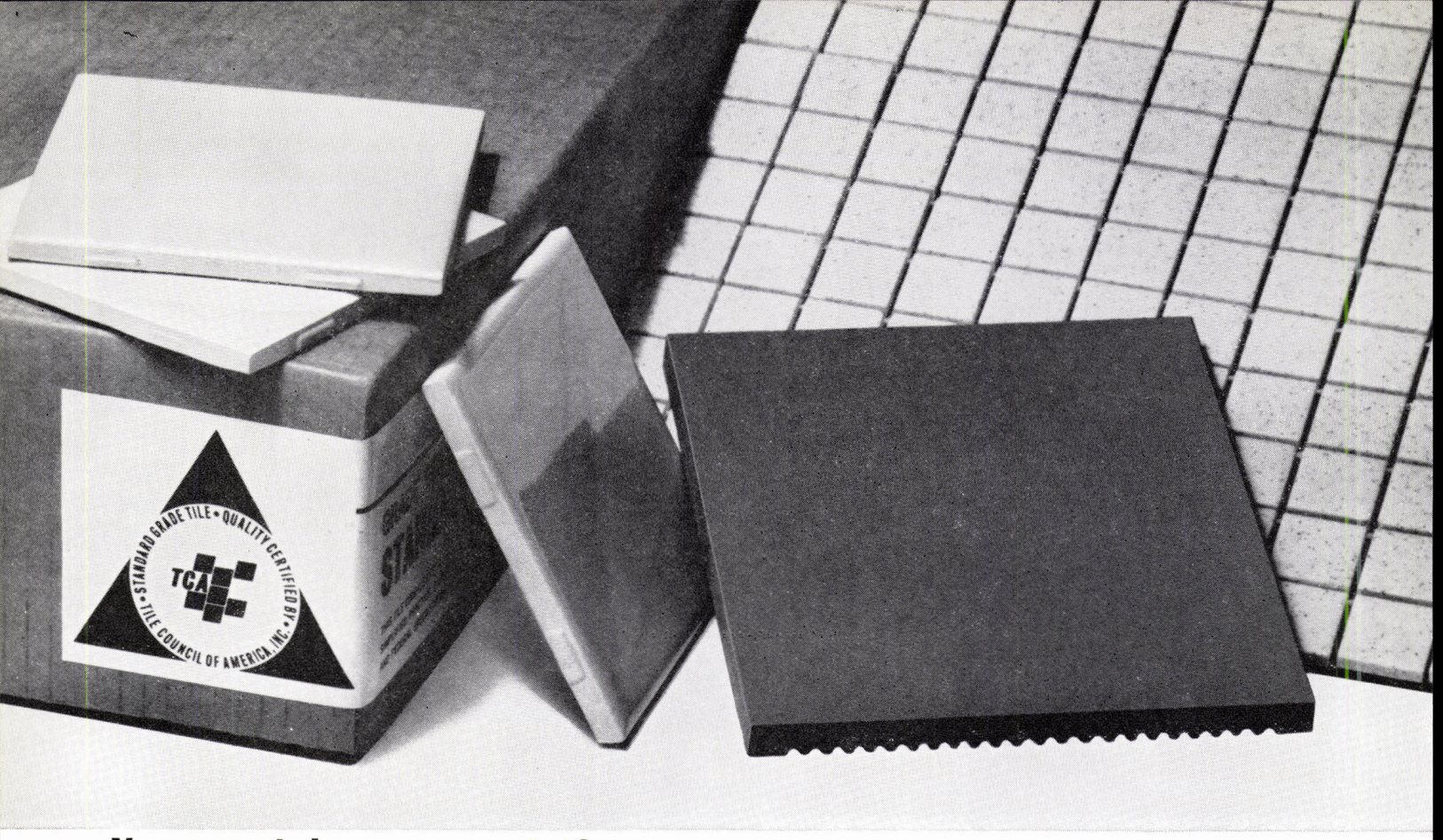

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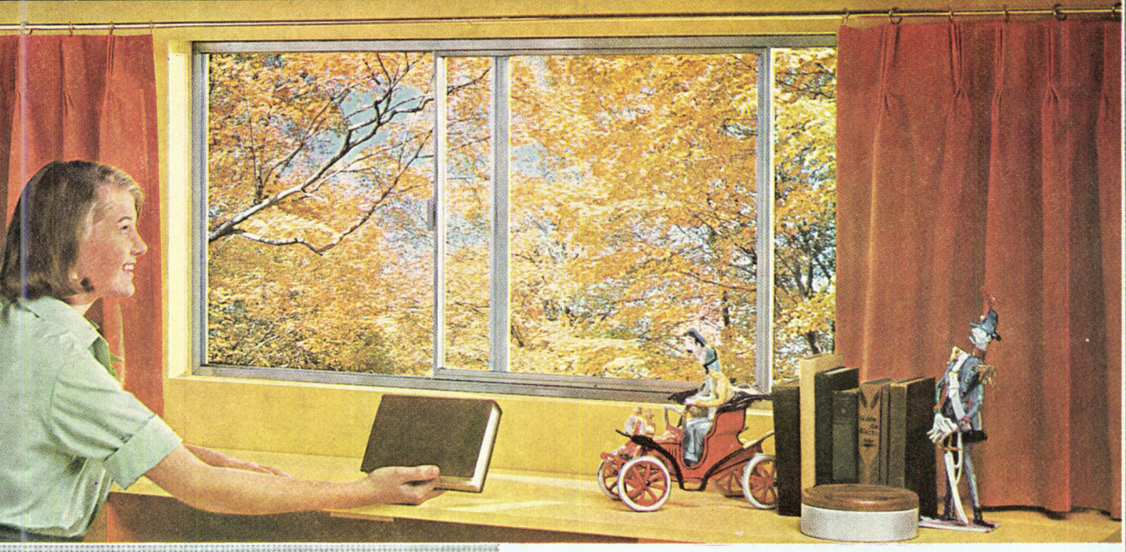

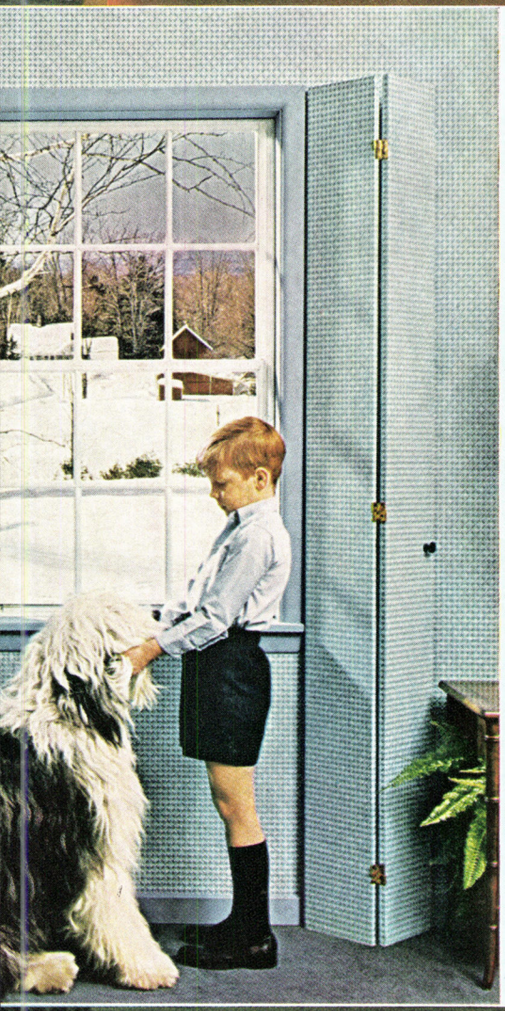

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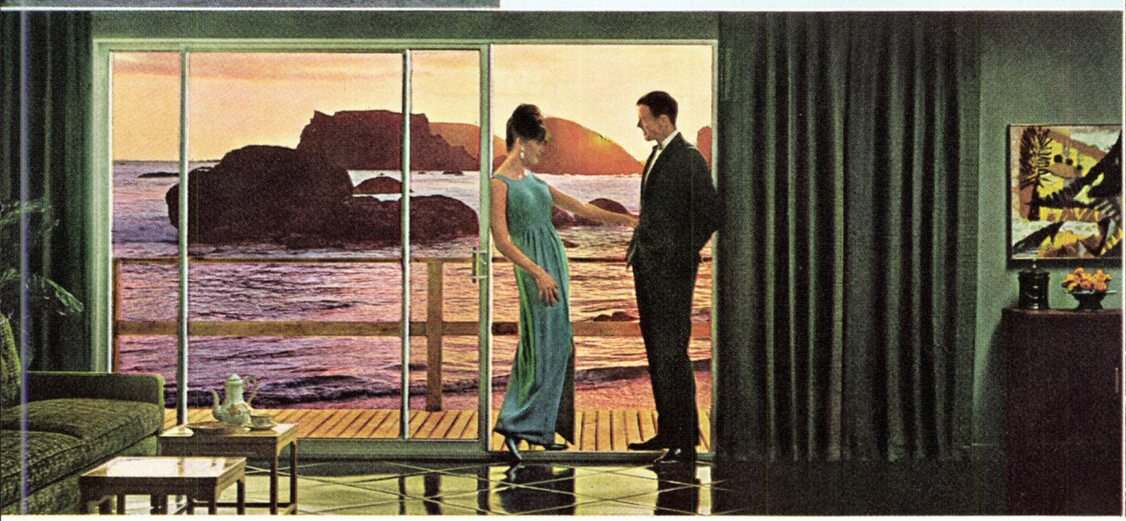

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EDITORIAL

Urban renewal: a workable tool that needs sharpening

Since World War II, growing decay at the heart of our cities has been the number one urban problem. In those 20 years, slums have proliferated, real estate values—and the municipal tax take—have dropped, the affluent and then middle-income families headed for the suburbs and downtown areas deteriorated.

Well aware that these conditions could become a nationwide trend, the federal government began urban renewal under the 1949 Housing Act. The program was, and is, designed to do what the private market clearly cannot do. No entrepreneur can assemble the fragmented land of a slum area into a marketable tract, because slum buildings produce income (and have a market price) too great for the entrepreneur to absorb. Urban renewal simply makes funds available to cities to assemble land for private development according to publicly approved plans.

Renewal projects are essentially local in character. They are directed and run from city hall, not from Washington. Cities must want urban renewal assistance to get a program going. Community leaders have effective veto power over every urban renewal project. (Strangely enough, the U.S. Chamber of Commerce has always been against urban renewal, but last year the U.S. Conference of Mayors polled 220 local chambers of commerce and found only five opposed to renewal.)

Urban renewal's record of accomplishment since 1949 is truly impressive.

• Urban renewal has triggered striking physical changes in Boston, Hartford, Honolulu, Columbus, New Haven, New York, Philadelphia, Pittsburgh, Baltimore, Washington, Norfolk, Atlanta, Detroit, Chicago, St. Louis, San Francisco and hundreds of smaller cities. Today, there are 1,545 urban renewal Title I projects in 765 cities, and 72% of these areas have populations of less than 50,000.

In all of this huge volume of work, distribution of urban renewal grants has been both fair and amazingly free of scandal. There has been no reported misuse of public funds even though more than 150,000 pieces of property have been acquired under the program. And 20 states that have 78% of the urban population and 77% of the deficient housing in urban areas have received 78% of urban renewal grants.

• Urban renewal has done an exceptional job of housing families forced to move by renewal projects. The 1949 Housing Act specified that an urban renewal project cannot be carried out unless and until standard housing is available for evicted families. The latest Census count finds that 94% of relocated families now have standard quarters. At the end of 1964, half of the $2-billion worth of private construction in renewal projects was in housing. Some 62,000 units have been built and 150,000 more units have been planned on land committed to renewal. Furthermore, 60% of all housing units committed in 1964 were within reach of low- and moderate-income families.

• Urban renewal is beginning to fill municipal coffers. There has never been any question that slums are a real economic drain on cities. For instance, between 1950 and 1960 in Boston's deteriorating core, $78 million of taxable assessments simply vanished. In New Haven, completed renewal projects will return 10% per year of the city's total investment in renewal; in Baltimore the figure is 15% of the city's investment.

• Urban renewal has broadened the role of private enterprise in the center city. About $6.90 of redevelopment investment (excluding land costs) is generated for each dollar of federal grant. Of this $6.90, about $5.45 represents private investment, excluding land. To date the federal government has committed $4.7 billion to urban renewal projects, which will generate $25.6 billion of private investment. This does not mean that private enterprise could do the job alone. In fact, slums and blight owe their existence largely to the past inaction of the free marketplace. Entrepreneurs alone cannot correct problems that developed through decades of nonplanning and unconcern for anything but fast profits.

Forcing people to leave their old neighborhoods is probably the major source of bitterness and opposition to slum clearance. Social ties, developed over the years, are destroyed and many small businesses are uprooted. Rehabilitation of residential and commercial structures both within and next to renewal sites could do much to solve this problem.

This approach is as sound economically as it is socially. We cannot meet the country's huge housing needs unless we rehabilitate buildings that are worth saving as well as replace the ones that are not. Rehabilitation generally costs less than complete redevelopment, and it spreads beyond the urban renewal area to help check the creation of new slums. But only now after a decade of well-intentioned efforts by FHA and URA is rehabilitation beginning to work in our cities.

In the years ahead, renewal and rehabilitation will generate much housing activity in our economy. In a decade's time over half of our dollar volume may be derived from urban renewal activity. We must solve the social and economic problems inherent in relocation and rehabilitation. The result would benefit not only the entire community but the housing industry as well.

—RICHARD W. O'NEILL

14 AWARD-WINNING CUSTOM HOUSES

If you're looking for new design ideas, you'll find plenty of them in the 14 award-winning houses on the following pages. A demanding jury selected the winners from more than 200 custom-built entries in the tenth annual Homes for Better Living competition.

You'll see little or no similarity in these houses. They vary in type from a remodeled townhouse to a rambling country mansion. Their budgets range from tight to unlimited. And their designs make use of a wide variety of materials.

But, despite their dissimilarity, all of the winners (and many of the non-winners as well) are noteworthy for their freedom from stereotyped concepts. This generally fresh approach shows up in three fundamental aspects of the houses:

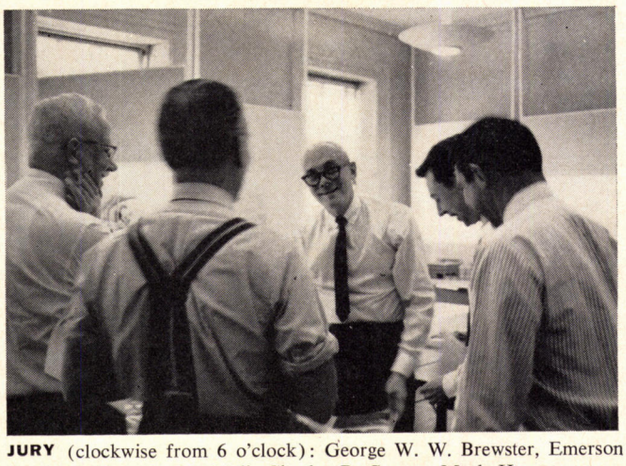
1. Imaginative shapes, including almost-oriental roof curves (like these at right), roofs that mix peaks of different sizes, towering vertical lines and cantilevered rooms.

2. Imaginative plans, including staggered levels, two- and even three-story open spaces, atriums and interior bridges and balconies.

3. Imaginative siting that not only copes with but also capitalizes on sites with such problems as 30° grades and 16′ widths.

This year's Homes for Better Living Program—sponsored by The American Institute of Architects, *The American Home* and HOUSE & HOME—drew 520 entries in three categories: custom houses, built-for-sale houses and garden apartments and townhouses. H&H will publish the apartment-townhouse winners in July, the built-for-sale winners in September.

The custom-house jury (*photo, below*): Chairman Arthur Gould Odell Jr. FAIA and president of the AIA; George W. W. Brewster, FAIA; Mark Hampton, AIA; Charles P. Graves, AIA, dean of the University of Kentucky's School of Architecture and Emerson Goble, AIA, editor of *Architectural Record.*



JURY (clockwise from 6 o'clock): George W. W. Brewster, Emerson Goble, Arthur Gould Odell, Charles P. Graves, Mark Hampton.

Photos: Robert Lautman

SIMPLE FACADE, with windowless walls of 1x3 t&g cypress, gives no hint of glass walls facing views at side and rear.

SOARING CEILING reaches up 21½ ft. to a skylight spilling light into both the living room and the entrance hallway.

THREE SIDED DECK (1,120 sq. ft.) more than doubles the living area. Portholes are over bunks in child's room.

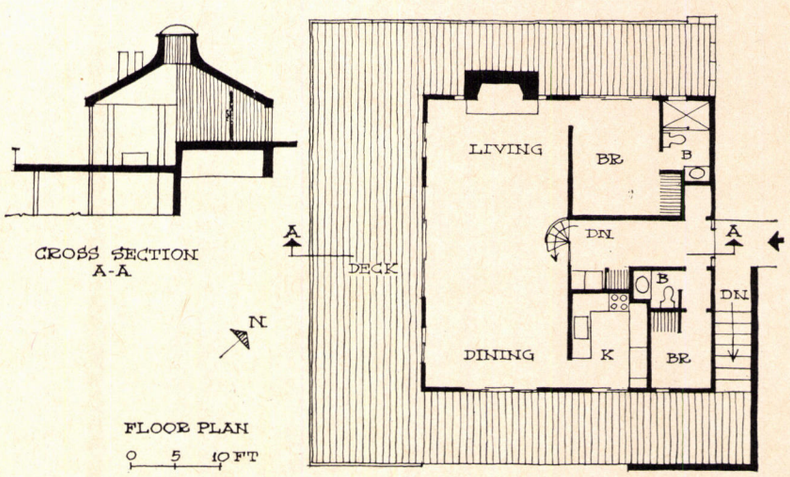
HONOR AWARD

This graceful pavilion, perched above a tidewater creek, 45 minutes from Washington, D. C., was planned as a weekend retreat. It so captivated its owners that they now live there year-round.

The upward curve of the roof tops out in a 5 ft.-square central light well just above where the mid-level entrance hall drops off into the living area (via a five-tread, semi-circular staircase). The thrust of the plywood-sheathed roof is absorbed by a steel tension band around the perimeter.

Despite the limited floor area (1,024 sq. ft.), the architect got complete separation (both visual and acoustical) of the child's bedroom from the living areas and the parents' suite.

Architect: Hugh Newell Jacobsen, AIA. *Builder: Sidney Fishman. Location: Riva, Md. Class: under 1,600 sq. ft.*



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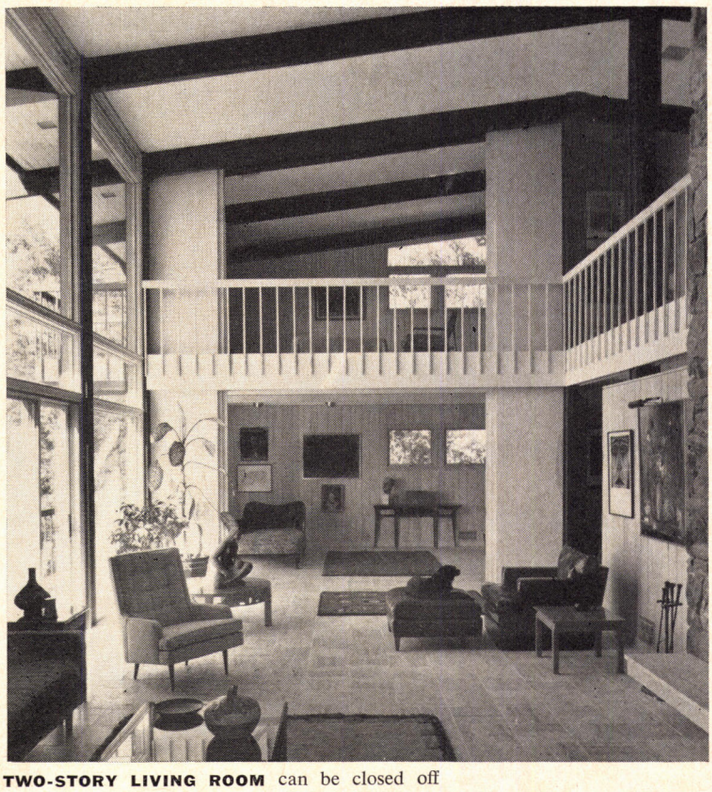
STRONG END WALL faces approach drive, which sweeps around house to main entry at rear.



TWO-STORY LIVING ROOM can be closed off from study and bedrooms by sliding doors.

HONOR AWARD

Conventional real estate advertising prose could describe this house accurately, but dully, thus:

> "Two-story stone and wood contemporary. Center hall layout. Two bedrooms plus convertible study/guest room. Three baths, full basement, modern kitchen. Full height living room with sweeping view."

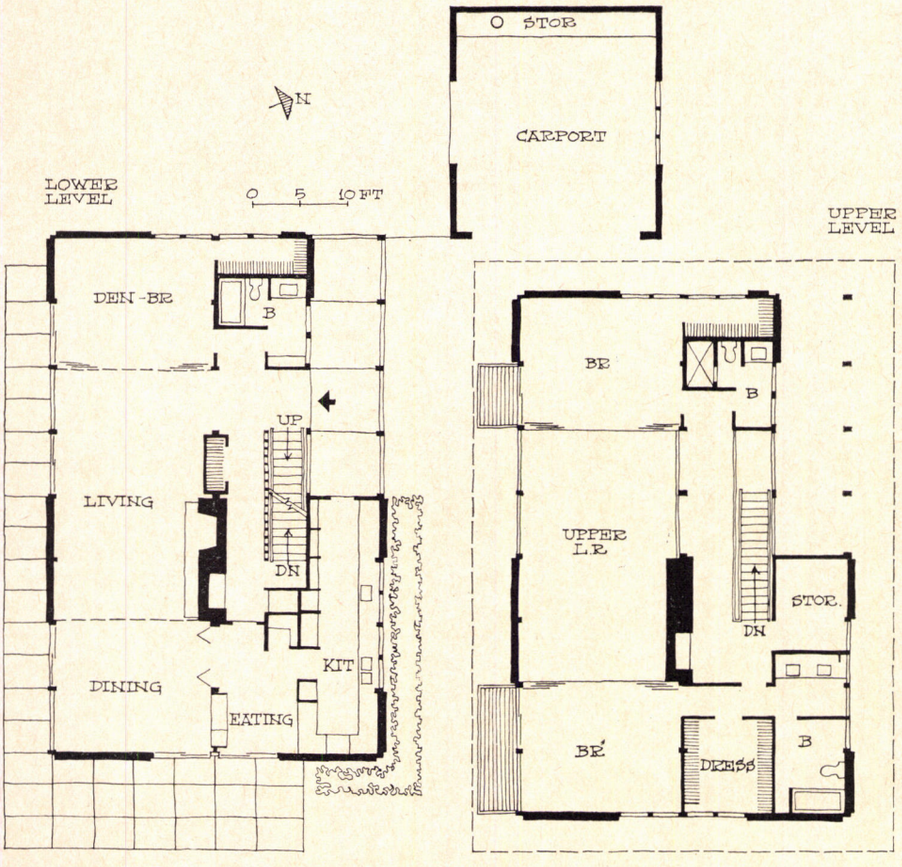
All true, but it doesn't begin to do justice to the excitement designed into this simple two-level cube. The house has the expansive feeling of one big room because every room opens into the central two-story living area. Every sleeping or living room also opens to a deck or balcony with a sweeping view of a town and mountains beyond.

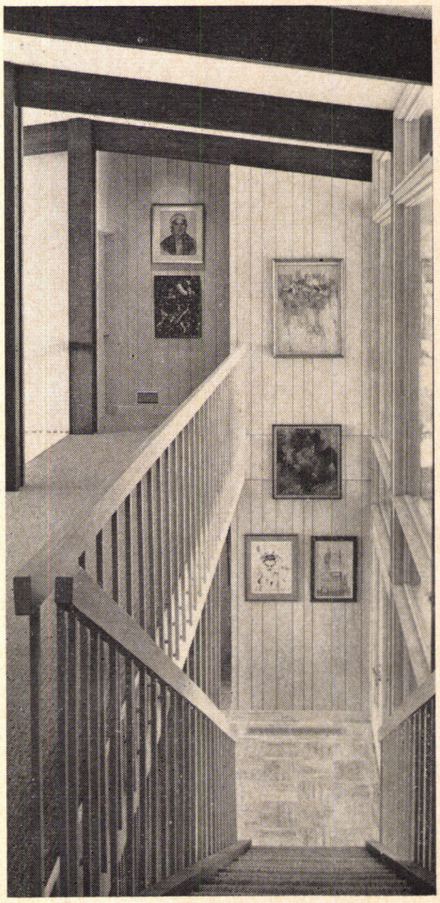
Structure and materials were kept simple and harmonious: framing is laminated post-and-beam; exterior walls are native stone and rough-sawn wood siding; interior walls are paneled in ash (to serve as a background for an extensive art collection); ceilings are acoustical tile; and the floor of the main level is travertine marble.

Architect: Charles M. Sappenfield, AIA. *Builder: H. Southworth Co. Location: Asheville, N.C. Class: over 2,800 sq. ft.*

Photos: Edward L. DuPuy

ROCKY SITE was left in its natural state, and no trees were removed without permission.





UPPER HALL, a bridge between bedroom wings, is open to both entry hall and living room.

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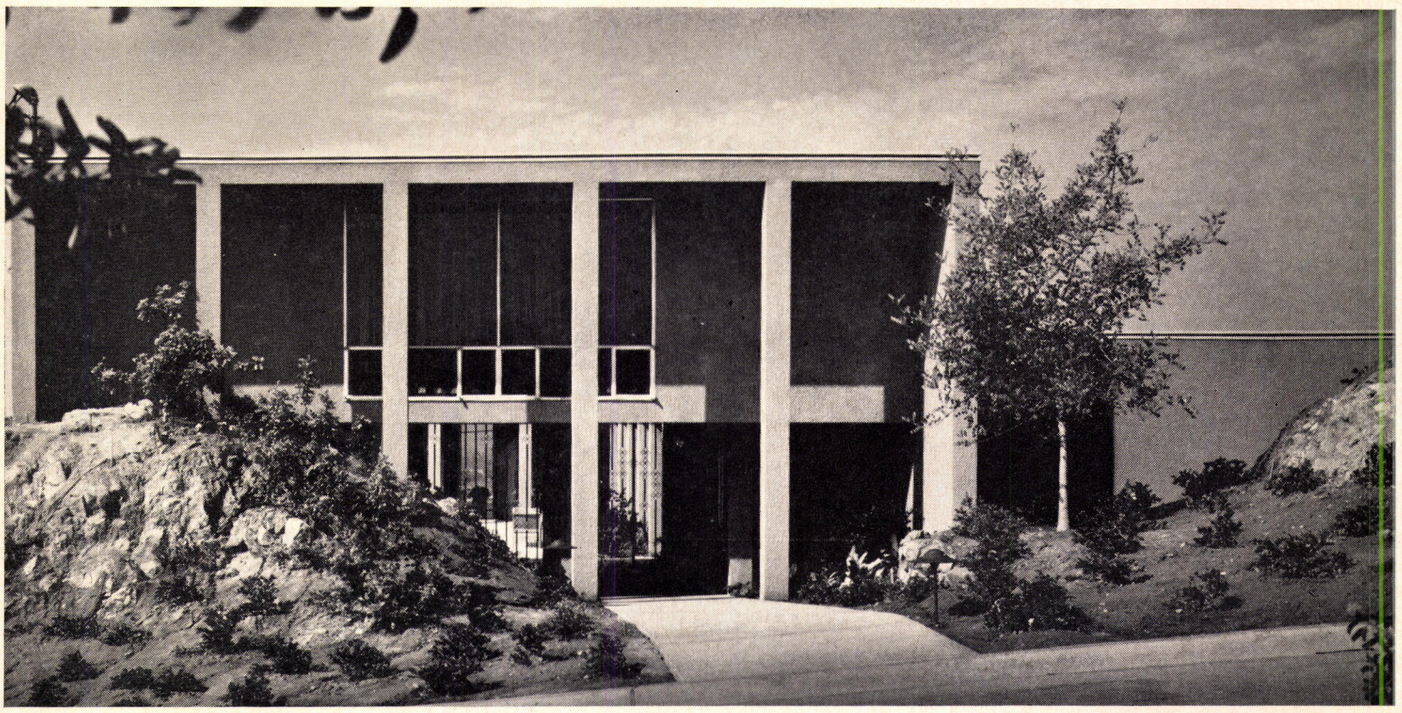
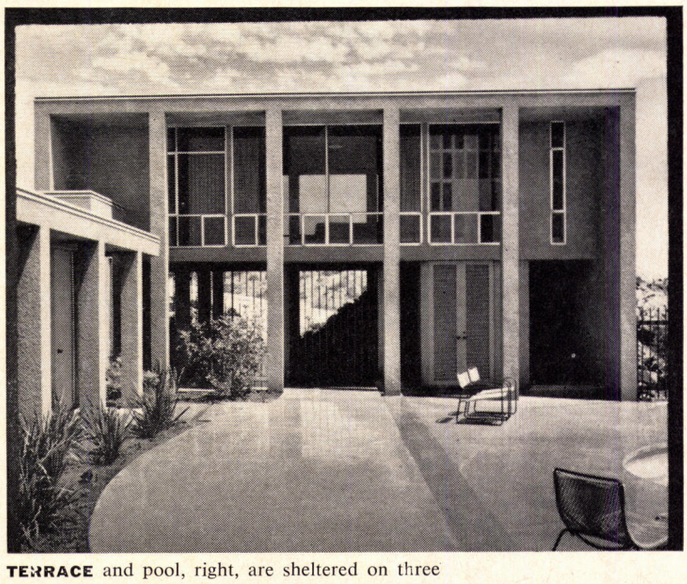
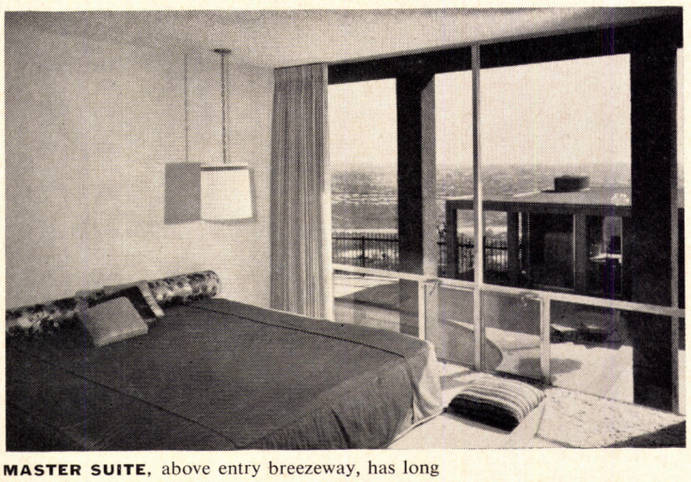


FACADE is partly hidden by rock outcroppings. Garage is at right. Exterior finish is stucco.

Photos: Julius Shulman



TERRACE and pool, right, are sheltered on three sides by house. Outside entry is in background.



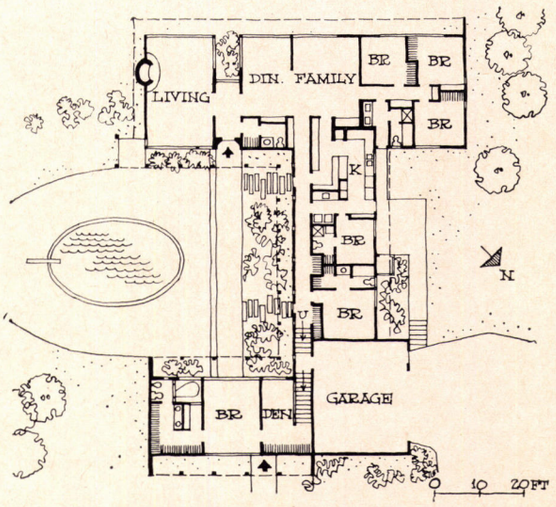
MASTER SUITE, above entry breezeway, has long view of city beyond living room roof.

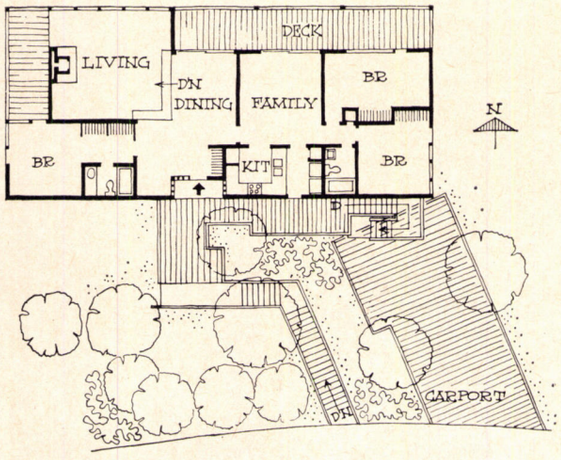
AWARD OF MERIT

Behind the elegant, two-story facade shown above lies what in effect is a one-story plan designed for a large household (parents, three boys, one young girl and a maid).

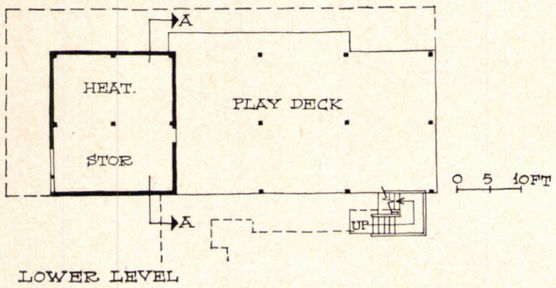
The facade resulted from raising the master suite to make it more private, provide it with views in two directions and form a breezeway beneath it. The breezeway serves as the outside entrance to the house. From there, visitors cross an interior terrace (*left*) to the entrance of the main living area. The well-zoned plan also groups the boys' rooms in a wing off the family room and isolates the formal living room from informal areas. Construction is economical stucco over a post-and-beam framing system.

Architect: Henry H. Hester, AIA. *Builder: Mabie & Mintz. Landsacpe architect: Wimer & Yamada. Location: San Diego. Class: over 2,800 sq. ft.*

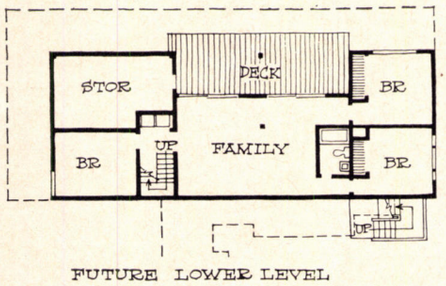




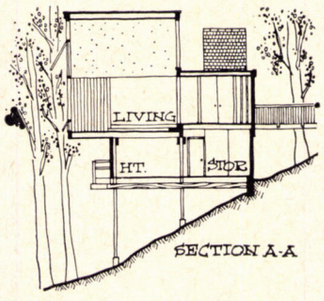
UPPER LEVEL



LOWER LEVEL



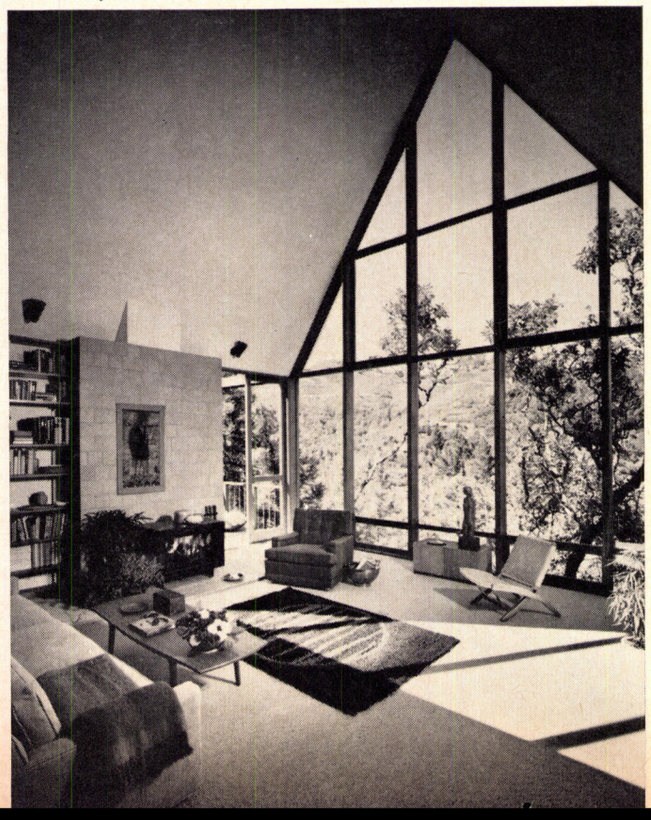
FUTURE LOWER LEVEL



SECTION A-A

ENTRY PLATFORM is reached by bridge and stairs leading down from carport platform above.

Photos: Morley Baer



GLASS WALL brings light and view into living room, which opens to deck behind fireplace.

AWARD OF MERIT

Growing families with limited budgets and constantly increasing needs are a common problem for architects and builders. This house shows one answer. Built on a steep, wooded hillside, it was designed for easy expansion—downward.

Future plans—included in the original drawings—call for the addition of three bedrooms, a bath, a family room and a deck on what is now an open platform beneath the present one-level living area. Plans also call for rearranging the present living area and adding an interior stairway from the front entry to the lower level.

The site is so steep—it drops 16′ in the 20′ from the road to the front entry—that a separate carport was built at road level; a stairway leads down to an entry bridge.

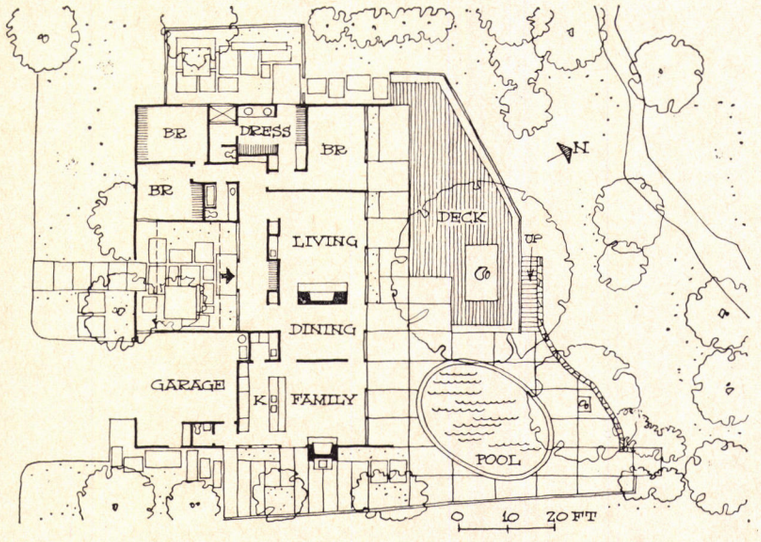
The site is so heavily wooded that bringing sunlight and uphill views into the house was a problem. The two-fold solution: 1) no roof overhangs were used; 2) the flat roof was broken up by four peaked roof sections (over the living room, kitchen and two baths), the two largest with glass gable ends.

Architects: Marquis & Stoller, AIA. *Builder: Robert E. Swendeman. Location: Mill Valley, Calif. Class: 1,600 to 2,800 sq. ft.*

continued

REDWOOD DECK, adjoining poolside concrete terrace, was built around a 30″ oak tree.

Photos: Joshua Freiwald



AWARD OF MERIT

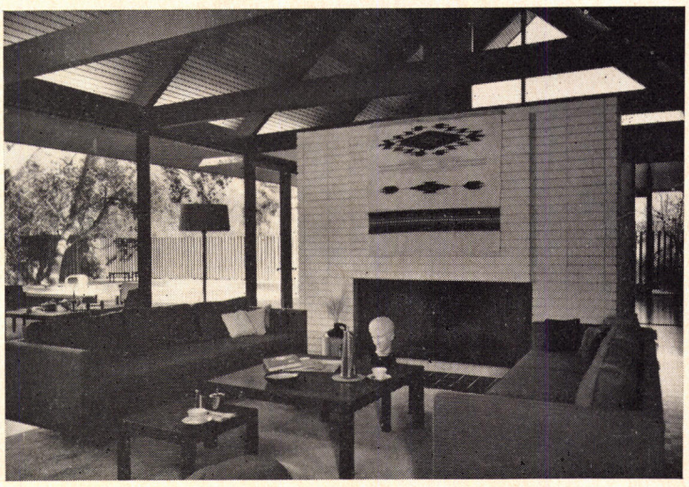
Here is a house that combines maximum privacy with maximum indoor-outdoor living.

As the photo below shows, it is closed to the street. The only break in the simple, clean-lined facade is a pair of steel gates leading into the entry court. (And even the garage doors match the siding of vertical t&g redwood.)

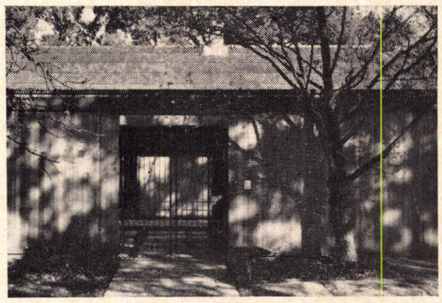
On both sides and at the rear, the house opens to private outdoor areas: a courtyard (with a barbecue) off the family room and kitchen, another courtyard off the master bath and dressing room and a large rear terrace (*above*) off the family room, dining room, living room and master bedroom. Behind the terrace the land slopes sharply to a creek which runs across the half-acre site.

Most of the post-and-beam house is flat roofed. But the living-dining area (*below, left*) has a peaked ceiling with glass gable ends.

Architect: William C. Rosso, AIA. *Builder: Ernest A. F. Carlson. Landscape architect: Anthony M. Guzzardo. Location: Lafayette, Calif. Class: 1,600 to 2,800 sq. ft.*

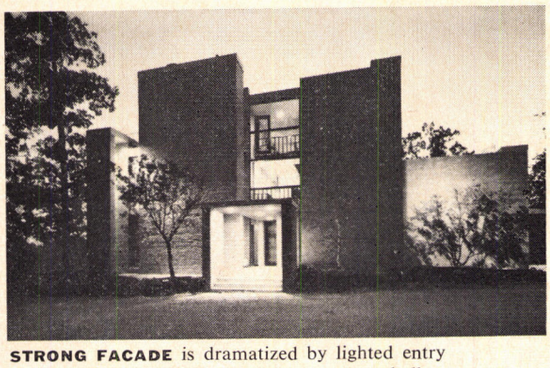


OPEN CEILING in living and dining area contrasts with flat ceilings in rest of house.

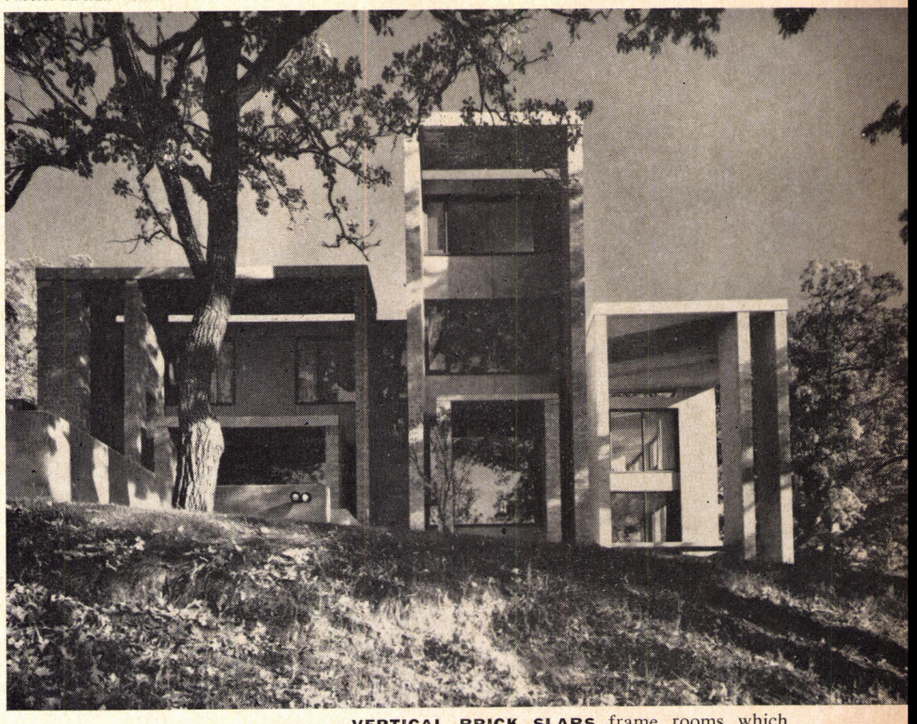


STEEL GATES, the only relief in the redwood facade, open into a 22′ x 24′ entry court.

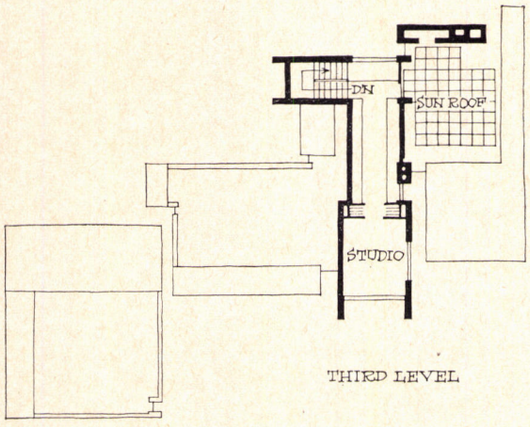
Photos: Baltazar Korab



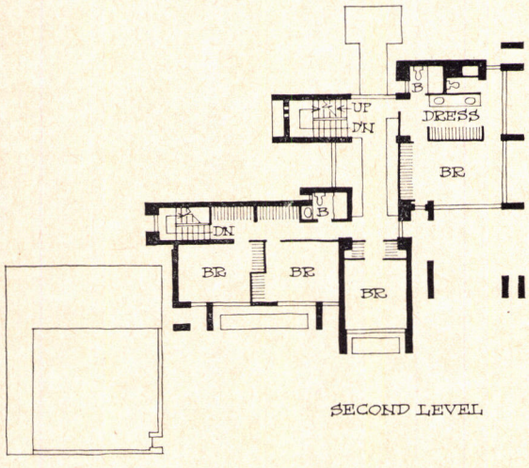
STRONG FACADE is dramatized by lighted entry and glass walls of three-story entrance hall.



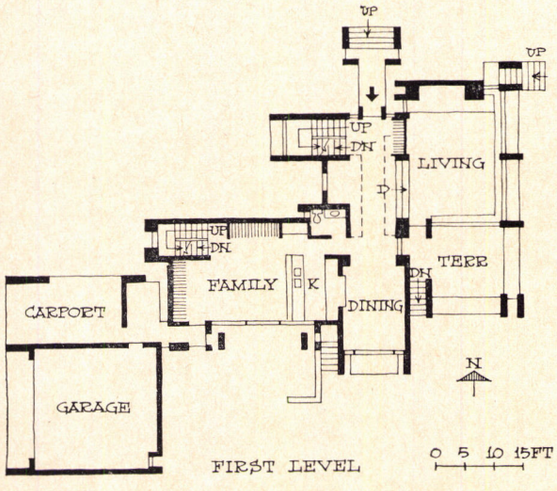
VERTICAL BRICK SLABS frame rooms which look out across sloping site to lake below.



THIRD LEVEL



SECOND LEVEL



FIRST LEVEL

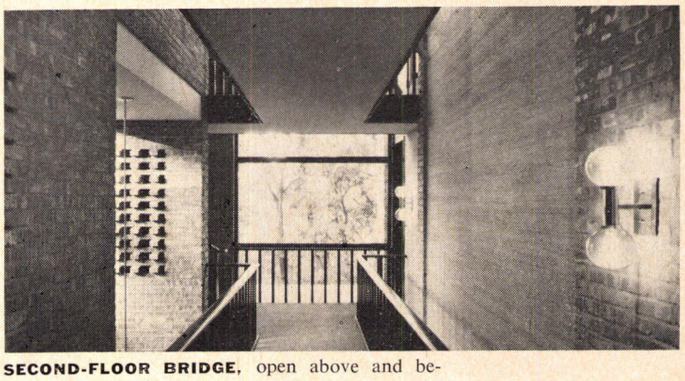
0 5 10 15FT

AWARD OF MERIT

This brick and concrete house sits on a steep knoll which slopes away to a lake. Rather than blend the house into the topography, the architect made it an upward extension of the sharply rising land. His design emphasizes height with soaring brick walls. And these vertical planes are capped by the strong horizontal lines of concrete-slab roofs with deep overhangs that protect against sun and rain.

For all its drama, this is still a family-oriented house with efficient separation of living areas and functions. A three-story entry area provides both vertical and horizontal circulation. The entry hall, along with the second- and third-floor bridges above it, separates the living room, dining room and kitchen-family room from each other and the master bedroom from the three children's rooms.

Architect: Edward D. Dart, AIA. *Builder: Carlo Carani & Sons. Landscape architect: Robert Loudon. Location: Barrington, Ill. Class: over 2,800 sq. ft.*



SECOND-FLOOR BRIDGE, open above and below, links children's rooms with master suite.

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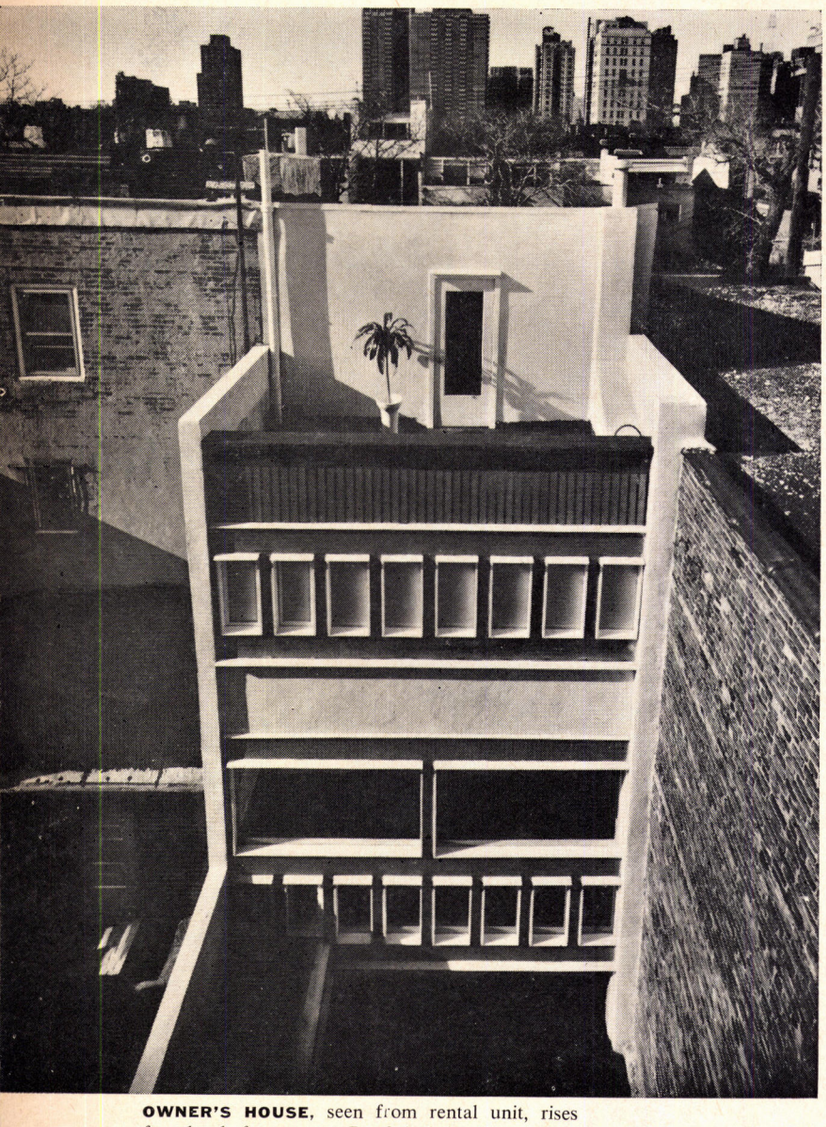
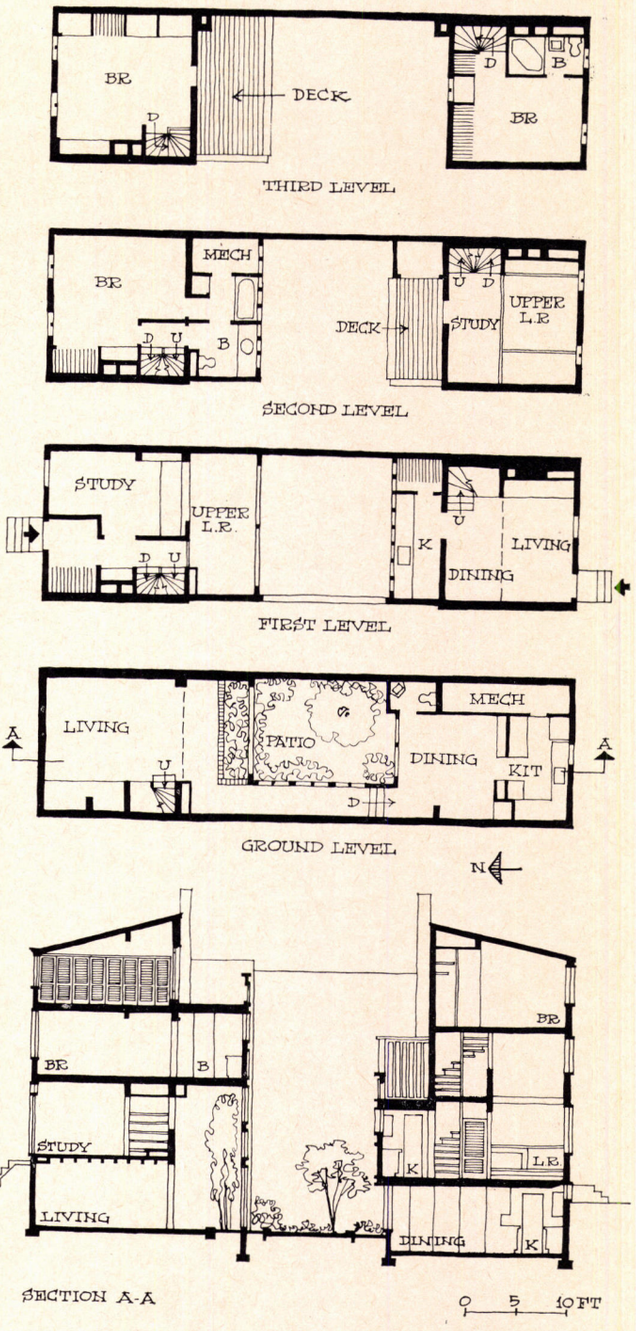


OWNER'S HOUSE, seen from rental unit, rises four levels from court. Roof deck is off bedroom.



AWARD OF MERIT

Urban rehabilitation's vast possibilities are shown dramatically by this back-to-back pair of remodeled, center-city houses. The site, which includes a 12′ x 14′ interior court, is only 60′ deep (from street to street) and 16′ wide.

A slight drop in grade between streets lets the architect extend the dining and kitchen areas of the owners' unit under the rental unit (*see section, right*). Otherwise, all rooms are stacked above each other in what Philadelphians call "Father, Son and Holy Ghost" style. Remodeling cost: $17,250 ($11.30 a sq. ft.) for owner's house, $8,500 for rental unit.

Although the interior court fails to meet a local 25%-open-space requirement, a variance was granted because both houses have ample roof decks.

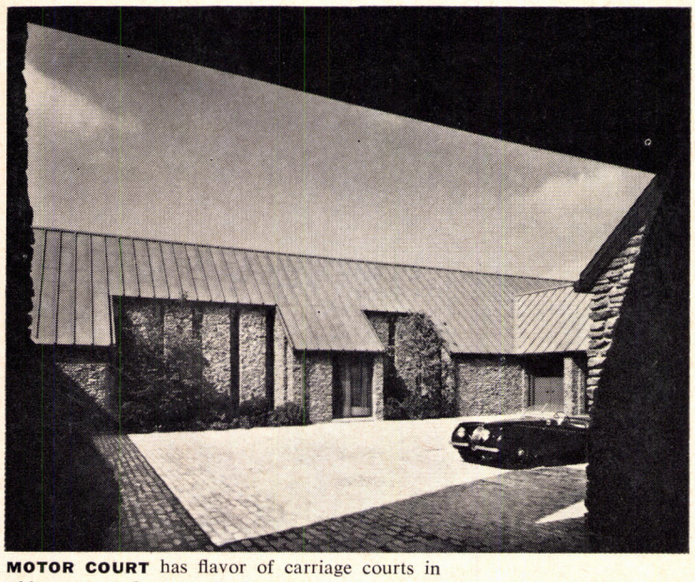
Architect: Louis Sauer, AIA. *Builder: Edwin J. Barrett. Location: Philadelphia. Class: under 1,600 sq. ft. Landscape architect: Adleman, Collins & DuTot.*

Photos: David Hirsch

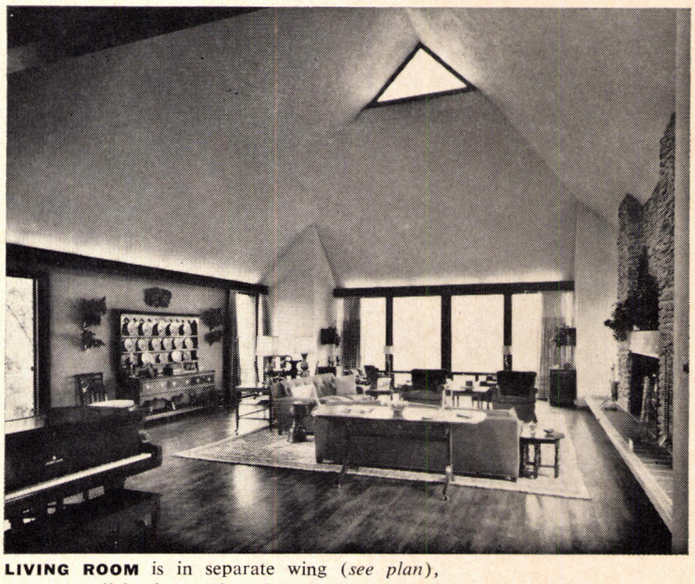
INTERIOR COURT is seen from owner's study. Two-story area of living room is in foreground.

LOW STONE WALL follows the contours of the hill and helps tie the house to the site.

Photos: Joseph W. Molitor



MOTOR COURT has flavor of carriage courts in old country houses. Paving is granite block.



LIVING ROOM is in separate wing (*see plan*), gets extra light from triangular clerestory.

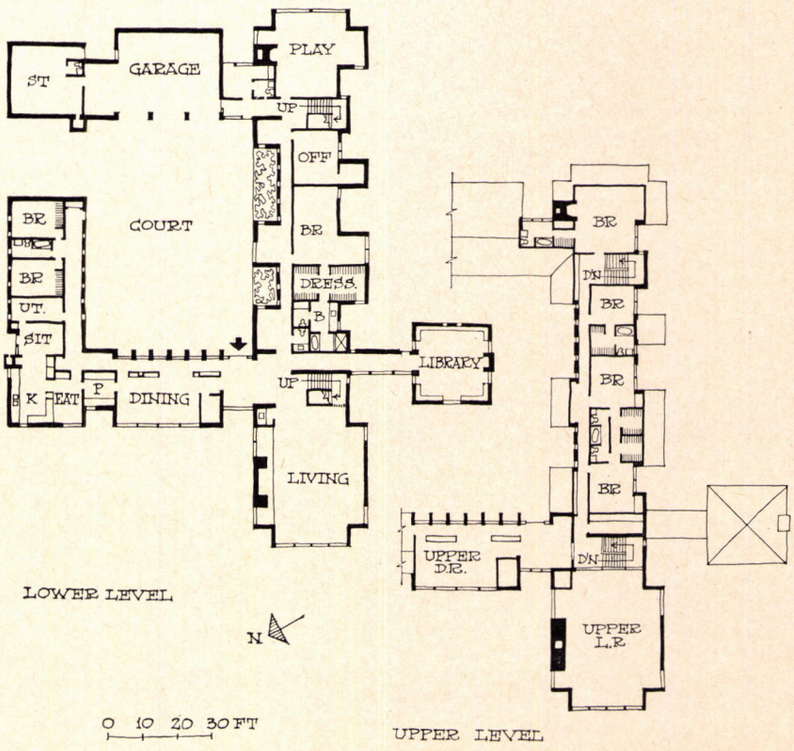
AWARD OF MERIT

Most houses are designed to look larger—and more expensive—than they really are. But this house—which has more than 12,000 sq. ft. of living area—was planned to look smaller than it is and to blend into its hilltop site.

Since the site offers sweeping views in three directions, all the rooms were faced outward to the rolling landscape, and the circulation was channeled through hallways around a central motor court.

The regional, but not eclectic, character of the house owes much to careful selection and use of materials. Walls of local stone, trimmed in dark-stained redwood and topped by a terne metal roof, give the house a timeless look that harmonizes with the landscape. Inside, floors and other woodwork are white oak. To keep the silhouette of the house low and the eave lines constant, no projecting dormers were used for second-floor windows. Instead, the stone walls were recessed wherever the windows occurred.

Architect: Winston Elting, FAIA*; Associate architect: Robert H. Burdett. Builder: F. Hoffman Co. Landscape architects: Franz Liff & Assoc. Location: Ligonier, Pa. Class: over 2,800 sq. ft.*



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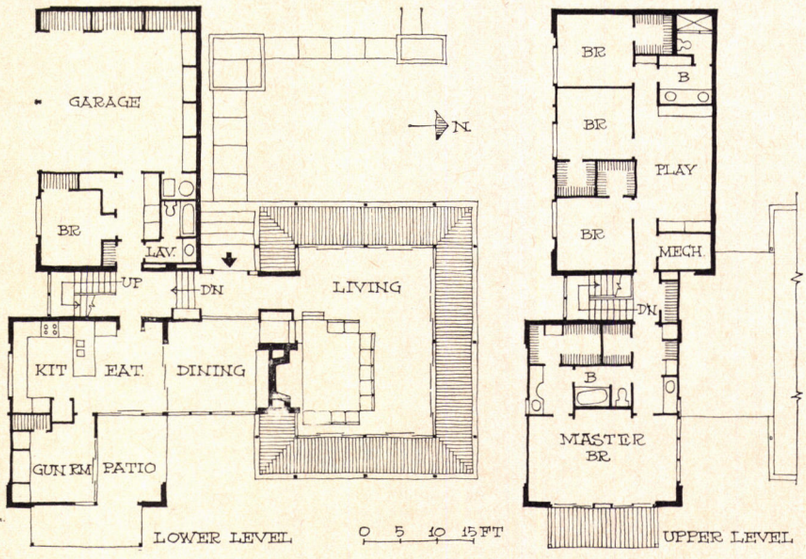
PRIVATE REAR BALCONY opens off master bedroom. Glass-walled living room is at right.

Paul Peters

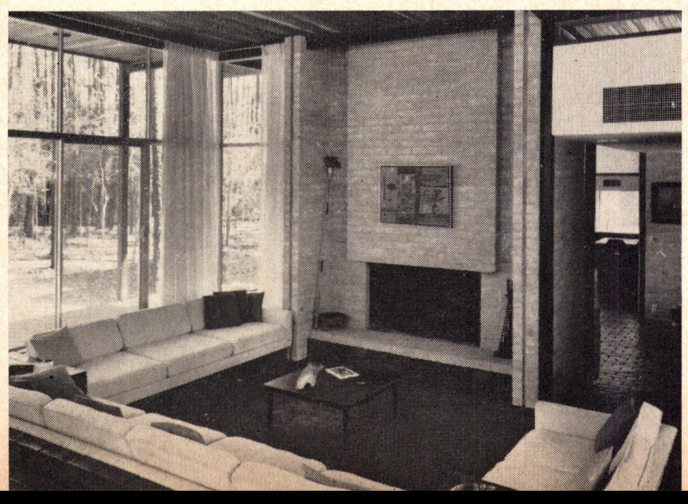


AWARD OF MERIT

The needs of this family (Architect William Hoff's own) were very similar to those of many potential homebuyers: space for three growing boys and for gracious entertaining of friends, plus good separation of adults' and children's areas.

But although the requirements are common, the solution is not. The high-ceilinged (10′ 6″) living room is pulled almost free of the rest of the house connected only by the umbilical dining room and foyer. The living room—it includes a sunken conversation area—is encased in a cage of steel (4x4 columns), glass and redwood. Dense shrubbery and trees provide a glass-walled room with needed privacy. All bedrooms are on the upper floor of the two-story wing, and the boys' area has its own bath and playroom.

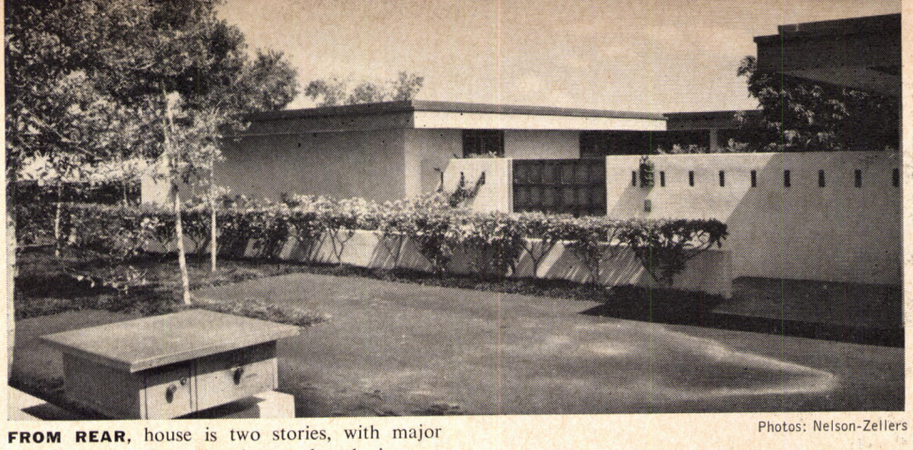
Architects: Jenkins & Hoff, AIA. *Builder: Roy W. Bierschwale Co. Location: Houston. Class: over 2,800 sq. ft.*



Paul Peters

FOCAL POINT of living room is a sunken conversation area three steps below the floor.

FROM STREET, motor court leads to private atrium, hidden behind wall and entrance gate.



FROM REAR, house is two stories, with major rooms overlooking swimming pool and view.

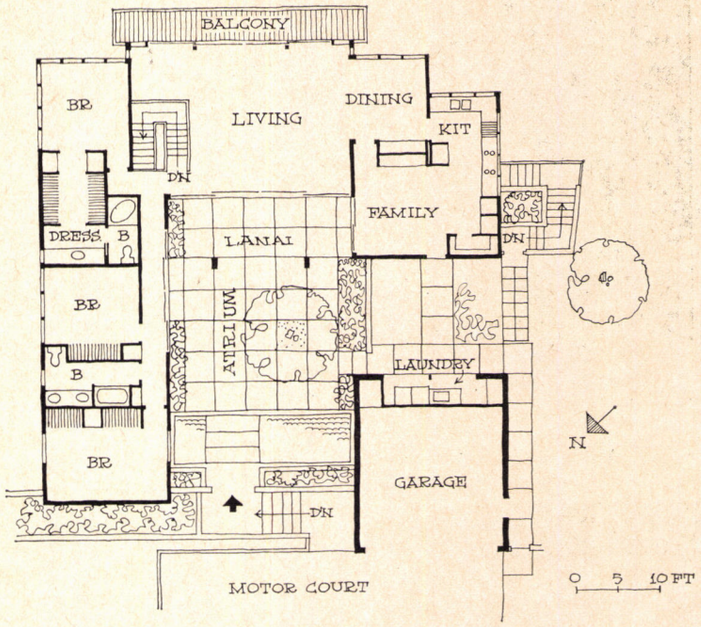
Photos: Nelson-Zellers

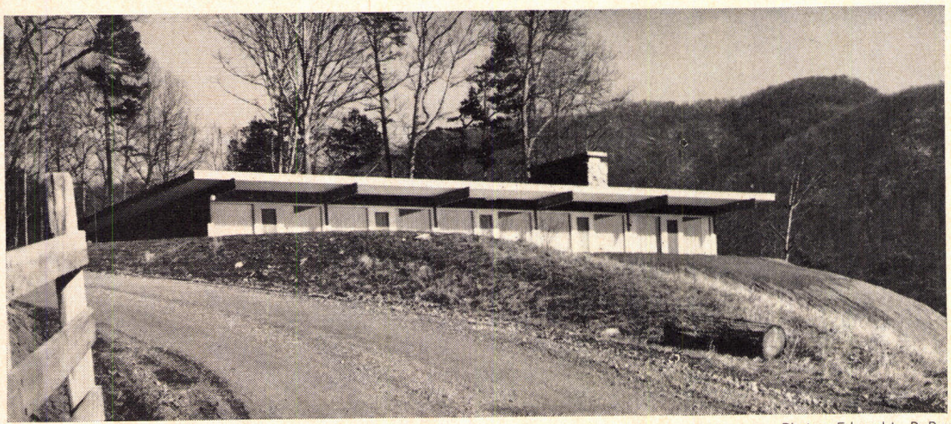
AWARD OF MERIT

Like many average-size hillside sites, this tight plot (10,000 sq. ft.) offered the architect both a problem and a promise. The problem: how to achieve privacy from nearby neighbors. The promise: a panoramic hillside view.

A series of courts—motor court, atrium, sheltered lanai—lead the family and guests through small-scale outdoor spaces to the expansive living and dining rooms overlooking the view. And this openness is extended by a 4′x32′ balcony out over the swimming pool and a second lanai at grade level below. Bedrooms are well separated from living areas, and the master bedroom has a 180° view.

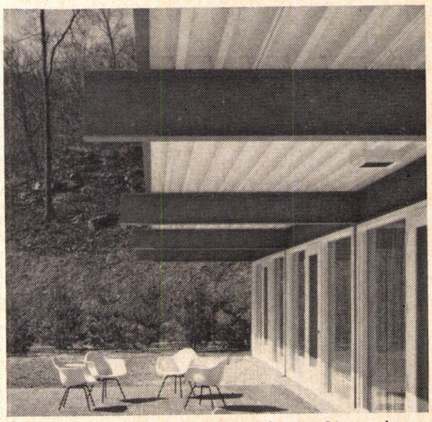
Architect: Edward Sullam, AIA. *Builder: James K. Shimizu. Landscape architect: George S. Walters. Location: Honolulu. Class: 1,600 to 2,800 sq. ft.*





REAR OF HOUSE and all major rooms have equal view across a valley to a mountain.

Photos: Edward L. DuPuy

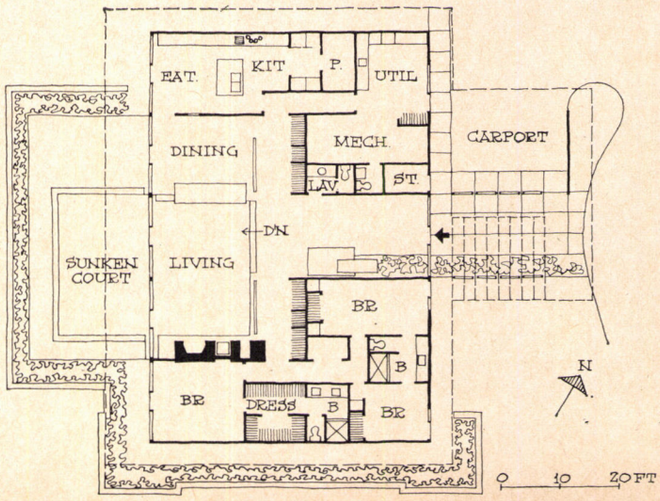


STEEL ROOF is carried out in an 8′ overhang. Sliding doors and windows are steel framed.

AWARD OF MERIT

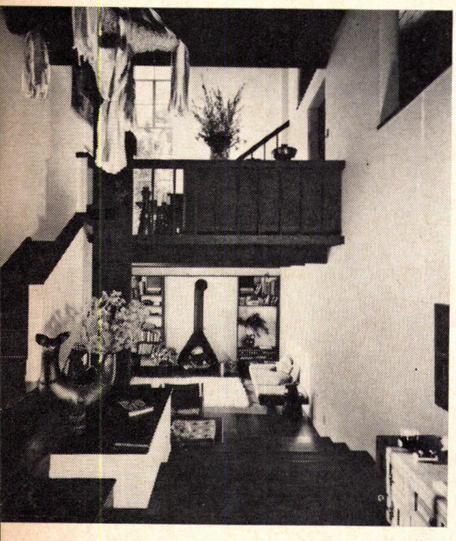
This is an all-steel house—only some of the cabinets are wood—because that's what the client, a steel fabricator, wanted. The architect's design makes efficient—and attractive—use of steel. Welded beams and columns frame twelve 14′x24′ bays, two of which form the carport and entry. Siding is ribbed steel on steel studs. And the roof is acoustical steel deck topped with rigid insulation and built-up roofing.

Architect: Charles M. Sappenfield, AIA. *Builder: H. Southworth Co. Structural engineer: Charles H. Kahn. Mechanical engineers: Loest & Stanley. Location: Asheville, N.C. Class: over 2,800 sq. ft.*

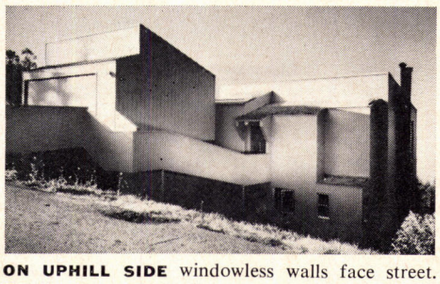


ON DOWNHILL SIDE two decks, bath and two-story viewing platform project beyond house.

Photos: Morley Baer



LIVING ROOM extends from two-story area to low-ceilinged alcove under dining room in rear.



ON UPHILL SIDE windowless walls face street. Wooden ramp leads from garage to front entry.

AWARD OF MERIT

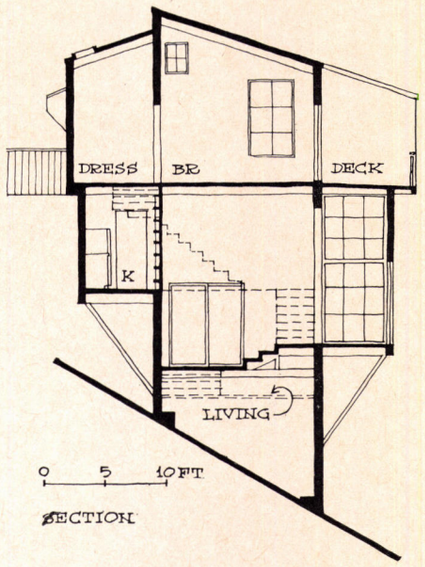
On a cliff-side site overlooking San Francisco Bay, the architects created a three-story tower with sleeping and living spaces in a series of descending platforms. All auxiliary areas—the kitchen, baths, closets and decks—are hung from the outside of the tower to permit the same free circulation vertically that most plans achieve horizontally.

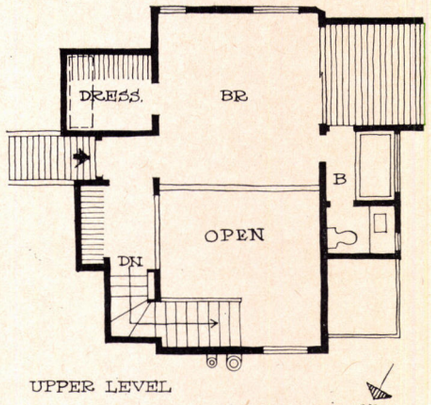
The unusual plan grew out of the special nature of the lot: the uphill side offered the only reasonable entry to the house and the only area suitable for a garage platform. A wooden ramp leads from the street to the entry at the top level of the house.

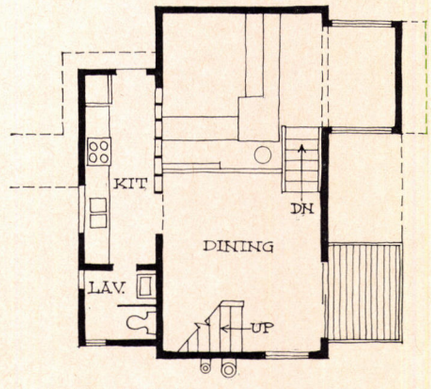
The living area on the bottom level offers a contrast in spaces and feelings: a low-ceilinged, bookshelf-lined alcove and a lofty, two-story platform, windowed on three sides and projecting toward the view.

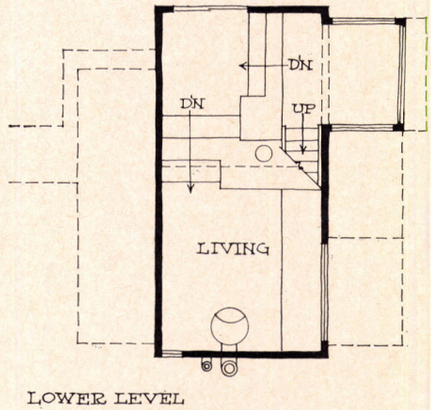
Architects: Moore, Lyndon, Turnbull, Whitaker. Builder: Eugene Monroe. Location: Oakland, Calif. Class: under 1,600 sq. ft.

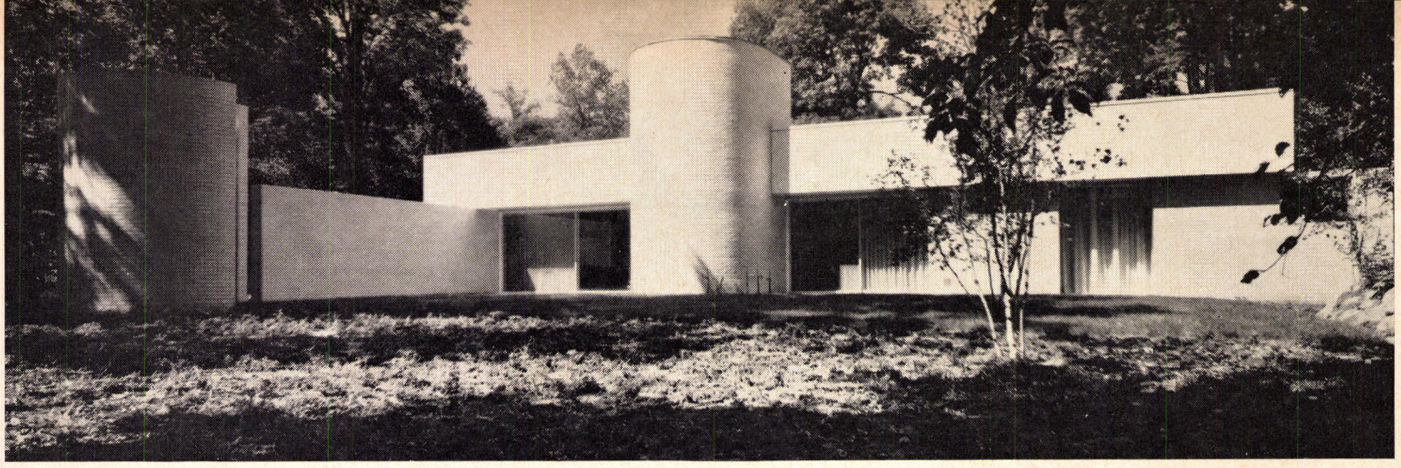
DINING ROOM, seen here from stairway, is platform between living and sleeping areas.











GLASS DOORS, flanking brick cylinder, open living room, left, and master suite to garden.

Louis Reens

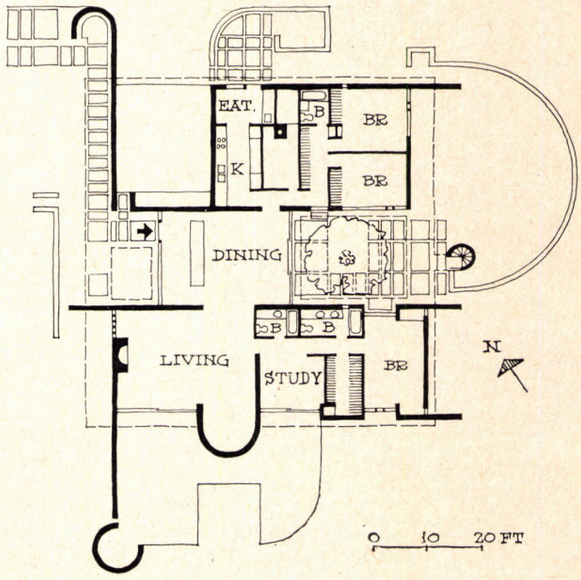
AWARD OF MERIT

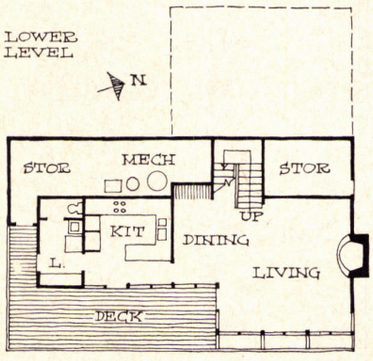
Two brick cylinders—one an indoor seating area (*right in photo*), the other a modern version of the gazebo (*left*)—relieve the plane geometry of this H-shaped house. The plan was developed to permit maximum views across an adjoining golf course and to retain a large oak tree in one hollow of the H.

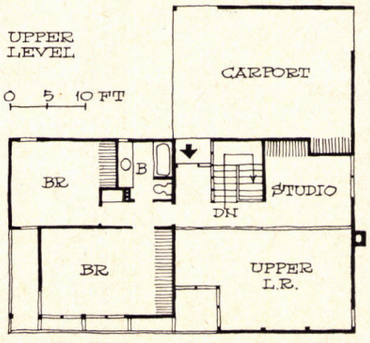
One leg of the H contains the living areas, plus the owners' bedroom-study suite; service areas, servants' bedrooms and a guest room are in the other wing.

A 5′-high wood parapet ties together the contrasting glass and masonry wall panels and adds apparent height to the flat-roofed, single-story house.

Architect: Richard Meier. Builder: John Ogden. Landscape architect: Donald Richardson. Location: Essex Fells, N.J. Class: 1,600 to 2,800 sq. ft.







AWARD OF MERIT

Given a subdivision-sized lot (75′ x 135′) and a limited budget (under $25,000), the architects of this two-level house created an expansive feeling in 1,408 sq. ft. of living area.

The steep grade (20%) forced the house site close to a busy street, but limiting all openings on the street side provided the privacy needed by a small house on a narrow lot.

Architects: Tryon & Foy, AIA. *Builder: Colletta & Edgley. Location: Los Angeles. Class: under 1,600 sq. ft.*

TWO-STORY LIVING AREA is overlooked by entry hall and studio on balcony at right.

Photos: Leland Y. Lee

WINDOW WALL opens lower half of two-story living room to rear. Street-side walls are blank.

continued

Odd-lot housing: how to tap the big market of buyers who don't like subdivision living

There's a widespread feeling that odd-lot building is either the exclusive province of small custom builders or a slack-season sideline for tract builders. But Tampa's biggest builder will sell 400 houses this year—all on other people's lots

"There's no way of telling just how big the odd-lot market is," says George Karpay, president of Tiffany Homes. "But we do know that if you offer buyers a house on their own lot for the same price they'd pay for a house in a subdivision, you can sell a lot of houses."

Behind this statement lies experience in both types of housing. The Karpays (there are two more: Irwin, vice president of construction, and Joel, financing vice president) started out in Tampa in 1960 by building 65 tract houses, and in the process they saw an opportunity in odd lots.

"We found that many of the people who went through our subdivision houses already owned their own lots," says Karpay. "We began to ask them if they'd like a house on that lot, and they'd usually answer, 'yes, but we can't afford it.' We decided that if we could build a house they could afford on their lot, we might make a dollar.

To pursue that dollar, the Karpays started Tiffany Homes in 1961 and hit the jackpot almost immediately. Building in Tampa's volume price range (an average of $12,000 on a $1,500 lot), the company sold 187 houses its first year, 287 the second year and 357 last year. Its 1965 volume — estimated at 400 — includes sales from two new branch offices: Polk County (Lakeland and Polk City) and Pinellas County (St. Petersburg and Clearwater).

The Karpays have found that the odd-lot builder enjoys two advantages over the subdivision builder:

1. *The odd-lot builder has a more permanent corporate identity.* "As tract builders," says George Karpay, "we were identified with our subdivision, and we would have had to reestablish an identity each time we started a new tract. As odd-lot builders, the company itself is the focus of attention."

2. *The odd-lot builder can run a more continuous operation.* "When a builder finishes a subdivision," says Karpay, "he has to start all over again on the next one, and there is an interim period when no money comes in. Or, if he starts a new tract before the old one is built out, he puts a heavy strain on his credit. The odd-lot builder has no tract to start or finish, so he is subject only to local market fluctuations, and his cash flow and credit situation is much steadier—and easier."

But these advantages are not without their price. Where the tract builder can concentrate his attention on one area, the odd-lot builder must deal with hundreds of little areas many miles apart, and his problems of land control, construction and supervision are far more complex. His sales effort must be geared to the fact that he has no subdivision model area to which buyers gravitate. And if, like the Karpays, he cannot use FHA or VA financing (for the reason, see p. 94), he is denied the powerful sales leverage of minimum-down-payment loans.

"All things considered," says George Karpay, "it's a lot easier for an odd-lot builder to take up tract building as a sideline than the other way around."

Tiffany's success in odd-lot building is based on sound management: the recognition of problems, the establishment of systems to deal with the problems and the choice of personnel to man the systems. What follows is a study of Tiffany's major problems, and how they are solved.

Land: every lot must be handled like a small subdivision

"We have the same problems as a tract builder," says George Karpay, "only we have more of them."

Since most buyers are blissfully unaware of these probems, Tiffany has had to set up a lot-control program that requires the full time attention of one man, and, in busy seasons, two men. "All the money we save by not having to buy land," says Karpay, "goes back into overhead for lot control."

When Tiffany first began building, about 75% of its buyers already owned lots, and most of the others, having picked out a model (the company maintains two models next to its Tampa office), went out and bought lots.

"At this point," says Norman Dolgin, Tiffany's sales vice president, "the trouble began."

Most of Tiffany's lot troubles showed up in one or more of these forms:

1. *The lot was not valuable enough for the house the buyer wanted,* so the buyer could not get a high enough mortgage. The buyer's pride of ownership led him to declare the value of his land at, say, $1,500. But when it was actually appraised the value turned out to be nearer $500, and the sadder but wiser owner found his equity in land was not enough to constitute the down payment on his mortgage.

2. *The lot was too small for the house,* and thus couldn't meet setback requirements.

3. *The lot had built-in construction problems* — usually drainage — and correcting them would jack up the price beyond the buyer's reach and beyond the economic

level of the area where it was located.

4. *Zoning or other restrictions ruled out the model the buyer had selected.*

5. *The lot's title was so messy it couldn't be cleared within a reasonable time* or at a reasonable cost (this happened in one out of every ten cases).

When any of these situations popped up, the result was either a lost sale or a potential homebuyer who, having lost a binder to a lot owner or real estate agent, had less money to put into his house on the next try.

"At the root of most of these problems," says Dolgin, "was the fact that we didn't take the time to go out and actually look at every lot before we signed up the buyer. We simply assumed that the law of averages would take care of us. But then we found that we were having some sort of trouble with one out of every three lots."

So Tiffany decided to set up a lot control system.

Step 1 in the new system was to require a two-way check of every lot before the contract is signed. First, a Tiffany man, who knows both land values and excavation, checks out—and prices—such potential problems as low land that will require more expensive foundations or old buildings that will have to be removed before construction can start.

Next, a paid appraiser looks at the lot so the buyer can immediately be told how much equity his land will provide.

This pre-checking of lots also has a side benefit: it shows Tiffany exactly where the lots are before construction crews move in. Says Dolgin: "We found that maps often weren't accurate, and we couldn't depend on the owner's description of where the lot was. [Sample description: 'Turn right at the field with the brown cow.'] Sometimes our excavation crews wasted half a day trying to find it. We tried giving owners a sign to post at the lot, but then other builders would spot it, contact the owner and try to steal the job from us."

Step 2 was to build up a list of available lots. "Four years ago," says Dolgin, "three quarters of our buyers already owned lots. But today the proportion has dropped to about half, so the other half need lots."

Tiffany now has on file (through a subsidiary company) more than 2,000 lots—some listed through private owners and some through real estate brokers.

"And most of the listings are good ones," says Dolgin, "because the word has gotten around that we won't touch poor ones."

"In our early, innocent days," adds Dolgin, "real estate agents used to tell us to send our buyers over and they'd find lots for them. But all too often these buyers never came back, and later we'd find that the agent had sold them another house."

Step 3 was to establish a title-searching operation which for sheer doggedness rivals a Scotland Yard investigation. It begins after the buildability of the lot has been established, the contract has been signed subject to title clearance and mortgage approval and the buyer has put down earnest money—a minimum of $100 to cover the cost of the title policy. ("The money is put into an escrow account," says Dolgin, "and the buyer can get it back any time he wants to call off the deal.")

If the title is clear, the house gets under way; if not, the title insurance company sends a list of the defects to Tiffany's mortgage servicing department which then starts the clearing process.

"The average title is cleared in 30 or 40 days," says Dolgin. "A tough one may take six months. And our record case took a year and a half." Tiffany has chased (by mail) clouded titles as far afield as France, Japan and even Formosa, and in four and a half years has given up only three cases as impossible.

Despite the excellence of Tiffany's gumshoe work, title delays still hurt both schedules and sales. So the company is now working on a plan under which title insurance would be written on a casualty basis: the house could be built and title defects cleared up later. But there's a problem: how to establish such a plan with a title company big enough to be acceptable to Tiffany's mortgage lenders.

Construction: scattered jobs demand extra tight scheduling and control

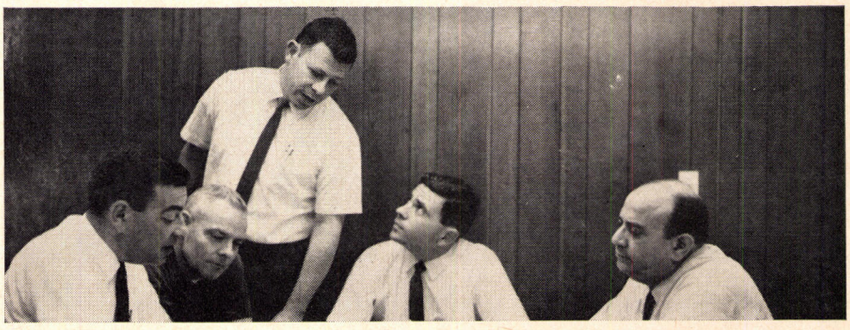
To get tight control, Tiffany bases its construction planning on two principles:

1. Most operations are scheduled for completion in one day or less. (Two exceptions: drywall, which must be scheduled over five days, and paint.) This sometimes means big crews—as many as 12 men, for example, may be needed to erect masonry walls in one day—but it also eliminates additional trips to the site, a big saving on jobs that are as much as 90 miles from the main office. If the job is more than 30 miles away and outside of Tampa's Hillsborough County, Tiffany charges a small fee based on the travel time to the site.

2. *Most construction is handled by Tiffany's own crews, even though in the Tampa area, most builders subcontract every operation.*

"This is a big reason why we can undersell all other odd-lot builders here—and most subdivision builders too," says Irwin Karpay, Tiffany's vice president for construction. "When we did subdivision building, we subbed out all operations just like everyone else. Everything was in one place, and supervision was easy. But when we switched to scattered lots, adequate supervision became impossible. And our subs either refused to travel or wanted much more money." An example: Tiffany's painting sub, who had been getting $400 per unit for subdivision houses, asked $500 for virtually identical odd-lot houses. Tiffany took on the painting and found that the actual cost, not including overhead, was $225.

Tiffany began its own construction by absorbing its own carpentry sub. The company formed a separate carpentry firm and



This management team runs Tiffany's odd-lot operation

It includes (l to r): Irwin Karpay, construction vice president; Jack Jourdan, mortgage consultant; George Karpay (standing), president; Joel Karpay, financing vice president and Norman Dolgin, vice president for sales and lot control.

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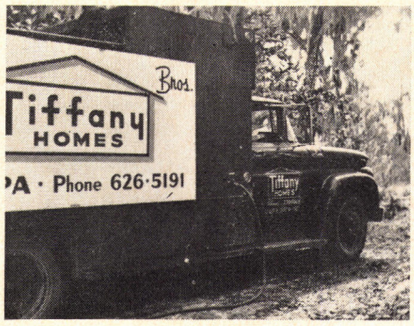
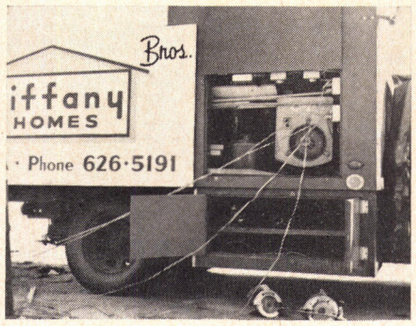
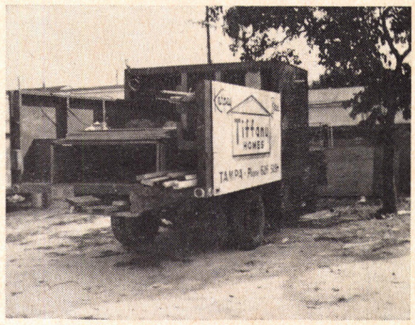






Tiffany's construction trucks carry their own utilities to far-out building sites

The masonry truck (*left*) has a built-in water tank for mixing mortar on sites beyond city mains. The trim carpentry truck (*center*) is equipped with a small generator to handle power tools, because power companies are often slow to install temporary service. The framing truck (*right*) has a heavy-duty generator plus bins to carry much-used materials like 2x4s and plywood. Thus if a lumber shipment is short, crews need not wait for a trip back to the yard.

gave the sub half interest, later bought him out and made him carpentry foreman. Next, the company added a masonry foreman, also a former sub, and continued to build up its own crews until less than half of the actual number of operations—and only about one seventh of the dollar volume—was in the hands of subcontractors.

Tiffany's payroll varies from 50 to 90 men, depending on the season, and includes crews for excavation, concrete, masonry, rough and trim carpentry, electrical, painting and final clean-up. Each crew is big enough to finish its particular phase in one day, and if production must be pushed, parallel crews are added. For example, if there is a big backlog of houses, the 12-man masonry crew is not made larger. Instead, a smaller crew is added to lay the foundation block between footings and slab —an operation that would normally be a partial day's work for the regular 12-man crew.

Because many jobs are in rural areas miles away from Tiffany's yard, and since utilities are not always immediately available, the company's construction crews travel in trucks that are completely self-sufficient. Masonry trucks carry their own water tanks to mix mortar; carpentry trucks carry both power tools and generators; and trim trucks carry trim lumber in built-in bins which are stocked each day in the yard. (A big fleet is one of the expensive necessities of odd-lot building. Tiffany operates 30 trucks and cars and spends an average of $2,000 a month on gasoline.)

The subs Tiffany still uses must meet four requirements: financial stability, quality work, good service and fair prices. "If they flunk any one of these," says Irwin Karpay, "out they go."

The company's current stable of subs includes outfits that already have the necessary special equipment (thus limiting Tiffany's own investment), mechanical trades which must be licensed in particular towns, and subs who for one reason or another do a job at appreciably less cost than the company could with its own men. These three categories now embrace ground clearing, roofing, plumbing, drywall, windows and flooring.

Tiffany pays all of its subs regularly either weekly or monthly—and in return, demands a high standard of performance. Callbacks are listed on complaint slips kept in the company office. The sub is expected to watch the slips and make prompt repairs; if more than a week passes without a complaint being checked, the slip is pulled, the sub is notified and all or part of his money is held back until the job is made good.

Accurate scheduling, important to any building operation, is a matter of life and death to Tiffany. The cost of every error will be compounded by the distance crews must travel to the site.

Here, in brief, are the major steps in Tiffany's schedule:

1. The house plan and lot plan are brought to the construction department by the salesman. Plan and lot are checked for compatability, custom changes in the plan are checked for feasibility and the house package is priced. Only Irwin Karpay gives prices. "We want to be sure that pricing doesn't vary," he says, "so that our referral sales aren't hurt.

2. The lot is checked for possible building problems, and the house price is adjusted accordingly by Irwin Karpay. Now, providing the appraisal is favorable, the customer is told the price and a contract is signed subject to mortgage and title clearance.

3. Once the mortgage is signed, the house is given a job number and placed in the schedule in this manner:

A job-order sheet is made out which lists target dates not only for all phases of construction but for the ordering of materials that Tiffany doesn't stock in its own yard (block, trusses, etc.) and for inspections.

The house is posted on a master control sheet in the superintendent's office, together with the target dates for completion of each operation. (At this stage, special materials and slow-delivery items are ordered.)

A separate materials form for the house is made out.

Job sheets for each crew are made out and given to the crew foremen. The sheets list every piece of material used by the crew and include columns where the foreman later enters labor time. Job sheets and materials sheets provide the cost-control data for each house.

As the job progresses, actual completion dates are posted on both the job-order sheet and the master sheet. Delays can thus be spotted immediately and compensating changes made on subsequent operations.

Obviously, any changes ordered after a job is scheduled can throw the schedule out of whack if they are not programmed into the entire process. So all change orders must be signed by the construction department. And the construction department, in its turn, doesn't sign until it is sure the changes can be integrated into the schedule.

The average Tiffany house is built in 54 calendar days, which allows for drying times, inspections and periodic rainstorms. Tiffany has completed a house in as little as 17 days for a cash customer who wanted his house in a hurry or no sale. But such brute force plays havoc with the rest of the schedule and is discouraged.

Two other elements are vital to maintaining Tiffany's tight schedule: good communications and experienced crews. Every vehicle is equipped with a two-way radio.

And more than half of Tiffany's men—and almost all supervisory personnel — have been with the company for over two and a half years. As as result, extra men can be added in rush seasons without disrupting efficiency. Turnover among key men is low; among other things Tiffany has a profit-sharing plan for which employees become eligible after one year. And morale is high; on their own initiative, crews asked for and got work shirts bearing the company emblem to wear on the job.

Selling: odd-lot houses call for a totally different approach

Tiffany's sales vice-president, Norman Dolgin, lists these four major differences between selling odd-lot houses and selling subdivision houses:

1. *The odd-lot salesman must go out and find his prospects,* whereas the typical subdivision salesman waits for them to walk in. Tiffany maintains two models next to its main office on a busy Tampa street (plus models in each of the other counties where it now builds), but less than 20% of its buyers are walk-ins. The bulk are brought in by referrals (close to 75%) or by such lead-procurement programs as brochures in motels (to catch house-shoppers from out of town), telephone canvassing, direct-mail campaigns, booths in local fairs, and, of course, newspaper and radio advertising.

2. *Buyers must be educated to the idea of buying on odd lots.* "Most of them believe they have to buy in a subdivision," says Dolgin, "because a house on their own lot would be too expensive."

Convincing such prospects introduces a more or less calculable time lag into the odd-lot sales process. Says Dolgin:

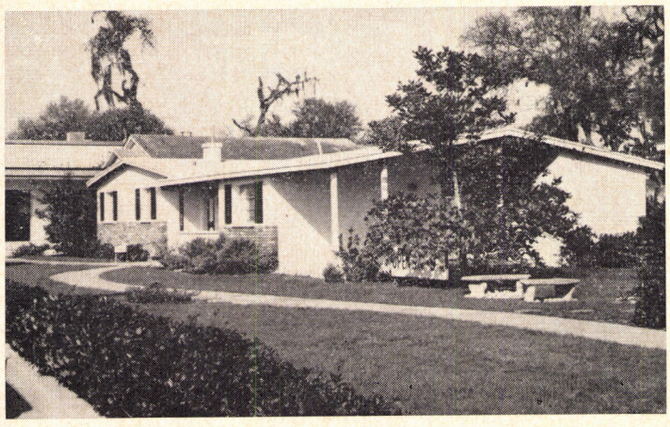
"Say we send a salesman out on 100 leads. He'll come back with two solid applications. If he goes back to the same group 90 days later, he'll get four more; and after another 90 days, eight more. That's about the limit. But for the next three years, other members of that group will trickle in just to see the houses. And some will buy."

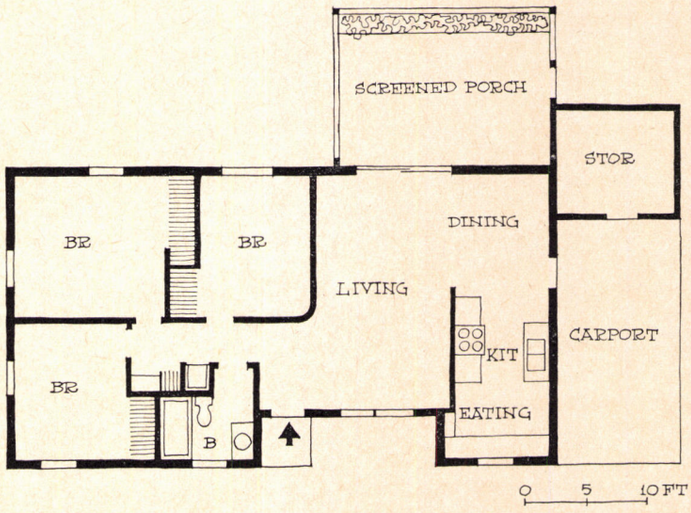
3. *Odd-lot buyers are a highly diverse group.* "Buyers in any one subdivision tend to fall into relatively narrow age, social and economic groups," says Dolgin, "but our buyers can be anybody. So our salesmen must be prepared to deal with anyone from dewy-eyed honeymooners to retirees."

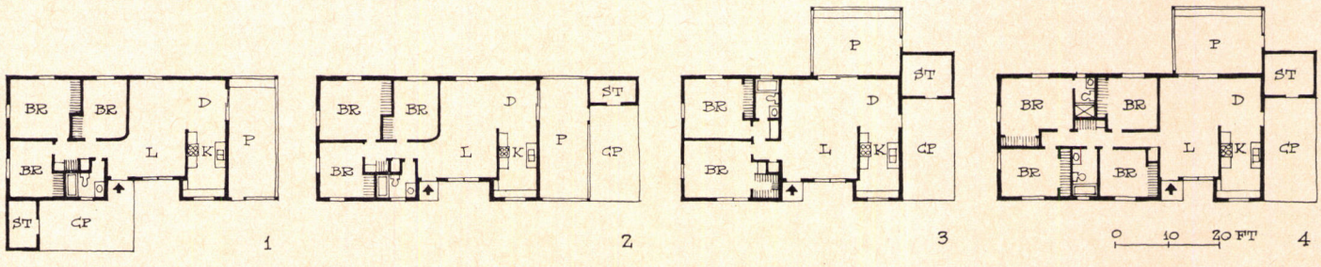
4. *Odd-lot buyers want houses tailored to their own needs.* "By contrast," says Dolgin, "subdivision buyers in our price range are satisfied with standard models—otherwise they wouldn't be there."

So Tiffany is perfectly willing to make changes. However, salesmen are instructed to try to sell down, not up, and commissions are paid on a unit rather than a price basis. Reason: the company doesn't want to price buyers too close to the limit of conventional mortgages and so lose sales through non-qualification.

The off-beat nature of selling odd-lot







Tiffany's most popular model has standard variations to fit almost any site or family

The basic house (*photo and plan, top*) has three bedrooms, 1,050 sq. ft. of area and is priced at $8,600 on the owner's lot. Typical variations (*plans at bottom*) include 1) a side carport and an end porch for deep, narrow lots, 2) an end carport and porch for wide or corner lots, 3) two bedrooms and a larger living room and 4) four bedrooms, two baths and a smaller living room. The first three variations are priced the same as the standard model; the last is higher—$10,500.

Tiffany will let a buyer make almost any change in a model, and some changes are requested so often they have become standard extras. Examples: double carports ($350), Terrazzo floors ($150) and air conditioning ($950). Extra area is priced at $7.50 a sq. ft., and extra block courses (for low lots) are priced at $200 each for the first two, $300 for the third.

continued

houses has given Tiffany very definite ideas about hiring new salesmen.

"We want young men," says Dolgin, "because they have fewer predetermined ideas. Also, they are more likely to be hungry, eager and healthy. Health is particularly important, because during their six-month training period they'll work from nine in the morning to nine at night six days a week. And we want married men because they tend to be more stable."

Furthermore, Tiffany rules out any salesman with experience in these fields:

Subdivision selling. Says Dolgin: "We'll have to untrain him before we can train him."

Real estate. "This man will have bad work habits. He's too casual. And he's used to looking for the one big hit, because in real estate a salesman can live off three good deals a year."

Insurance. "Unless he's been working on a debit, he's used to having his income depend just on how many calls he can make in a day."

Lending institutions (except finance companies). "We've discovered that such a man tends to prejudge a buyer's financial situation on too little evidence."

And finally, Dolgin avoids men who have had serious financial problems because, "they have too many things on their mind besides selling."

Once hired, a new salesman is put through an intensive — and expensive — training course. Training each man costs Tiffany about $4,000 (the company gives him a draw which is usually equal to or better than his previous salary), plus half the productive time of two top salesmen for a month. The new man gets three ten-hour days in the classroom, then becomes an assistant to a branch manager for about four weeks, and finally, for the next three or four months he works closely with other experienced salesmen on canvassing and calls. Says Dolgin: "He gets floor time in the models only on weekends. Most leads don't come from models, and floor time is just a license to starve."

By the time the new man has been with the company six months he should be earning his draw (his draw during the training period will have been forgiven). "He hasn't had to actually write any applications," says Dolgin, "because his commission is paid on the lead, not on the contract. And he's usually better off during this early period to leave the closing to the more experienced men."

On the average, one man out of three gets through the first 60 days of training, and if a salesman lasts through a full six months, chances are he's there to stay. Tiffany never fires a good salesman when sales are slow, but some leave for better jobs.

"There's just one problem," says Dolgin. "Our training program has such a reputation that we're constantly being raided. Some men are made sales managers by other builders after they've been with us for just a few months. But they usually don't do too well because other builders don't give them the merchandising help that we do."

Mortgages: conventionals are best despite bigger down payments

"There are two reasons why we almost never use FHA and VA loans," says Joel Karpay, Tiffany's vice president for finance: "They require too much time and expensive red tape, and they place too much value on city improvements. Conventional loans may not be as big, but they work much better for our odd-lot houses. Also, we can borrow construction money on conventionals and later convert them to permanent mortgages."

Tiffany gets 90% loans (backed by Mortgage Guaranty Insurance Corp. which insures the top 20% of the loan) for a few of its buyers, but the bulk of its mortgages are from 75% to 80%.

Tiffany thinks in terms of equity rather than down payment. "And an astonishing number of people have enough equity," says Joel Karpay. Most often, this equity comes from one or more of these sources:

1. Cash in the mattress. "People who really want a house seem to be able to get their hands on that extra $1,000," says Karpay. "And some buyers pay all cash. One day a man walked in, plunked down $12,000 in old bills on a salesman's desk, and said, 'Build me a house, Sonny.' We did."

2. Family-owned acreage, from which chunks are broken off and given to children.

3. Lots which the buyer either owns outright or is in the process of buying. Says Karpay: "Many of these buyers bought or started buying their lots four or five years ago, and the lots have appreciated."

If a buyer simply can't scare up enough equity, Tiffany tries to persuade him to begin saving, and will set up an escrow account for him so he can buy a house within a couple of years.

"We like this type of buyer," says Karpay. "He's a solid citizen, and usually a good credit risk."

Since Tiffany is concerned with getting the best possible conventional loans for its buyers, it goes to great lengths to make sure that its buyers are good risks. Applications are screened very carefully before being submitted to a lender. As a result, the foreclosure rate among Tiffany buyers is only 20% of the rate for subdivision buyers in the same price range. Says an executive of a local lender: "Out of 450 Tiffany mortgages, we've had just two foreclosures, and only eight accounts are now delinquent as much as 90 days. This is by far our best record with any builder in the Tampa area."

Tiffany places most of its mortgages with federal S&Ls. "There are no savings banks here, commercial banks don't give us big enough loans and insurance companies don't like either small loans or rural loans," says Karpay. "S&Ls are local in character, and they're interested in buyers who will become depositors."

But S&L localism has one drawback: when Tiffany expands into a new area, it can't take its reputation for good mortgages along with it.

"We have to start all over again," says Karpay, "and we have to learn a whole new set of ground rules." Example: one S&L insists on 12-ft. carports rather than Tiffany's standard 10-ft.

Tiffany has set up its own licensed and bonded mortgage company to expedite loans. The reason: fast as the processing of conventional mortgages is, it can nonetheless be too slow to keep Tiffany's cash flow in balance. Furthermore, even a small delay between a signed contract and a cleared title may cause a lost sale.

The subsidiary company, called Florida Mortgage Investors, will take a buyer's mortgage under these circumstances:

If a buyer is in a hurry for a house on a lot with an uncleared title, and Tiffany is sure the title will be cleared. Later, when the title is cleared, the mortgage is sold to a lender. And before FMI takes the mortgage, it gets from the lender a commitment to buy subject to clearing the title.

If an S&L is so jammed up with closings that a Tiffany application must be delayed for several days, and so hurt Tiffany's cash flow. FMI warehouses the mortgage with a commercial bank, and Tiffany draws construction money against it.

"Another advantage of this system," says Joel Karpay, "is that it lets us make the final draw on a permanent mortgage without having to wait for a buyer's signed acceptance. Some of our buyers live halfway across the country, and getting their signatures can take from a week to ten days." —MAXWELL C. HUNTOON JR.

J. C. Allen & Son

WATERBOUND FILL, pumped by dredge in background, gushes into settling basin (*see p. 94*).

Underwater land: how to dig it up and turn it into premium building sites

Why bother? Because underwater land is 1) usually cheap, 2) often in a perfect location or 3) can be turned into highly desirable waterfront property. The reason it is available is that no other builder has had the imagination or the ambition to tackle it.

Sometimes the opportunity is too obvious to ignore, like the $120,000 bay-front lots created out of a sandbar (*page 96*). But more often it's a difficult site that local builders have gotten into the habit of bypassing, like the $6-million apartment job an out-of-town builder pulled out of a swamp (*page 98*).

Moving underwater earth can be even simpler than moving earth on the ground. First, if it's moved by hydraulic dredge, it's simply sprayed out of a pipe (*above*) instead of being carried around by tractors and pans. Second, it's self-compacting. Third, it's self-leveling and requires only finish grading. Underwater land can be gotten at in a more conventional way, too. It can be pumped out and moved with the kind of machines builders are accustomed to.

To see how three builders are profiting from underwater land, turn the page.

A half-submerged sandbar yields 75 bayfront lots worth $2,000 a front foot

And the job—as the photo sequence at the right shows—took Macco Realty Co. just seven months. A dredge began cutting the first of two channels into the sandbar in May, and by December the first foundations were being poured.

Located in Newport Beach, Calif., 40 miles south of Los Angeles, the development—Dover Shores—includes a total of 311 lots and is part of the famous Irvine Ranch. Macco leased the land from The Irvine Co. and subleases finished lots to homebuyers. Even if they were for sale, there probably wouldn't be many takers for the 75 bayfront sites: at current valuation, an average 60′ lot would start at $120,000 (the best-located lots are worth $2,500 a front foot and some are as wide as 140′).

This extraordinarily high land value is why a sandbar in Newport Beach (most sandbars contain excellent material for hydraulic dredging) is well worth the cost of reclaiming.

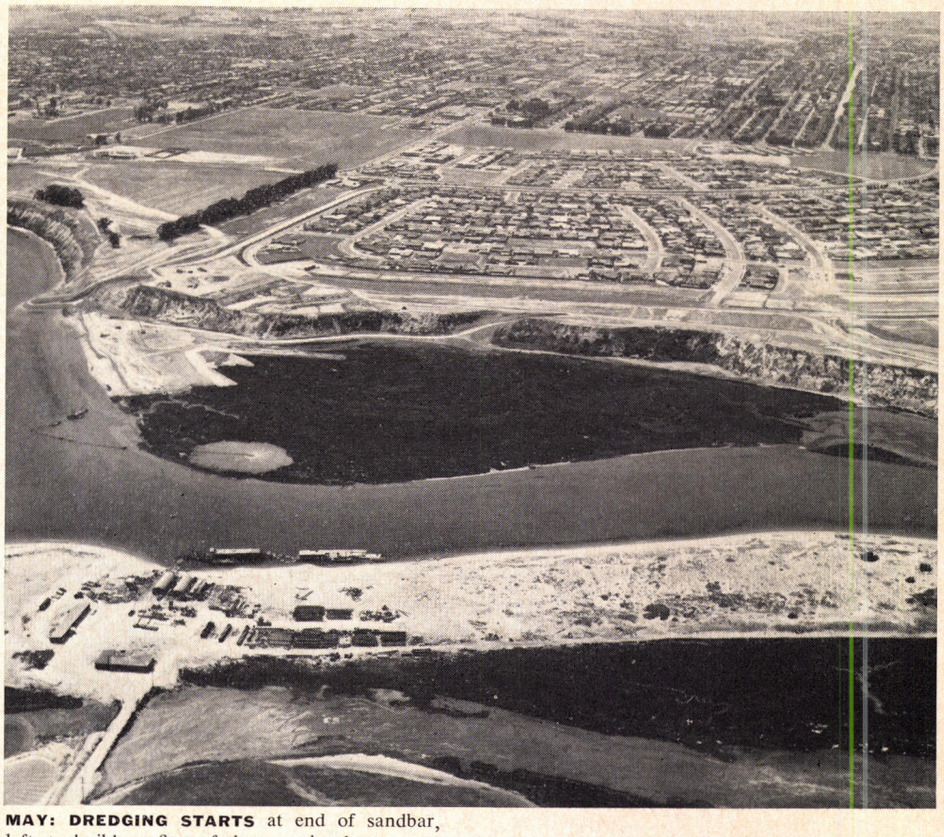
By pumping and redistributing 309,000 cubic yards of sand and mud, Macco carved three broad peninsulas out of the formerly unusable land and nearly tripled its length of shorefront.

Hydraulic dredging cost about 45¢ per cubic yard, and the operation often went as rapidly as 10,000 cubic yards per 12-hour day. Because the channels had to be dug to a minimum depth of 10′ to allow for homeowners' boatslips, there was enough fill for the homesites without making the channels unusually wide or deep.

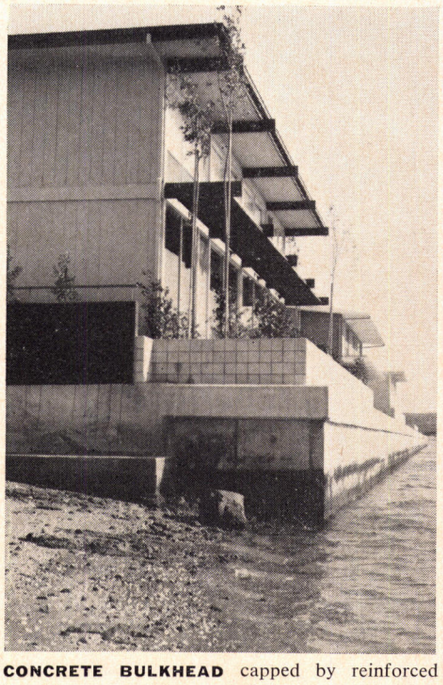
One minor hitch occurred at the outset of the tightly scheduled operation. The hydraulic dredge brought in for the job was unable to cut the tightly cemented sand and mud and had to be replaced by a larger, more powerful model.

Bulkheading cost about $65 per lineal foot and the three peninsulas required 5,200 feet. Precast V-groove slabs, 4′ wide, 12″ thick and 20′ long were placed by a floating crane that followed close behind the dredge as it cut the outlines of the peninsulas. (For details of bulkheading, see pages 100-101).

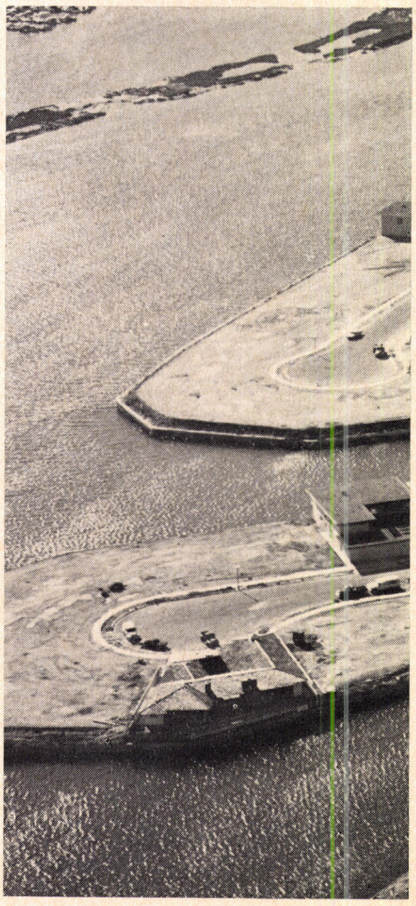
What kind of house do you build on a $120,000 lot? Macco has six models priced from $59,500 to $200,000 including up to 4,480 sq. ft. (with six bedrooms and four baths). Average rental for the leasehold lots, contracted for from 52 to 72 years, is $1,500 per year.

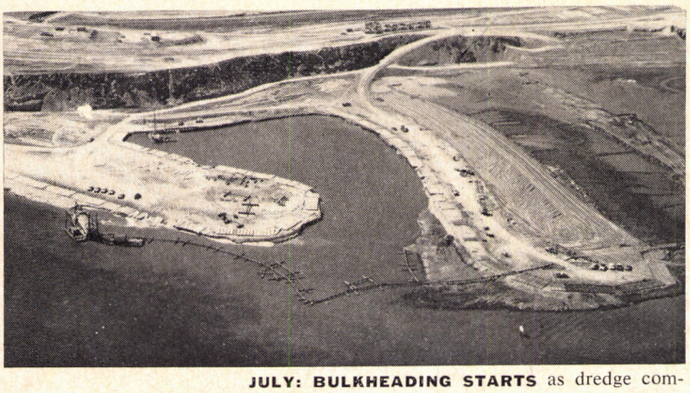


MAY: DREDGING STARTS at end of sandbar, left, to build up first of three peninsulas.



CONCRETE BULKHEAD capped by reinforced bond beam permits homebuilding at water's edge.





JULY: BULKHEADING STARTS as dredge completes first channel and evens up shoreline.

OCTOBER: DREDGING ENDS and bulkheading is nearly done, followed closely by backfilling.

DECEMBER: BUILDING STARTS on two peninsulas as roads are graded and utilities buried.

JANUARY: DEVELOPMENT ENDS and 75 leasehold lots are open to homebuyer inspection.

DESIRABLE LOTS on bayfront were more than half taken one year after finish of dredging.

continued

A bypassed swamp yields prime apartment land and a private lake

The builder who finally bought the difficult site—30 acres of low marsh beside the Wabash River—took it for two reasons.

First, it is a perfect location for apartments, next to the bridge that links the Indiana cities of Lafayette (business people) and West Lafayette (Purdue University students).

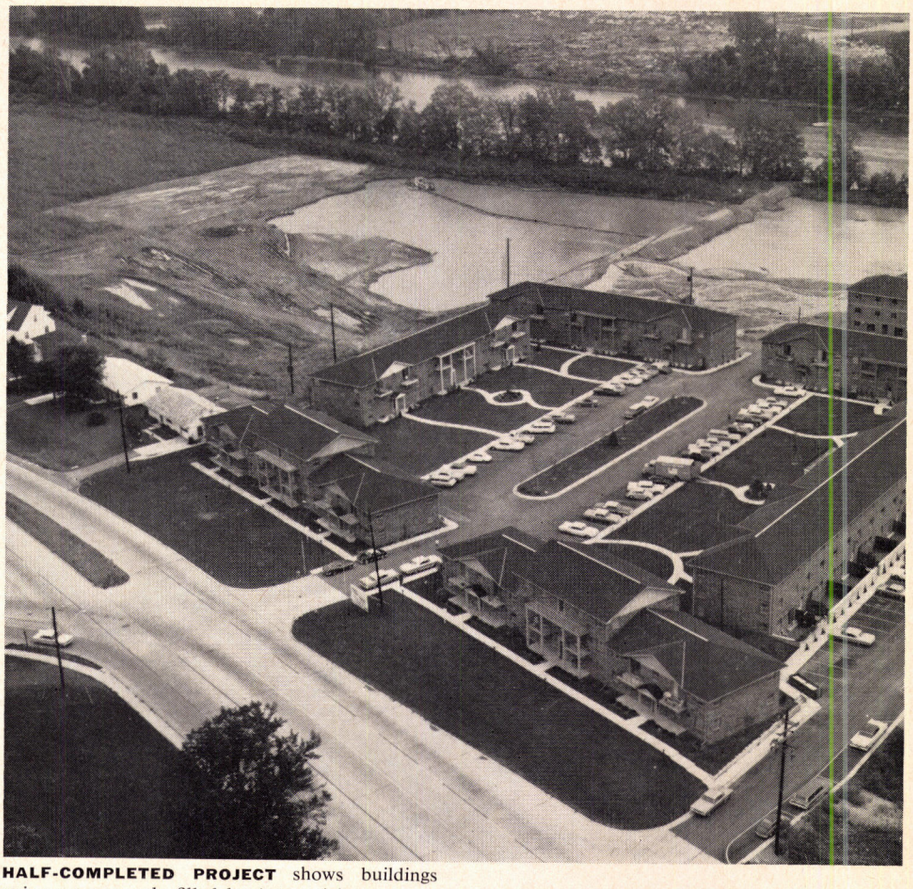
Second, studies showed the swamp could be made usable. A shopping-center developer had already taken 200,000 cubic yards of fill out of it, so Builder Ralph Williams of Marion, Ind., knew that beneath the top few feet of silt lay an extensive supply of granular soil. Also, he had studied Wabash flood-level records and knew that by raising the land 25′ to 30′ he could make it flood-safe.

Williams' plan (shown in completed form in the rendering, bottom right) was to dig a 12-acre hole 30′ deep and use the fill to raise the remaining 18 acres to the flood-safe level. The excavation will become a lake because of its proximity to the river and consequent underground springs, and the filled land on three sides of it will become buildable land for 458 apartments. Share of total investment devoted to fill and rough site work: 6% to 7%.

A compact 12″ hydraulic dredge—much smaller than conventional dredges of the same capacity—was the key to the job. The subcontractor was able to get it into the swamp by opening up a channel from the river and digging a pool just large enough to float the machine.

The dredging operation excavates the lake at a rate varying from 900 to 2,500 cubic yards per 12-hour day (cost: 35¢ to 40¢ per yard). It is coordinated with a construction schedule that calls for the completion of apartment groups precisely at the peak of the rental season (September, when the local university students are looking for accommodations). Sections of land big enough for one or two buildings are built up one at a time. A dragline dikes off the section by raising a 25′- to 30′-thick earth wall to the desired finished-land height. This creates a settling basin.

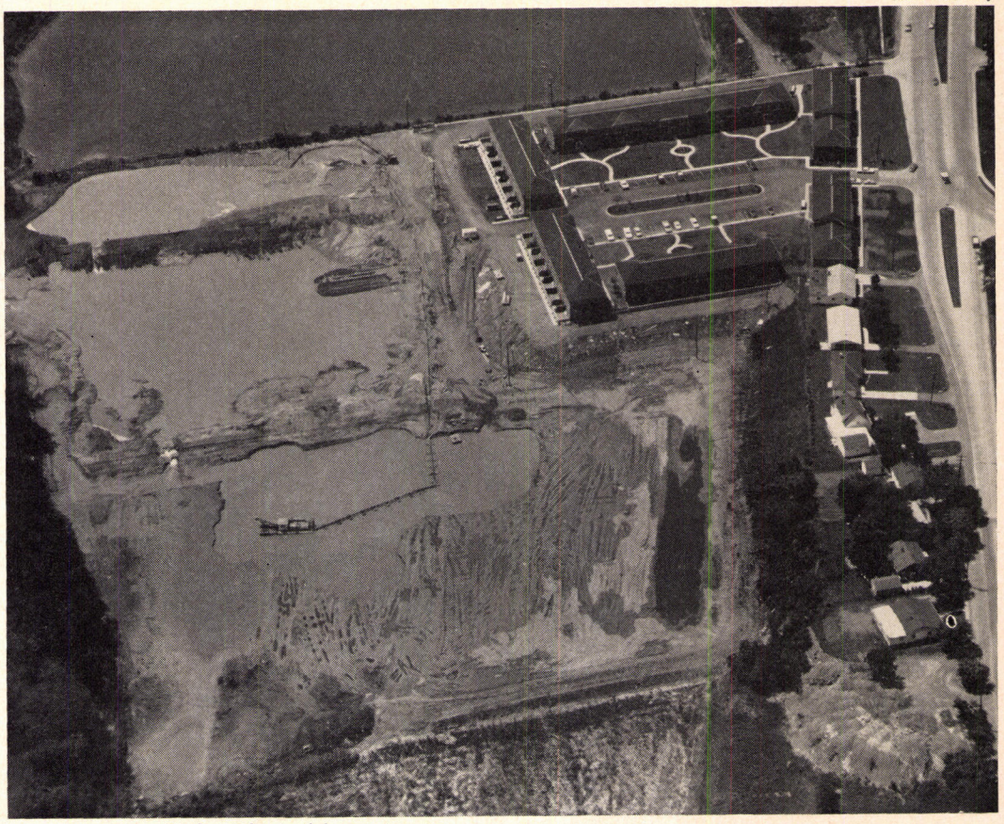
Three days after the fill reaches the top of the dike, Williams excavates and starts laying foundations. No compaction is necessary. Within three weeks, a local components supplier is placing the walls and the dredge is working in the next section of the schedule.



HALF-COMPLETED PROJECT shows buildings going up on newly filled land, top right.

COMPLETED PROJECT will overlook new lake on three sides. Wabash River is in background.

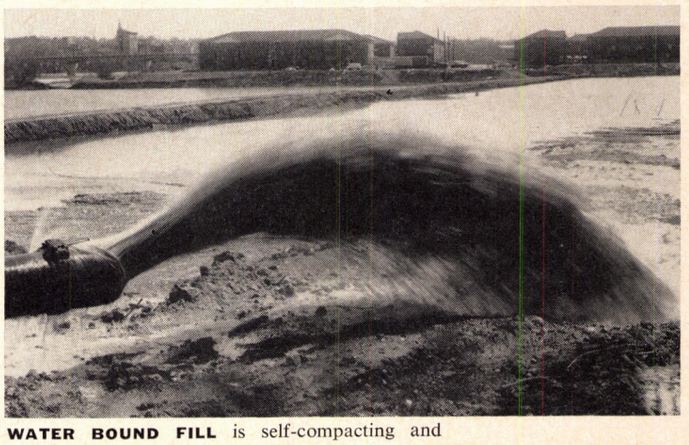
Jesse McGreery



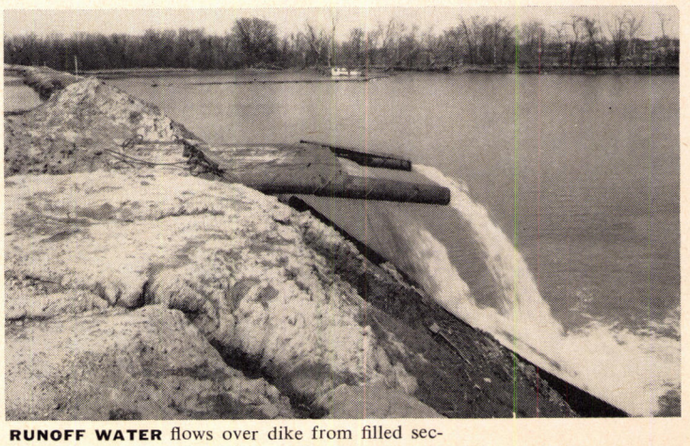
DREDGE pumps fill from future lake, center, to next land section on building schedule, top.

Public Service Co. of Indiana

Photos: Allen & Son



WATER BOUND FILL is self-compacting and leveling. Dike, left, is at final fill height.



RUNOFF WATER flows over dike from filled section, left, into excavated lake, right.

continued

A cleaner way to dredge: pump out the water and dry-dig the job

This system prevents silting of the surrounding waters—an important consideration when one of the biggest promotional assets of a new waterfront project is good fishing.

Mackle Bros., Florida builder and developer, is using the dry-dig method for opening some 90 miles of waterways at its 10,000 acre Marco Island project. Mackle is concerned not only with preserving the abundant fish supply around the offshore island (12 miles south of Naples on Florida's Gulf Coast) but also with conserving the waterfowl and other wildlife that will make the area attractive to homebuyers.

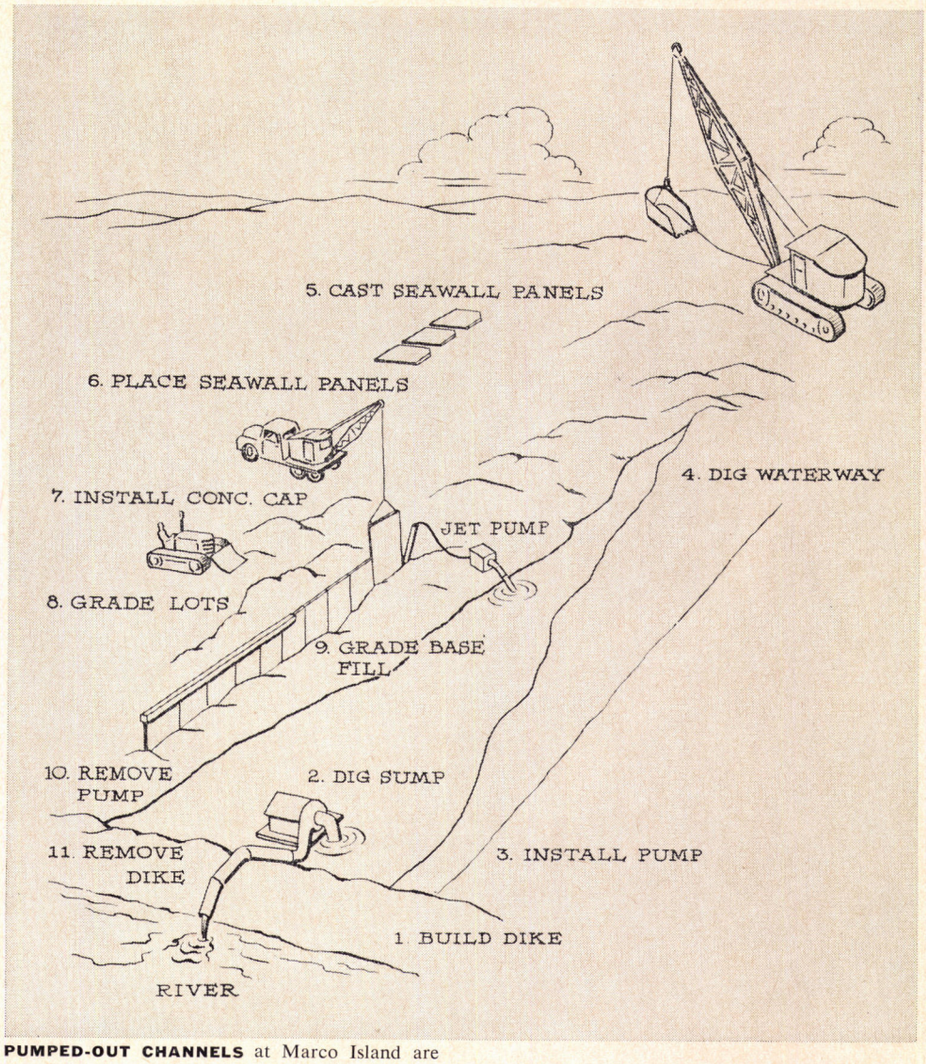
Marco Island contains many small natural waterways which can be enlarged and extended and used as the basis of an over-all channel system.

Instead of using an hydraulic dredge to dig the channels and fill the adjacent land, the Mackles expose the land and dig it with draglines. Here's how the job, diagramed at right, is being done:

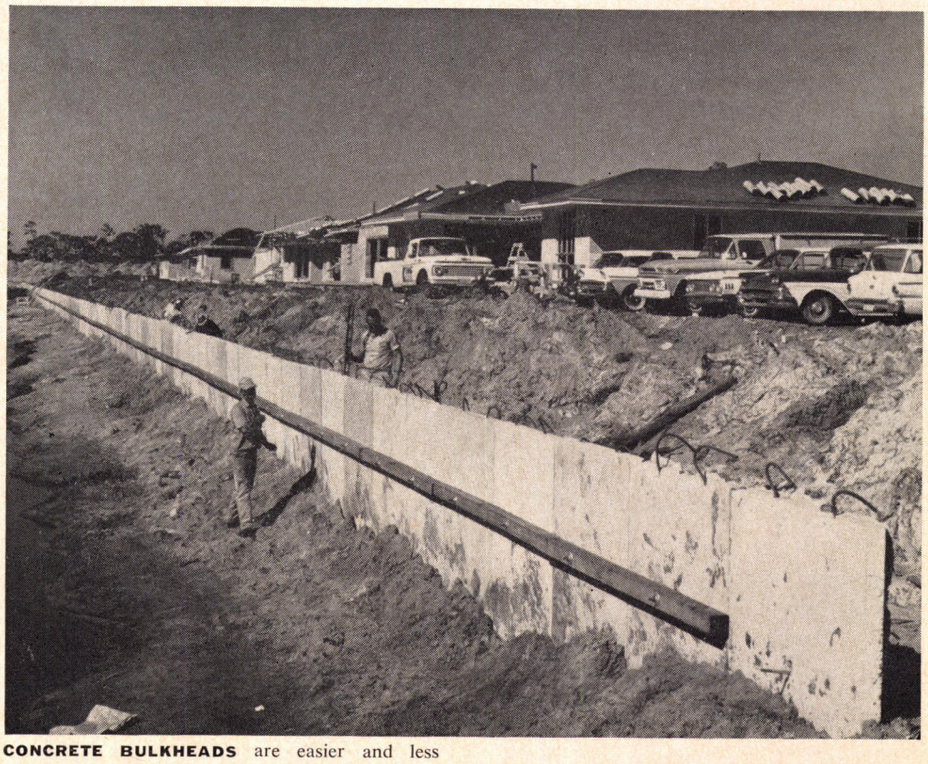
The first step is to dike off a large area of the natural inlets and lower the water table 10′ to 12′ below river level. This is done by digging a sump behind the dike and putting a floating agricultural pump above it.

The dragline starts digging at the sump and works back into the island, spreading fill to the adjacent land. As the channels progress, the bulkheads are placed. Enough water is left at the bottom of the channels to operate the jet pump used for setting the bulkhead panels. After all the seawalls are completed and graded on both sides, the water is let back into the area.

Pumping and dry-digging may sometimes be less expensive than hydraulic dredging. At Joppatowne, Md., 400,000 cubic yards of granular fill were taken from pumped-out marshes for 40¢ a cubic yard. And the cost included both hauling (by tractors and pans) and compacting the fill as well as damming the marshes and digging drainage ditches to the electric pumping station. The builder (Panitz & Co.) is currently moving 550,000 cubic yards of similar granular fill by hydraulic dredge, at a cost of 45¢ a cubic yard. The economics of dredging vs. dry-digging depend largely on the size and extent of the job: it has to be big and all in one place to warrant pumping and dry-digging.



PUMPED-OUT CHANNELS at Marco Island are dug and walled without silting surrounding waters.



CONCRETE BULKHEADS are easier and less expensive to install in drained-out waterway.

Bulkheads let builders get the most out of waterfront home sites

They bring buildable land right out to the water's edge, saving as much as 40′ over sloping shorelines.

Vertical slabs of precast concrete are the most widely used bulkhead material. They are tied together by a continuous poured-concrete cap and cost from $60 to $75 a running foot depending on wall height and soil conditions. The slabs are cast in a curing yard near the water to minimize handling and are let into the bottom by trenching with a high-velocity jet of water.

The bulkhead slabs in the project shown on the facing page are aligned by integral V joints and tied to the land by steel rods embedded in the cap at one end and in buried concrete deadmen at the other end.

An alternate system, which eliminates the jetting operation and permits a shorter slab, is shown at top right. Concrete piles are driven into the channel bottom, and the slabs are slipped between them. (The photos show this system used for a nine-mile seawall at Golden Isles, Fla.)

Corrugated asbestos-cement panels are the basis of a newer and much cheaper system of bulkheading. The cost is from $9 to $12 a running foot. And unlike the installation of concrete bulkheading, which requires a crane and precasting facilities, the asbestos-cement can be set with only a jetting rig (*photos, bottom right*). The 3′-wide corrugated panels, available from manufacturers in 3′ to 10′ lengths and 3/10″ to 6/10″ thicknesses, weigh 120 to 170 lbs. and can be placed by hand. Like concrete slabs, they are capped and tied to on-shore deadmen.

But bulkheads are often impractical for shorelines subject to heavy waves. The lightweight asbestos-cement wall is strictly for protected waterways and lakeshores, and the heavier concrete bulkhead, while it may withstand the waves, tends to bounce them back and forth destructively.

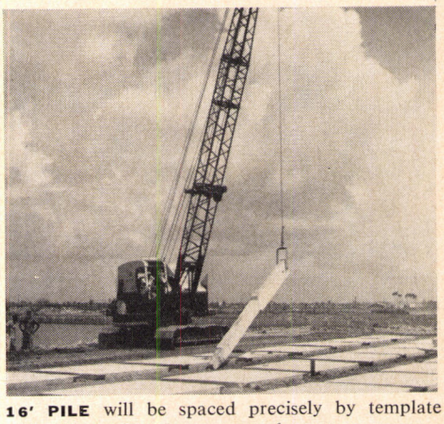
Sloping rock, or riprap, is the most effective way to absorb wave action. An engineer can work out the best compromise between economic land use and safety by determining the steepest permissible slope. Examples: at Ventura Keys, Calif., a 1-in-3 slope was covered with two sizes of stone: a small size used as a protective filter blanket to hold down the sloping sand and clay, and a larger size on top to dissipate the waves.

—H. Clarke Wells

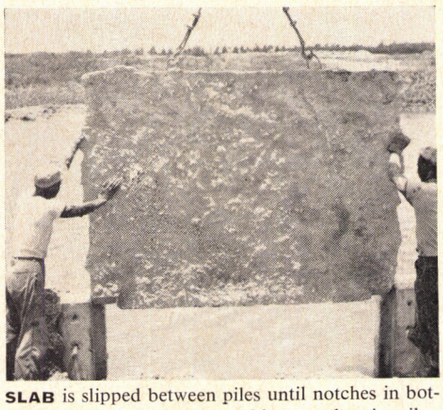
Concrete slab-and-pile seawall needs no underwater jetting

Photos: Candid Art Inc.

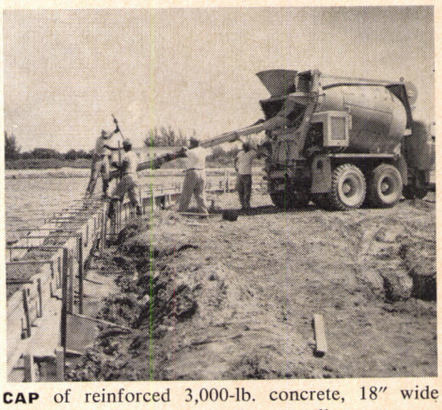
PRECASTING of 6′x8′ seawall slabs is done at site. Forms are steel angles on level ground.



16′ PILE will be spaced precisely by template and driven with hammer attachment on crane.



SLAB is slipped between piles until notches in bottom corners lock into matching notches in piles.

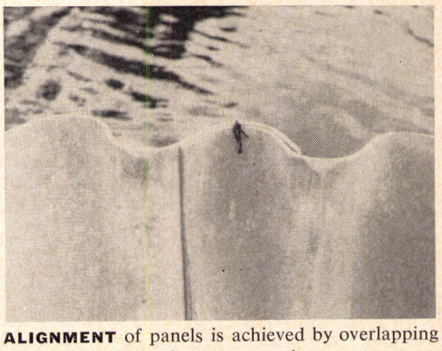


CAP of reinforced 3,000-lb. concrete, 18″ wide and 6″ deep, finishes and ties seawall.

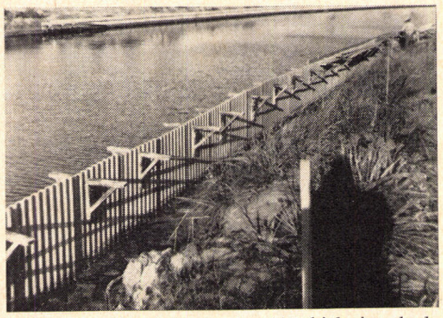
Asbestos-cement seawall requires no lifting equipment

Photos: Phototech Studios

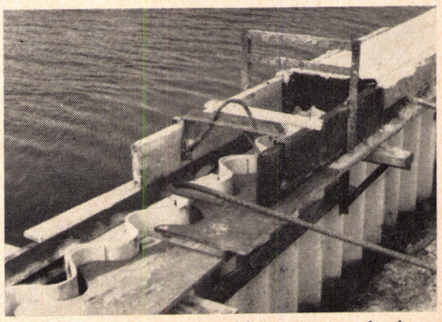
JETTING RIG is only power tool used to install corrugated panels which weigh about 150 lbs.



ALIGNMENT of panels is achieved by overlapping corrugations. Wire is temporary tie.



BRACES are bolted to the ½″-thick interlocking asbestos sheets to carry concrete cap form.



TIE-BACKS link cap with concrete deadmen under backfill. Wall costs $10 a running foot.

Unanswered questions cloud the outlook for nursing homes

Not long ago the nursing home market seemed unmatched in promise. An expanding elderly population opened apparently unlimited opportunities for builders: speculative nursing homes, homes built on contract and homes operated as investments.

There is still excitement in the nursing home field. Builders who claim high returns from their homes often are besieged by other builders looking for pointers.

But the nursing home field is also showing symptoms of ill health. A rash of fires has aroused public concern for safety; investigations have exposed some cases of substandard care; and overbuilding has weakened a dozen metropolitan markets.

To find out what is troubling the nursing home market, HOUSE & HOME talked to over 100 experts in the field—builders, administrators, physicians, consultants, architects and government officials. This research shows that the problems of the market can be summed up in three basic—and unanswered—questions:

Question No. 1: Just how big is the nursing home market?

The U.S. Public Health Service says there's a need for 514,080 beds for long-term care, yet there are already over 100,000 empty beds in the U.S. On the other hand, in 1960 California predicted it would need 37,950 beds by 1975. That number was exceed by 1962, yet occupancy rates have held at around 90% right up to today.

The problem: nobody knows how to calculate the need for nursing homes. FHA, for example, relies on the states for certificates of need. But, says one state official, the certificates are based on estimates "we just plucked out of the air." Officials administrating the Hill-Burton program (federal assistance to medical institutions) base their estimates on a population ratio ranging from 1.5 beds per 1,000 population in the Virgin Islands to 5 in Illinois. But Iowa has already reached 8 per 1,000 and is still building. Conversely, FHA's Camden, N.J., office says its area has reached saturation in nursing home approvals at 3.2 beds per 1,000.

Builders who rely on Hill-Burton estimates may find themselves in overbuilt markets. Reason: Hill-Burton officials recognize only nursing homes that meet their standards of safety and care. But there are hundreds of homes—some approved by FHA—that do not meet these standards.

Age is a misleading indication of need. Builders often estimate demand on the basis of the number of people over 60. But most nursing home patients are 80 or older. Comments Dallas Nursing Home Manager E. Y. Ashcraft: "The assumption that anyone over 60 is a candidate for nursing homes is wrong. The real need doesn't begin until age 75."

Regional mores upset general calculations of demand. In the Midwest and in all rural areas, families tend to keep old people at home. But in the metropolitan areas of the East and West coasts, families are less hesistant to place their elderly in nursing homes.

The number of old people in hospitals is also a misleading indication of need. In New York City, 50.5% of the long-term patients in municipal hospitals can be cared for in nursing homes, according to a study by Columbia University in 1963. But there are strong reasons why many of these patients will never become nursing home residents. First, hospitals are often reluctant to turn patients over to nursing homes (the Columbia study showed that hospitals were "cynical" about nursing home care). Second, hospitals are filled with welfare patients who cannot be economically cared for in proprietary nursing homes. Today, 50% to 60% of the country's nursing care patients are welfare cases whose payments range from $50 to $100 below the minimum monthly rates that nursing home operators must charge to break even.

And vacancies in nursing homes can be a misleading indication of need. In Houston where 1,500 beds came on the market last year, there are 911 empty beds. Says City Health Official H. L. Sadler: "Beds are increasing by 22% a year, patients by only 15% a year. But I can't say we're overbuilt. If the state enacts the second phase of its assistance program, and if the federal government passes Medicare, we'll need more beds."

Another point: most vacancies occur in high-priced nursing homes. A builder who can keep his costs down can often tap a vast need for low-cost beds. And location is crucial: a county can be oversupplied with nursing home beds, but a new nursing home that is convenient for physicians has a good chance of succeeding.

Question No. 2: How will government influence the nursing home market?

The pressure of an expanding elderly population will inevitably push both federal and state governments toward increased expenditures for nursing care. This will expand the nursing home market. But it will also create problems:

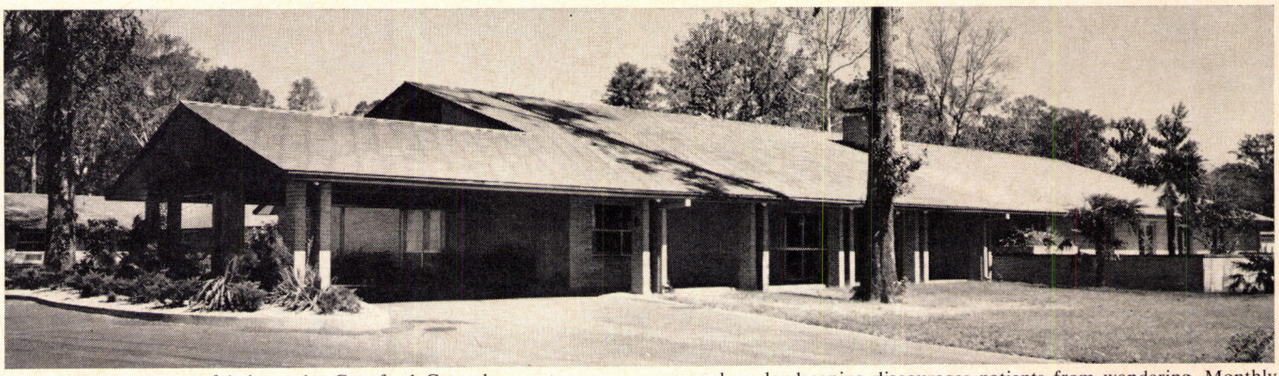
Greater involvement by government will almost certainly bring more stringent regulations for both construction and care. And the added cost may price some proprietary nursing homes out of the market.

Frequently nursing home sponsors complain about state codes, which tend to increase the cost of care. But a poll of operators attending a board meeting of the American Nursing Home Assn. in Seattle last month showed most of these complaints are premature.

There is agreement, however, that FHA standards do raise construction costs. The estimated increase varies from 15% (from a builder in Bridgeton, N.J.) to 80% (from a builder in Waterloo, Iowa); most reports fall in between—35% (St. Petersburg, Fla.), 25% (Washington, D.C.) and 20% (from a California architect who complains bitterly that he wasted three months proving to FHA that his home did not need a dumbwaiter).

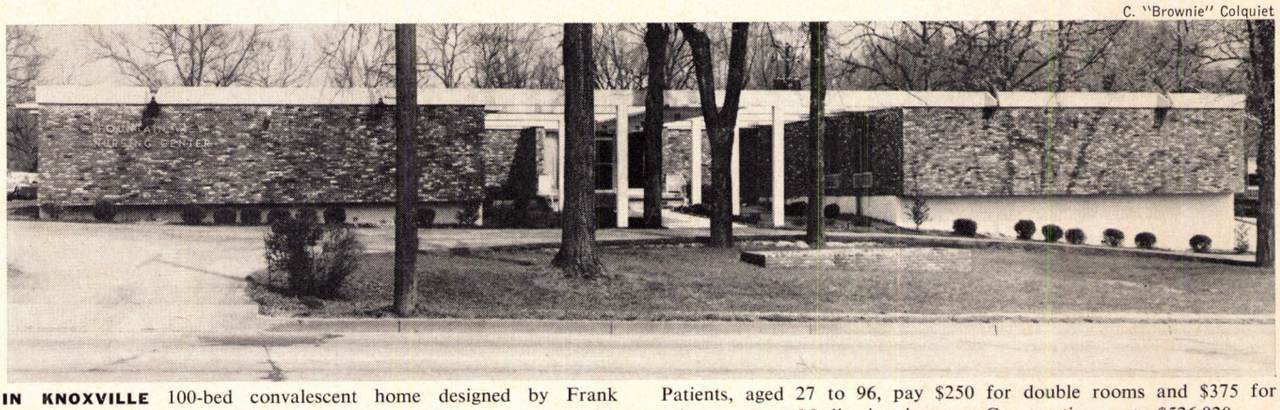
These higher costs lend credence to rumors that several FHA nursing homes have foreclosed. In truth, none of FHA's 200 operating homes has been foreclosed,

The new look in nursing homes: long, low and contemporary



IN BATON ROUGE prefab home by Crawford Corp. has center core and 104 beds in single and double rooms. Many rooms open to terrace where landscaping discourages patients from wandering. Monthly rates average $340. Construction cost: $800,000.

C. "Brownie" Colquiet

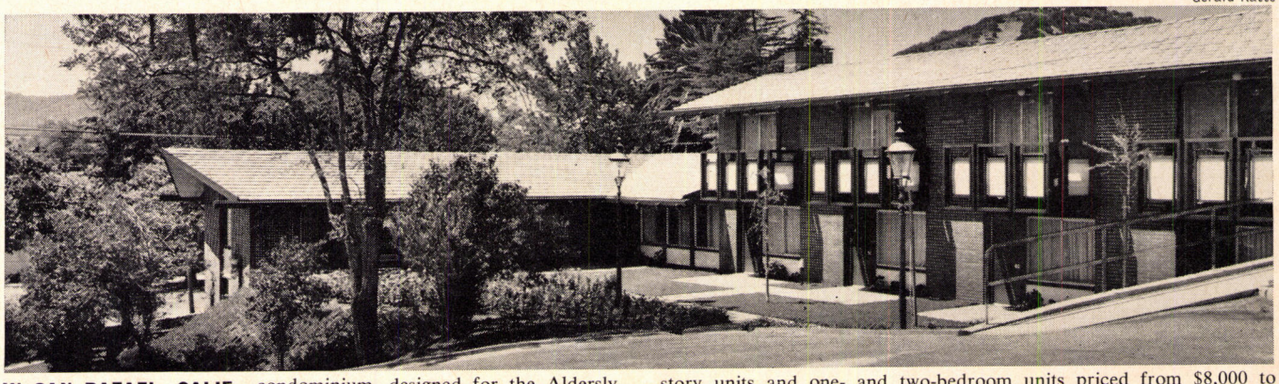


IN KNOXVILLE 100-bed convalescent home designed by Frank Lansky & Assoc. looks inward to enclosed court and reflecting pool. Patients, aged 27 to 96, pay $250 for double rooms and $375 for private rooms. Medication is extra. Construction cost: $526,920.

Ronald S. Senseman

IN HYATTSVILLE, MD., 150-bed home by Builder Stewart Bainum has inner court and sprawling look of modern motel. Wing at right has rooms for intensive care. Rates range from $325 to $495. Architect: Ronald S. Senseman. Construction and land cost: $1,140,000.

Gerald Ratte



IN SAN RAFAEL, CALIF., condominium, designed for the Aldersly Danish Home Foundation by Rex Whitaker Allen & Assoc., has two-story units and one- and two-bedroom units priced from $8,000 to $16,000, plus medical care. Construction cost: $132,000.

continued

though two, FHA admits, are in trouble.

Many government officials frown on proprietary nursing homes because they believe the function of nursing care is better handled by nonprofit homes. Admits one licensing official: "I'm sure that most thinking people would rather put their parents in a nonprofit home, especially a home run by their church. It just seems that this kind of home would be more concerned with its patients than a proprietary house."

Says Nursing Home Expert Harold Baumgarten of Columbia University: "As soon as nonprofit homes catch up with demand, I think you'll see HEW [U.S. Dept. of Health, Education & Welfare] grow cool toward properietary homes." Baumgarten sees nothing in the potentials of Medicare and new state legislation that will help builders.

Abuses in proprietary homes, though relatively few, contribute to the coolness of government. For example, the practice of some California nursing homes of "selling" patients to other homes has drawn fire from the state legislature. According to Mrs. Lillian McCall, consultant to the state assembly subcommittee on nursing homes, some homes transfer patients to other homes for a fee when they want room for wealthy patients, when they want to unload patients who are difficult to handle or when they have waiting lists they can't service.

Government officials are becoming alarmed by overbuilding in their areas. Says Alabama State Health Official Ed David: "The only thing we can do officially is try to persuade applicants not to construct nursing homes. But as long as they meet our requirements, we must license them." Adds F. Spencer Smith of New Jersey's Department of Institutions: "Mounting vacancies lead to a deterioration in nursing care."

New York State is the first state to try to control overbuilding. The state's Metcalf-McCloskey Law requires proof of need before the state will approve projects. Since the law became effective (Oct. 1, 1964), 40 nursing homes have been proposed, and they're all awaiting decisions. Notes Deputy Commissioner Claude C. Nuckols Jr. of New York's Department of Welfare: "We don't know how we're going to decide on need. We don't have any formulas. A lot will depend on utilization of existing homes, I suppose."

New York's approvals will also be based on the applicant's financial qualifications and his nursing home know-how. But the state's attempt to relate new homes to market need raises a new question: what right does a state have to prohibit new nursing home construction and thereby protect older homes from competition? Says Nuckols: "We expect some howls when we turn down our first home."

Question No. 3: Where is the balance between quality and economy?

For nursing homes, this balance is delicate—and crucial. Money spent for initial construction and equipment will help attract patients. But as a builder pushes his initial costs close to $10,000 per bed, he so raises his breakeven point that he must operate at nearly full capacity to turn a profit. Three examples:

1. A 50-bed nursing home in Somerset, N.J. cost $8,000 per bed to build. It is 90% occupied—but it is not making money because its breakeven rate is 90%.

2. A 25-bed nursing home in South Cape May, N.J. cost $3,000 per bed to build. It is operating at 92% of capacity and is making enough money to encourage its owner to expand. Reason: breakeven rate is 40%.

3. Builder J. W. Garrison, who is building his seventh nursing home in Lafayette, Ind., insists on keeping initial costs below $6,500 a bed, plus land. Two of his homes earned 20% and 30% respectively last year.

The quest for a profitable balance is often upset by the long time lag between planning and capacity operation.

It takes an average of 18 months to plan and build a nursing home and another 12 to 24 months to break even.

Builder Melvin T. Pugatch (Dulaney Towson Convalescent Home, Towson, Md.) warns builders they will lose $1,000 a month during their first year of operation. Columbia's Baumgarten found that a typical 100-bed nursing home with 90% financing runs up a defiict of $90,600 by its eighth month. He also found that homes fill up at the rate of 10% a month. In a study of 80 projects, homes ranged from 72% to 97% full by the end of their first year.

Advice from experienced builders is often hard to apply because every nursing home has special local problems. Here, for example, is some often-heard advice that can trap a new nursing home builder:

Advice: assure yourself of a market by affiliating with a general hospital. *Trap:* the hospital will insist on a high level of care, which will drive up costs. For example, a 60-bed Rome, Ga., nursing home that draws patients from a local hospital takes in only $8 per bed per day—just about as much as a nearby motel that offers no services.

Advice: leave out frills—they can run up initial costs. *Trap:* too much economy in the beginning often necessitates costly alterations. Examples: a nursing home in California that omitted a pharmacy had to install one later. And a Los Angeles home found it needed additional storage space for wheel chairs and food carts.

Advice: build as big a home as you can —this will keep your operating costs down. *Trap:* the bigger the home the more difficult it is to tailor to a local market, and the greater the difficulty in converting the building to something else if the nursing home fails.

It's true, however, that per-bed labor costs decline with size. A study of 133 homes by the California Nursing Home Assn. showed that labor costs (which averaged 56.3% of total operating costs) decline evenly from $7.58 per patient day in homes of one to ten beds to $5.71 in homes of 100 beds or more. Food costs, on the other hand, do not vary with size of home.

The best answer to the problem of size is to plan an initial plant that will serve, say, 50 beds efficiently, then expand as demand improves. This approach raises costs in the early years but allows for economical expansion later.

Advice: tie up with local physicians. *Trap:* close affiliation with some physicians can alienate others in your market.

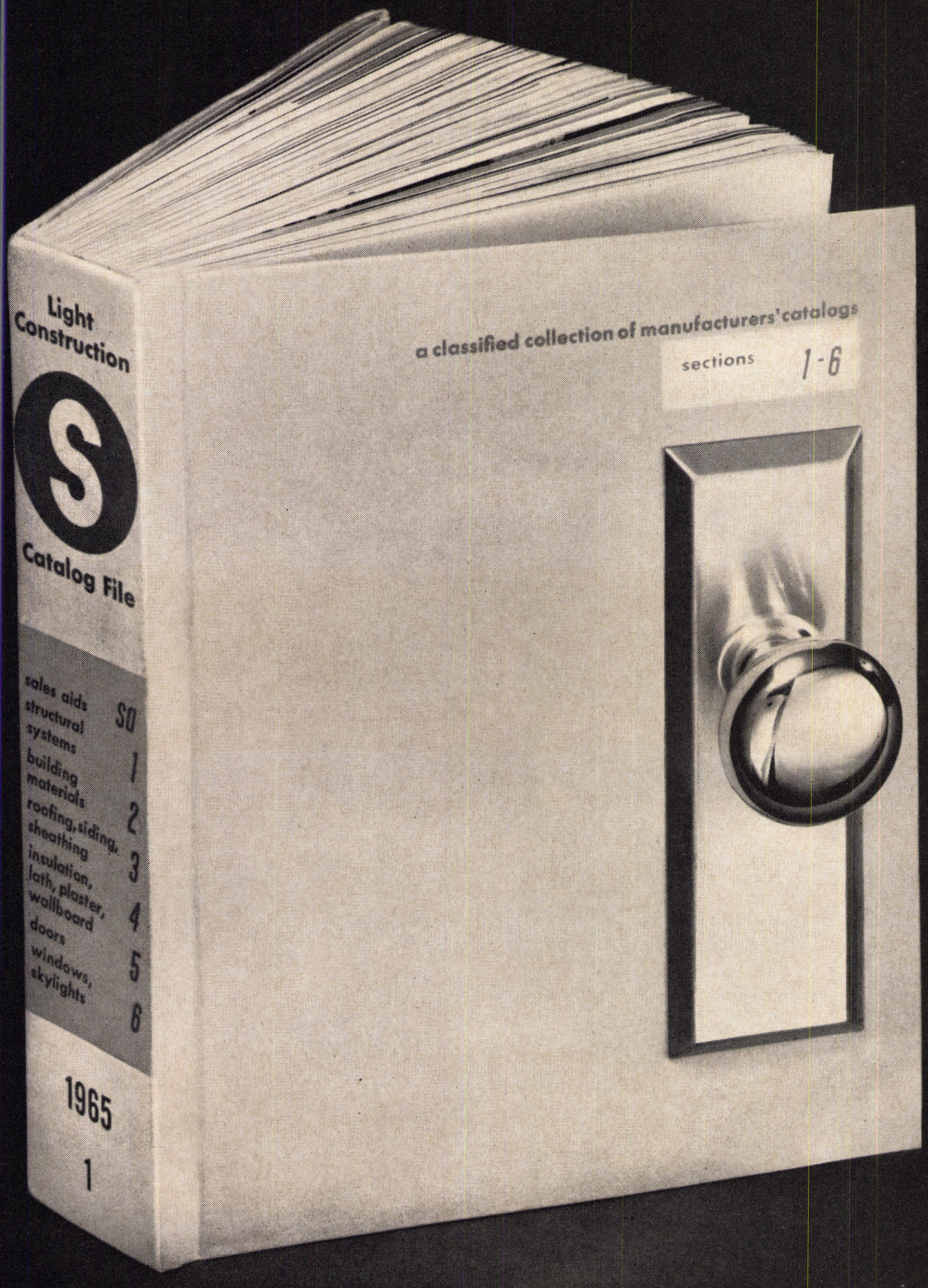
The best advice for any builder is this: find a smart administrator and build the home around his recommendations. Unfortunately, smart administrators are not easy to find. Few universities have nursing home curricula (only Georgetown University has a graduate program), and schooling must be followed by experience. Warns Builder Pugatch: look for an administrator who can work within a budget.

But this scarcity of administrators is no deterrent to Holiday Inn's Wallace Johnson, who plans to blanket the country with standardized nursing homes ("Let's say, 400 as a start"). Thus far, 1,000 applicants have agreed to pay $100 per bed for a franchise, plus $1,500 for a feasibility study. The first Medicenter is planned for Memphis, with additional sites acquired in Greensboro, Gastonia and Winston-Salem, N.C.; Columbia, S.C. and Mobile, Ala. Johnson has already built nursing homes in Cherry Hill, N.J., Towson, Md. and Richmond, Va. through a corporation that is 47.5% owned by Washington's Stewart Bainum. In addition, he built a nursing home on his own in Memphis three years ago which included $700-a-month suites.

Johnson feels his experience has shown him that nursing homes can be profitable, especially with the standardization and centralization of supplies and services he plans for his Medicenters. But he is leaving himself an out: all his nursing homes will be designed for easy conversion to motels.

—ROBERT L. SIEGEL

Circle 55 on Reader Service Card ➤



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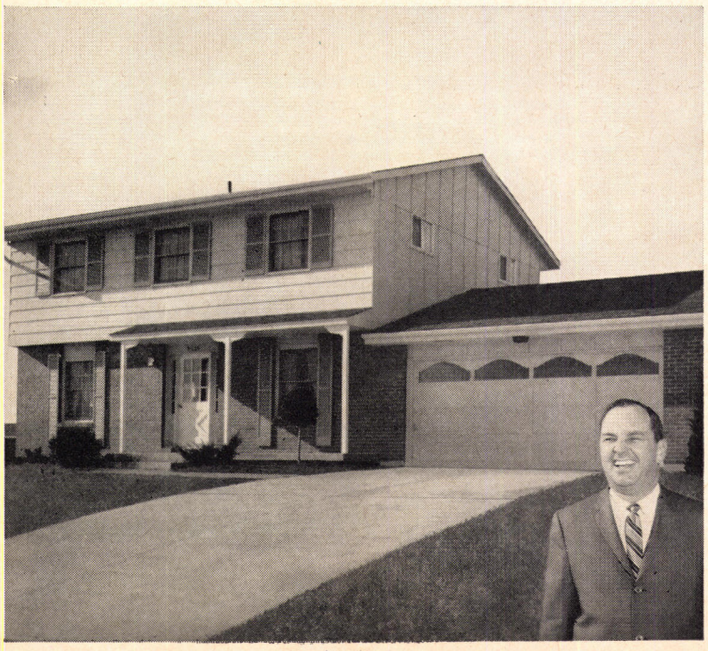
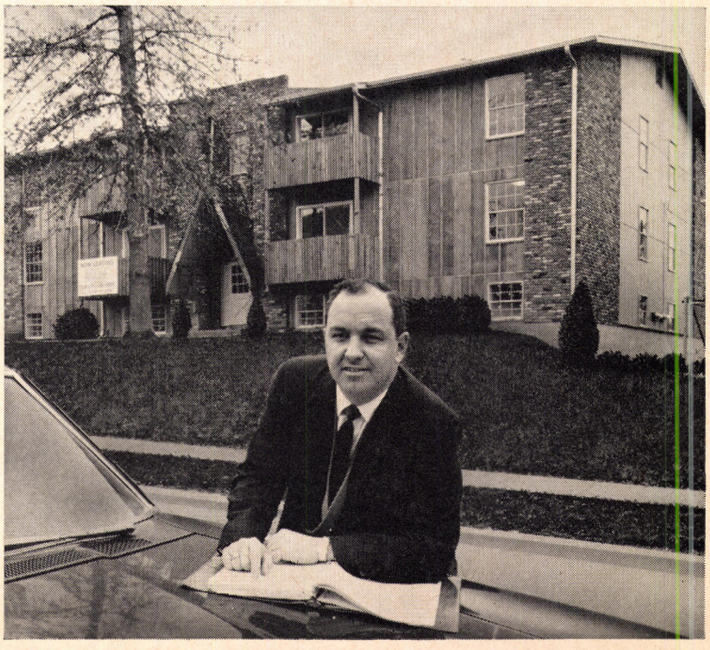
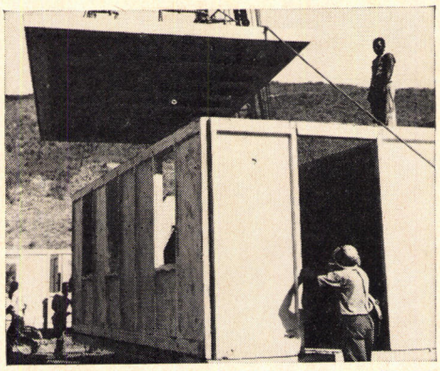
The photographs below show two of the types of U. S. Steel Homes' 1965 product line currently being built by Midland Development Company. Both the two story single family home and the apartment building are constructed with U. S. Steel Homes' steel structural system.

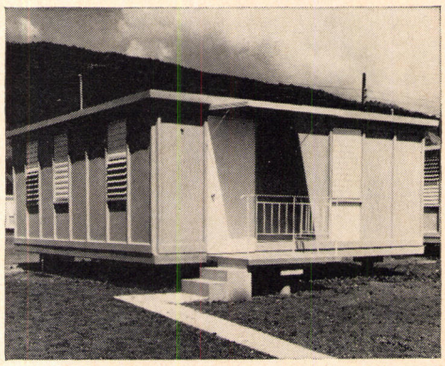




PARTITION FORMS of glass fiber are wired before pour. Panels cure on wood racks at left.



ROOF PANEL, reinforced by waffle design, is 4½″ thick and must be placed by vacuum-lift.



FINISHED HOUSE offers 500 sq. ft. Site work and land cost bring final sale price to $4,900.

$2,000 concrete house requires only 16 precast panels and 185 man-hours of labor

Built from a bare-bones production system worked out by Wilson Chong & Assoc. of Kingston, Jamaica, the house is currently being used in a 1,700-unit low-cost Jamaican housing project. Here are the key elements of the system:

Thin-shell concrete panels owe their strength to shape rather than weight. The floor and roof sections are waffled and the wall panels are ribbed, permitting thicknesses of 2″ for walls, 4½″ for roofs and 6″ for floors. Because they are so thin, the cranes used to move the panels must be equipped with vacuum-lifters.

Glass-fiber forms permit easy removal of the waffled and ribbed panels by minimizing adhesion. The forms also produce an extremely smooth concrete surface which eliminates patching and improves the spreading of paint. Because the lightweight forms are easy to clean, the builder (West Indies Home Contractors Co.) estimates they can be used for at least 12,000 houses. They cost about $5 per sq. ft. in the United States, but were built for less in Jamaica.

Electric welding speeds fastening of the panels. Matched steel plates, measuring 5″x1½″x 5/16″, are embedded in the panels with ⅜″ hooked bars and spaced about 7′ apart. They abut at regular intervals along all floor, wall and roof joints and are welded together as each panel is placed. The plates are designed to resist earthquakes, hurricanes and thermal stresses.

Integral terrazzo floors eliminate a separate floor-finishing operation. When the concrete for the floor panels is poured and screeded, handfuls of stone chips are scattered over the wet surface and rolled in. After the slabs have been fixed in position —and before any of the other panels have been placed—a terrazzo finisher grinds the surface.

Sealed-in mechanicals reduce plumbing and wiring to a hookup job. Wiring harnesses and plumbing trees are made up in wood forms and then set into the glass-fiber forms before pouring.

Waterproof concrete eliminates the need for a membrane. The ½″-wide joints between the smooth-surfaced roof panels are grouted and finished with a thiokol sealant.

Precasting can be done at the site, as in the Jamaican project (*shown here*), or at a central plant if roads are good. Labor breakdown for the Jamaican house is 132 man-hours for precasting and preparation, 53 man-hours for erection.

Adjustable streetlight fixture keeps glare off house fronts

Designed exclusively for Foster City, a new $650-million community being dredged out of San Francisco Bay, the cylindrical fixture consists of an ordinary mercury-vapor lamp encircled by movable vanes. By closing some vanes and opening others, the lighting can be heavily diffused on the house side and directed almost entirely to the street side. Illumination is unusually even because the lights are only 14 ft. high and spaced about three lots apart.

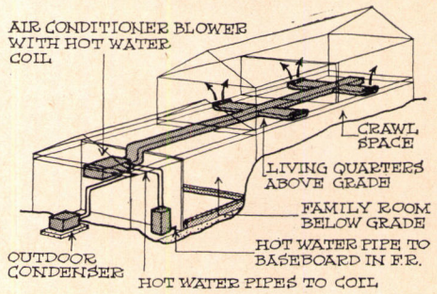
Chrome-plated plastic ready for use in bathroom hardware

The result could be a typical faucet set costing up to 70% less than a comparable unit in chromed metal. So says Walter Lewis, associate professor of architecture at the University of Illinois, who made a cost study of the material.

Chrome-plated plastic is not new. But now manufacturers have found a way to make a much stronger metal-to-plastic bond—and on a larger scale. Previously, to prepare a plastic surface for metal coating, it had to be roughened mechanically by abrasive tumbling or vapor blasting. The process was slow and the plating was often imperfectly bonded because narrow or deep recesses could not be roughened.

Now the manufacturers are doing the job with chemical conditioners that can thoroughly etch the most intricate slatted, grooved or finned areas. Thus the bright copper undercoat adheres to the entire surface and the finish coat is secure.

This advance has caused a sharp increase in the number of chromed plastic parts used in automobiles, and may soon put such items as plastic shower heads, spigots, faucet handles and towel rods on building-supply shelves.



New heating-cooling system combines ducts and radiators

The purpose of the dual installation (*diagramed above*) is to provide the benefits of both air cooling and hot-water heat without paying for two separate systems.

On-grade rooms are heated by baseboard radiators, while above-grade rooms are heated by a fan-coil unit forcing warm air through ducts. A single oil-fired boiler supplies hot water to both radiators and coils. In summer an outdoor condenser refrigerates the fan-coil unit and cool air is blown through the ducts.

The system was designed for Millpond Homes of Yorktown Heights, N.Y., by United Lakeland Air Conditioning Co.

New products start on p. 115

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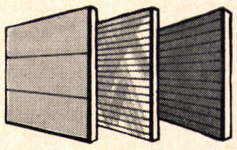

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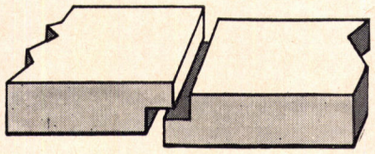

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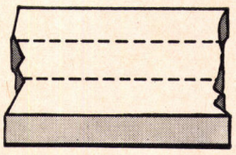

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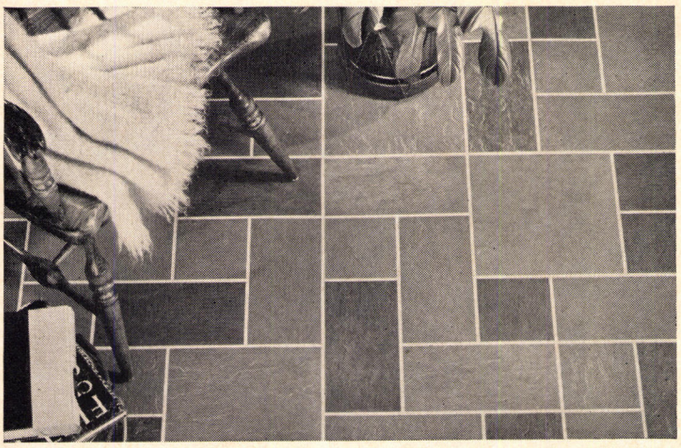
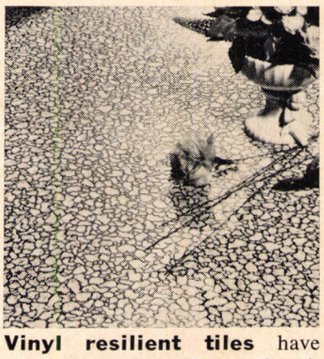
Flooring

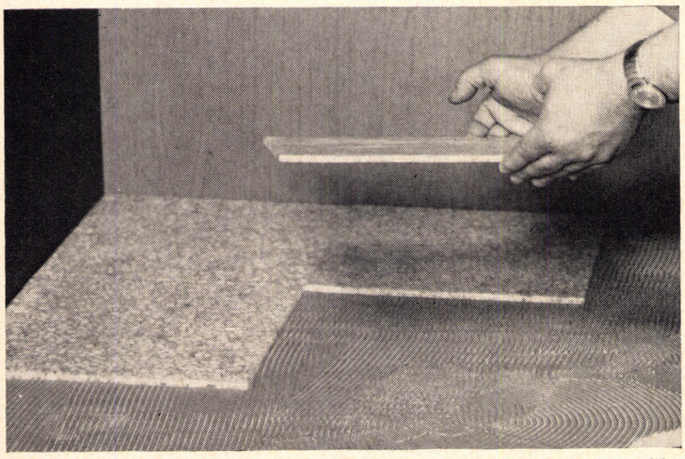


Vinyl tiles in flagstone pattern come in three colors with a strip that looks like natural grout. Tiles are available in 12″x12″ size or precut random packs at about $18 for 27 sq. ft. Congoleum-Nairn, Kearny, N.J. *(Circle 209 on Reader Service card)*

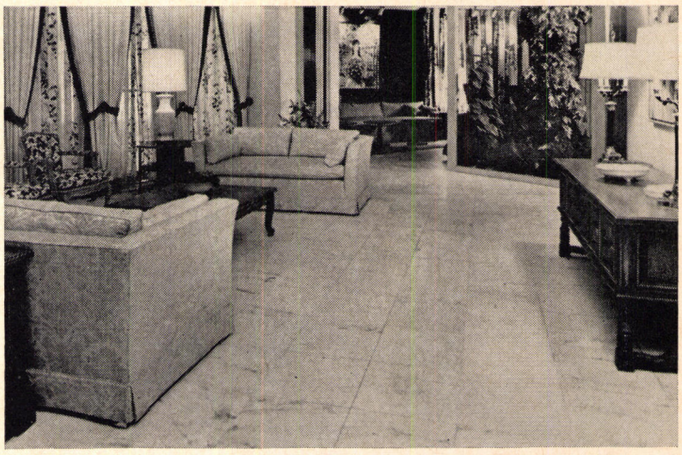
Vinyl sheet flooring is available in two designs, Mosaic (*above*) and Travertine. According to the manufacturer, installation at any grade level is possible because of a moisture-resistant Hydrocord backing. Armstrong, Lancaster, Pa.
Circle 210 on Reader Service card



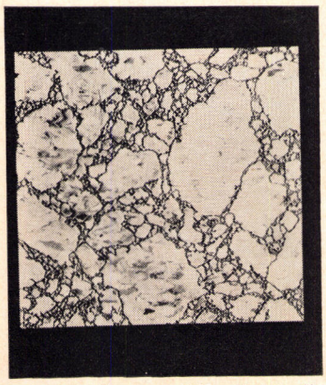
Vinyl resilient tiles have stone-chip pattern. Indoor installation can be on, above or below grade or over wood subfloor. Tiles come in five colors including beiges, whites and golds. Size: 1/16″ gauge by 12″x12″. Azrock, San Antonio.
Circle 211 on Reader Service card



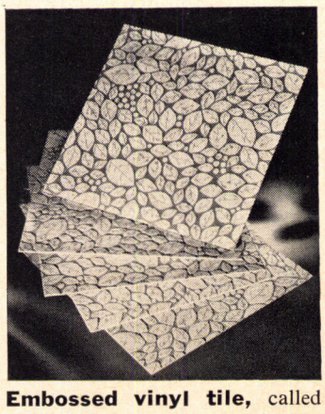
Jewel-stone tile is made from crushed mother-of-pearl and marble. Installation with mastic can be over cement, wood subflooring or finished wood. According to the manufacturer, tile doesn't need wax. CIPCO, Cincinnati. *(Circle 212 on Reader Service card)*



Marble floor, called Colorado Yule, has tan and gray markings on a white background. According to the manufacturer, flooring is durable and easy to maintain. Carthage Marble Corp., Carthage, Mo. *(Circle 213 on Reader Service card)*

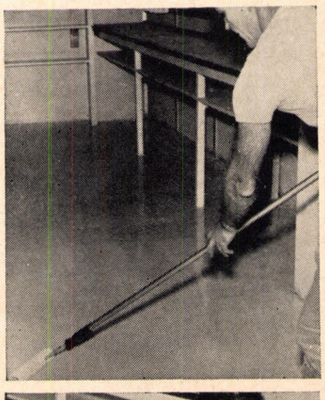


Vinyl-asbestos tile is available in four colors: Barcelona white, Castile white, Madrid beige and Seville gray. Del Prado has deeply embossed veining which forms a chip design. Tiles come in 12″x12″x3/32″ sizes. Johns-Manville, New York City.
Circle 214 on Reader Service card



Embossed vinyl tile, called Folia, is patterned in deeply textured leaves in different sizes, forms and reliefs. Tiles are available in five colors: White, Brown, Moss, Spruce Green and Frost Beige. They come in 12″x12″ size and .080″ or ⅛″ gauges. Kentile, Brooklyn, N.Y.

Epoxy flooring is applied as a liquid over almost any surface. Flooring is tack-free in several hours and can withstand traffic in a day. A textured effect with plastic confetti (*right*) is one special effect possible. Flex-Coat, Paramount, Calif.
Circle 215 on Reader Service card



New products continued on p. 117

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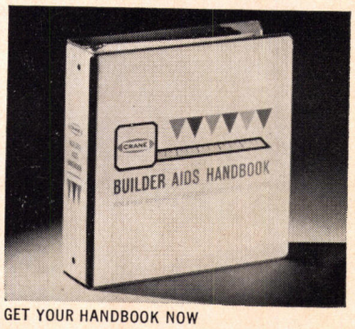

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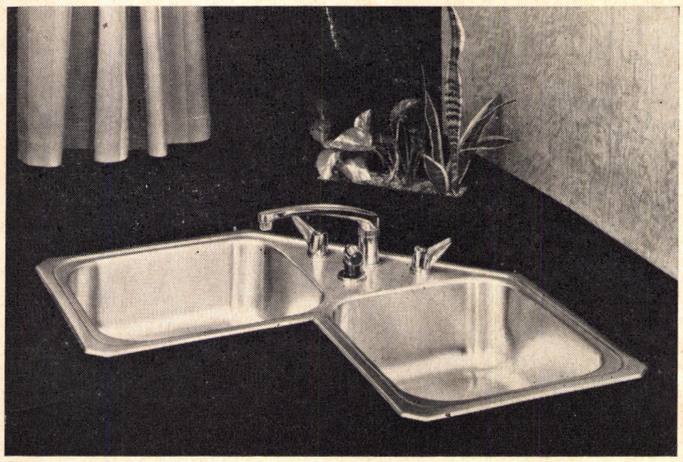
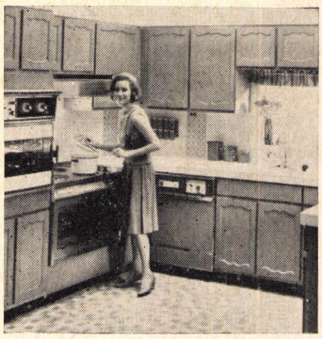
Kitchens

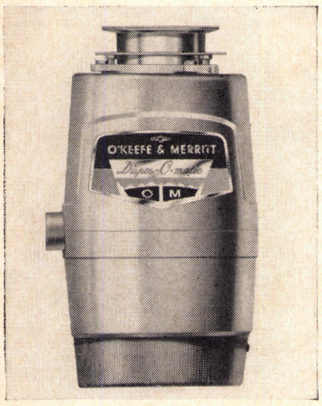


Corner sink of nickel-bearing stainless steel has a self-sealing rim. Sink has curved and slightly raised edges with a sloping drop ledge and angled corners. There are five other models in the line. Elkay, Broadview, Ill. *(Circle 232 on Reader Service card)*

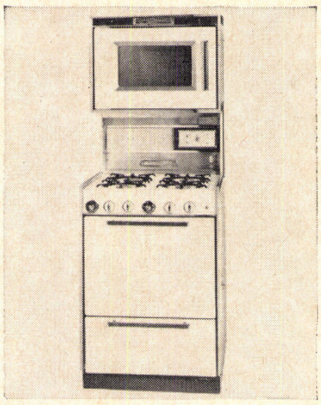


Kitchen cabinets have provincial styling designed to blend with colonial, period and contemporary interiors. Finishes are maple or fruitwood. Removable door panels allow use of other decorative materials. Raygold Inds., Lindenhurst, N.Y.
Circle 226 on Reader Service card

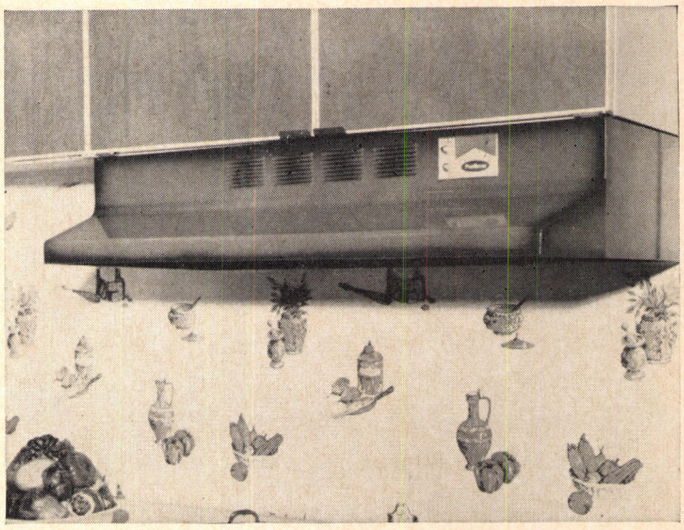
Electric range in white or shaded copper has a brushed chrome tilt top and backsplash. Infinite heat controls, an automatic timer and an appliance outlet are included in the 30″ unit. Suggested retail price: $179.95. Philco, Philadelphia.
Circle 227 on Reader Service card



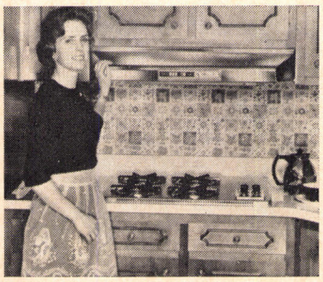
Disposer reduces sound and vibration because it is encased in acoustical material, says the manufacturer. Self-sharpening blades cut at a 60° angle. Two models are available, both with a one year guarantee. O'Keefe & Merritt, Los Angeles.
Circle 233 on Reader Service card



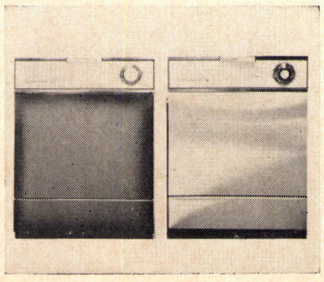
Gas range with double oven is 66″ high, 24″ wide and 36″ to the cooktop. The model includes lighted ovens and backguard, clock, center simmer burners and removable oven side racks. Several custom features are also available. Crown, Chicago.
Circle 234 on Reader Service card



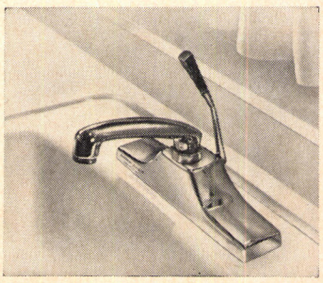
Color-coordinated range hoods have a gold ion tube to purify air by releasing negative ions. According to the manufacturer, the unit maintains maximum efficiency for five years. Puritron, New Haven, Conn. *(Circle 225 on Reader Service card)*



Dual-vent range hood is 5¼″ high. A removable grease filter and a two-speed squirrel-cage blower are included. Unit also has push-button controls, a built-in light and a damper. A variety of finishes are available. Rangemaster, Union, Ill.
Circle 230 on Reader Service card



Dishwashers have stainless steel interiors that carry a ten year guarantee against chipping, peeling and rusting. The two medium-priced models each have a capacity of 12 table settings. A fan-jet spray arm is included. Thermador, Los Angeles.
Circle 228 on Reader Service card



Single-lever fitting has a molded black nylon tip. A sealing gasket that eliminates use of putty and new-sized shanks have been added to the model. The manufacturer suggests use with kitchen and party sinks. American-Standard, New York City.
Circle 231 on Reader Service card

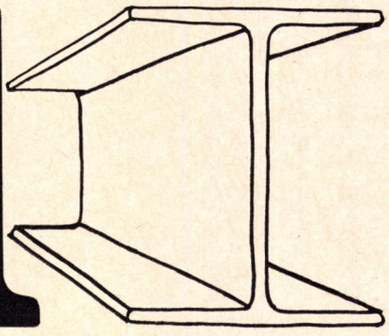
Kitchen cabinets have sliding shelves on nylon guides. Cabinets have magnetic catches and self-closing drawers with three-roller suspension. Lazy Susan corner cabinets at 45° and 90° are also available. Long-Bell, Long View, Wash.
Circle 229 on Reader Service card

New products continued on p. 120

How to build a bargain basement

(or how to turn a cellar into a seller)

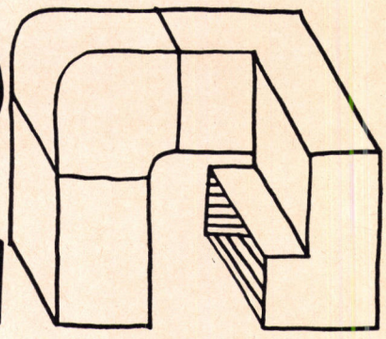
1



Provide more useful space with steel beams.

Steel's great strength permits longer clear spans, reduces need for load-bearing partitions and posts. Steel beams give more head room when used in the proper size. U. S. Steel makes a variety of types and sizes of beams for residential use, and they are readily available from your local steel supplier. If you would like a free calculator to help in determining the proper beam size for any residential condition, write for U. S. Steel's Beam Stress and Deflection Estimator.

2



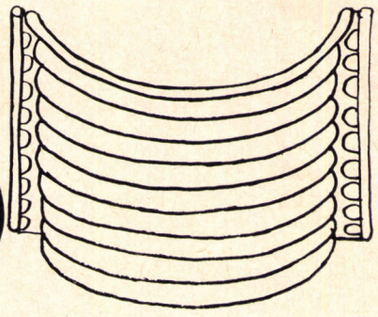
Steel ducts save you money

Galvanized steel ducts cost less than any other kind. They are much stronger and are easily fabricated. Steel ducts are fire resistant, quiet in operation, readily installed and do not sag.

Steel

For strength, appearance, economy.

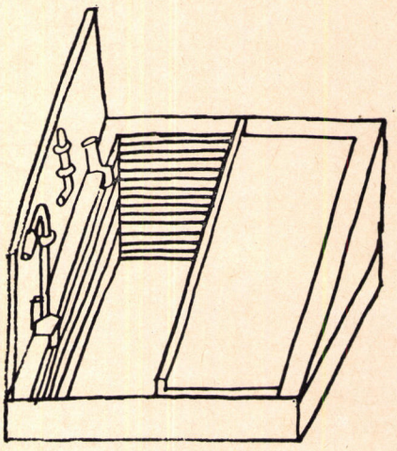
3



Let in the light with steel area walls.

Galvanized steel area walls come in various sizes to admit more daylight through basement windows. Heavy zinc coating acts as a reflector, and a guard against corrosion. The deep corrugations provide added strength.

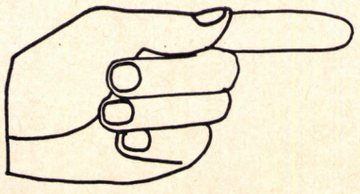
4



Provide easy access with steel doors.

The easy access steel basement doors and stairways provide is a time-saving advantage to you as well as the buyer. They are economical because they cost the same or less than old-fashioned doors. Steel access units are attractive, permanent and weathertight, can be readily installed by one man in a very short time.

5



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and for the names of reliable manufacturers of these steel products. U. S. Steel does not produce ducts, area walls or basement access doors, but has many fine customers who do.

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- ☐ Please send me more information about galvanized steel ductwork.
- ☐ Please send me more information about galvanized steel area walls.
- ☐ Please send me more information about steel basement access units.

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Company_____

Address_____

City_____ State_____ Zip_____

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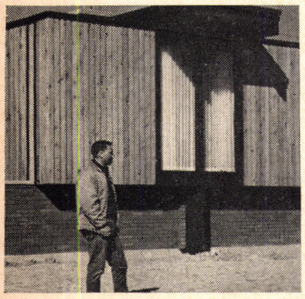

The reason? Olympic is made of top quality ingredients. And it penetrates. The stain soaks right in and actually becomes part of the wood. So Olympic doesn't form a film over surfaces the way paint does. It can't flake away. Or crack, peel or blister.

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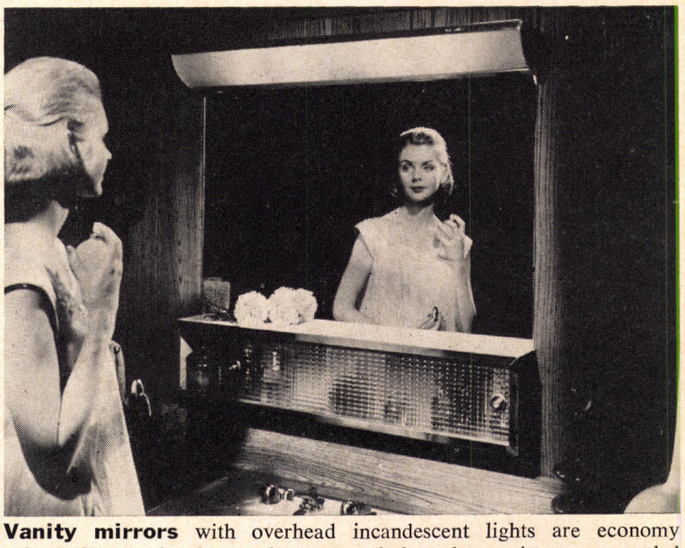
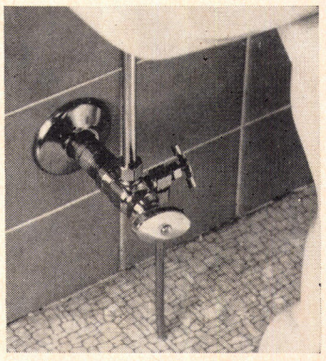
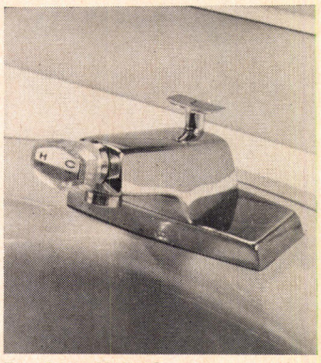
Baths



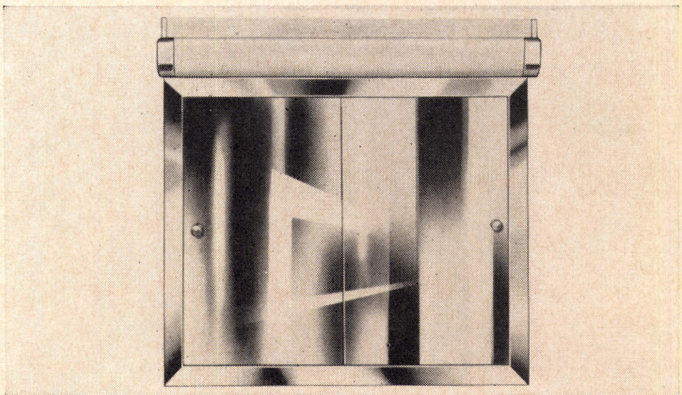
Vanity mirrors with overhead incandescent lights are economy priced. The units have plate- or window-glass mirrors, enameled compartments with sliding doors and a 47/8" vanity with plastic doors. F. H. Lawson, Cincinnati. (*Circle 216 on Reader Service card*)



Anti-sweat valve eliminates sweating and dripping of toilet tanks and bowls, according to the manufacturer. Four different models are available for any plumbing arrangement. Retail Price: $10.50. JMJ Corp., Portland, Ore.
Circle 218 on Reader Service card



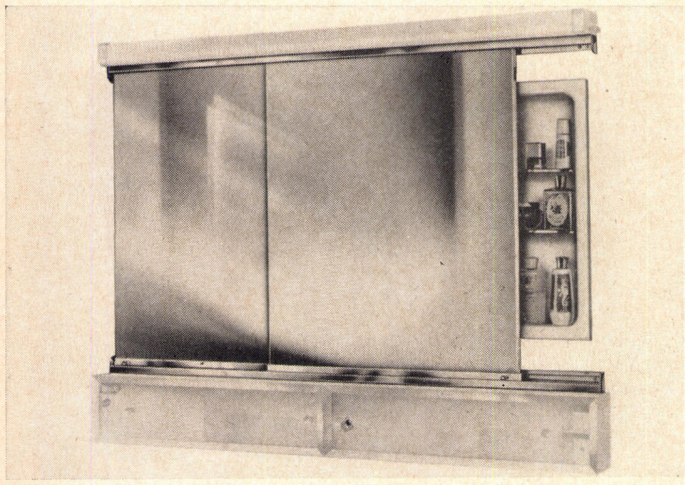
Push-pull fittings have acrylic handles with a highly polished surface. Handles have an oblong shape and rounded edges. Lavatory fixtures (*above*) and bath and shower fittings are available. American-Standard, New York City.
Circle 219 on Reader Service card



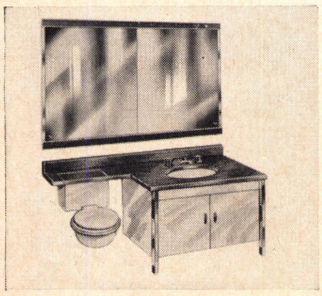
Recessed cabinet with sliding doors and an incandescent light requires a 22½" x 20¾" wall opening. Model with plate glass mirrors lists for $41.39; with crystal mirrors the unit is $43.85. General Bathroom, Elk Grove Village, Ill. (*Circle 217 on Reader Service Card*)

Single-handle faucets permit preselection of desired temperature before water is turned on. The heavy nickel chrome plated faucets are available in 35 matching models for bath and kitchen. Nile Faucet Corp., Royal Oak, Mich.
Circle 223 on Reader Service card

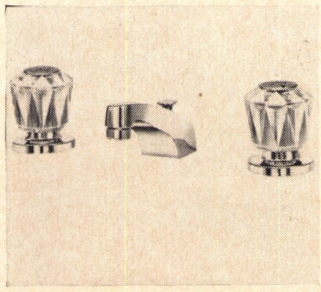
Knurled grab bar of stainless steel is stronger and easier to grip and hold, according to the manufacturer. A variety of models are available for use in institutions, apartments or homes. Pocono Metal Products Co., East Stroudsburg, Pa.
Circle 224 on Reader Service card



Bathroom cabinet has two surface-mounted mirrors that roll on wheels. Three types of doors and both incandescent and fluorescent lighting are available. Grote, Madison, Ind. (*Circle 222 on Reader Service card*)



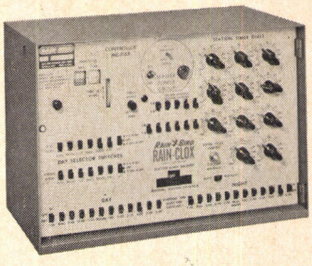
Cabinet-mirror unit has formica strips above and below double mirror. Sliding-door mirrors are included and twin three-shelf cabinet bodies are also available. This unit is 48"x26⅝", and a smaller model is also offered. Ketcham Mfg., Glendale, N.Y.
Circle 220 on Reader Service card



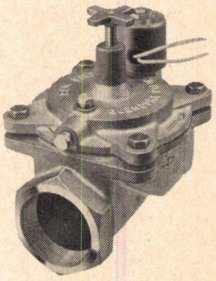
Wide-spread basin fittings have clear lucite handles. The Contessa line includes matching two- and three-valve tub-shower combinations, separate tub and shower sets, a 4" lavatory set and a top-mount kitchen fitting. Price Pfister, Pacomima, Calif.
Circle 221 on Reader Service card

New products continued on p. 122

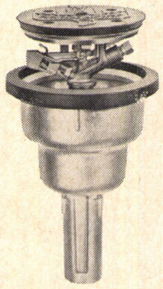
Rain Bird covers every irrigation problem,



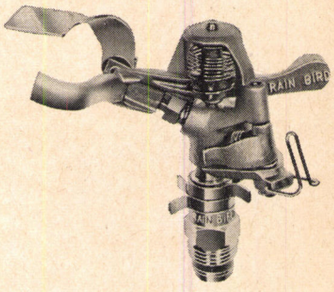
Rain-Clox Electronic Controller for reliable programming.



Rain Bird Electric Remote Control Valves for automatic sprinkling.



Rotor Pop-Up that won't get in the way of mowers or golf balls.



Our exclusive Precision Jet keeps water off walks and driveways.

And our Hi-Pops spring up a full 2" to clear the thickest turf.

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Circle 60 on Reader Service Card

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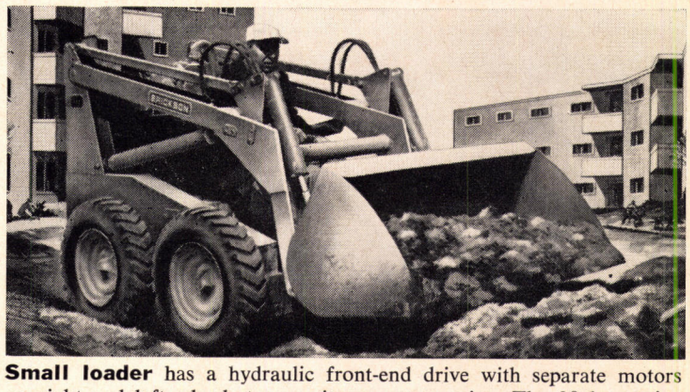
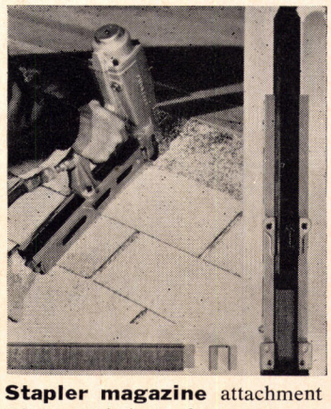
Tools and equipment

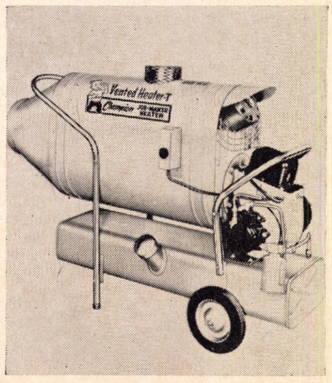
Industrial wheel tractor is equipped with loader and backhoe. The backhoe has a 30″-wide bucket with a 9.9-cu.-ft. capacity and can dig 15′ deep. The loader has a 3,200-lb. capacity. Allis-Chalmers, Milwaukee. (*Circle 230 on Reader Service card*)



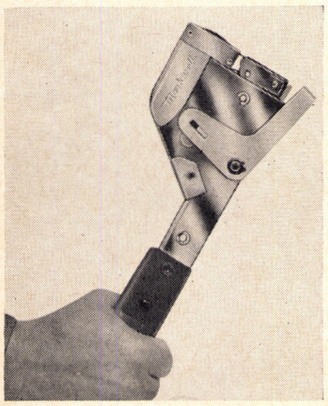
Small loader has a hydraulic front-end drive with separate motors on right and left wheels to permit accurate turning. The 30 hp engine is air cooled. Unit can accommodate 1,500 lbs. Erickson Power Lift, Minneapolis. (*Circle 231 on Reader Service card*)



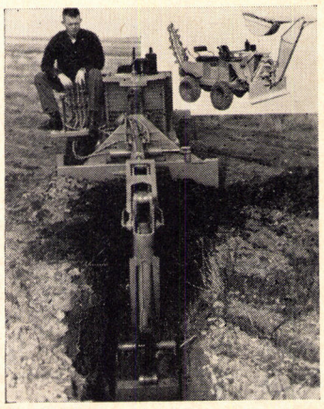
Stapler magazine attachment adapts asphalt roofing staples to manufacturers' V model stapling gun. Unit accommodates over 140 sixteen gauge 1″-wide crown staples in lengths from ¾″ to 1¼″. Spotnails, Rolling Meadows, Ill.
Circle 232 on Reader Service card



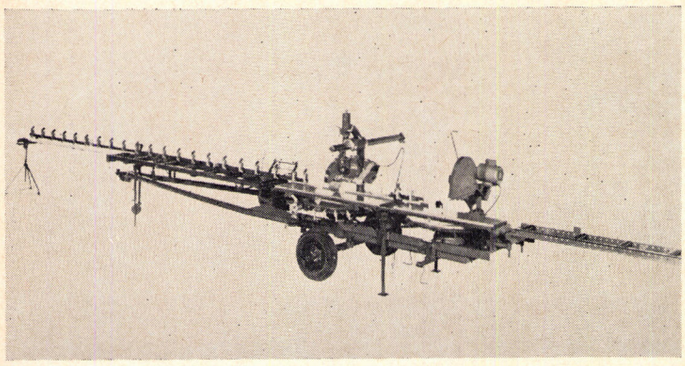
Vented portable heater has a stack for smoke-free heat. The 140,000 Btu unit has a cartridge-type fuel filter, a high-heat safety switch and an automatic thermostat. Unit operates on 110 volt current. Champion Heater Co., St. Louis.
Circle 233 on Reader Service card



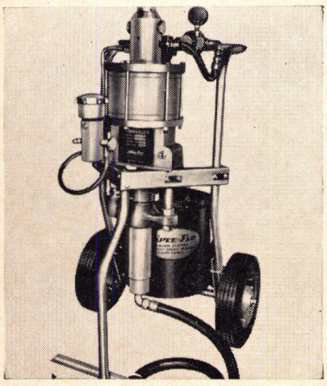
Hammer tacker drives 12 types of staples in sizes from 11/64" to 9/16" without adjustment. Unit has hammer-type operation and a neoprene nonslip handle grip. Available in two models listing for $18.95. Markwell Mfg., New York City.
Circle 234 on Reader Service card



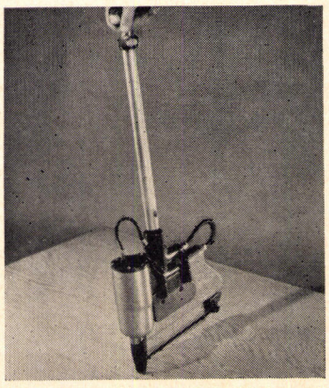
Backhoe attachment has double action in the backhoe arm allowing the bucket to be folded back over the trencher. The hydraulic attachment is available in 12", 18" and 24" sizes. Backhoe is detachable. The Charles Machine Works, Perry, Okla.
Circle 235 on Reader Service card



Component cutting device can be used on the site. It can measure and cut lumber to any length or angle automatically and sharply reduces working time, according to the manufacturer. Con-Fab Equipment, Corvallis, Ore. (*Circle 236 on Reader Service card*)



Airless paint sprayer can deliver up to three gals. per minute to five guns. Unit has a siphon-type pump on a tubular dolly for mobility. A five gal. container carried on the dolly or a 55 gal. drum can supply paint. Spee-Flo, Houston.
Circle 237 on Reader Service card



Staple nailer is 30" high and weighs six lbs. Designed for use on roof decking, subflooring or floor underlayment, the unit can drive staples up to 2" long. Machine is operated by pressing palm trigger and touching tool down. Senco, Cincinnati.
Circle 238 on Reader Service card

New literature starts on p. 133

"My company has been successful bidder on many jobs I couldn't touch without SPEE-FLO HYDRAAIRLESS EQUIPMENT"

So says Mr. Fred Hephinger, President of Hephinger Painting and Decorating Company, New Philadelphia, Ohio. The subject of the conversation was the Spee-Flo Model 28-100 HydraAirless and Patented H-Gun purchased in June of 1962 after a series of tests against competitive units. The unit has now been proved on such jobs as Hillsdale High School near Haysville, Ohio; The Methodist Churches of Brentwood, Dover, and Mingo Junction, Ohio; and Jefferson Union School of Richmond, Ohio.

Here's what Mr. Hephinger had to say:

"This is the only airless unit which I own and operate which is trouble-free."

"I have had absolutely no maintenance costs on this unit."

"This unit has applied over 3,000 gallons of material including latex, flat oils, clear varnishes and lacquers, and exterior materials."

"In every case Spee-Flo equipment has permitted me to make additional profits."

"Material savings have run from 20 per cent to 33 per cent depending on material."

"We have been the successful bidder on many jobs because we can count on Spee-Flo equipment to operate without interruption."

"On one job the speed of application with this equipment permitted us to paint a ceiling deck with 7-inch ribs in about half the time estimated."

Spee-Flo has many other testimonials just like this. Why not put Spee-Flo in your profit picture. Write today or contact the Spee-Flo Representative in your area.

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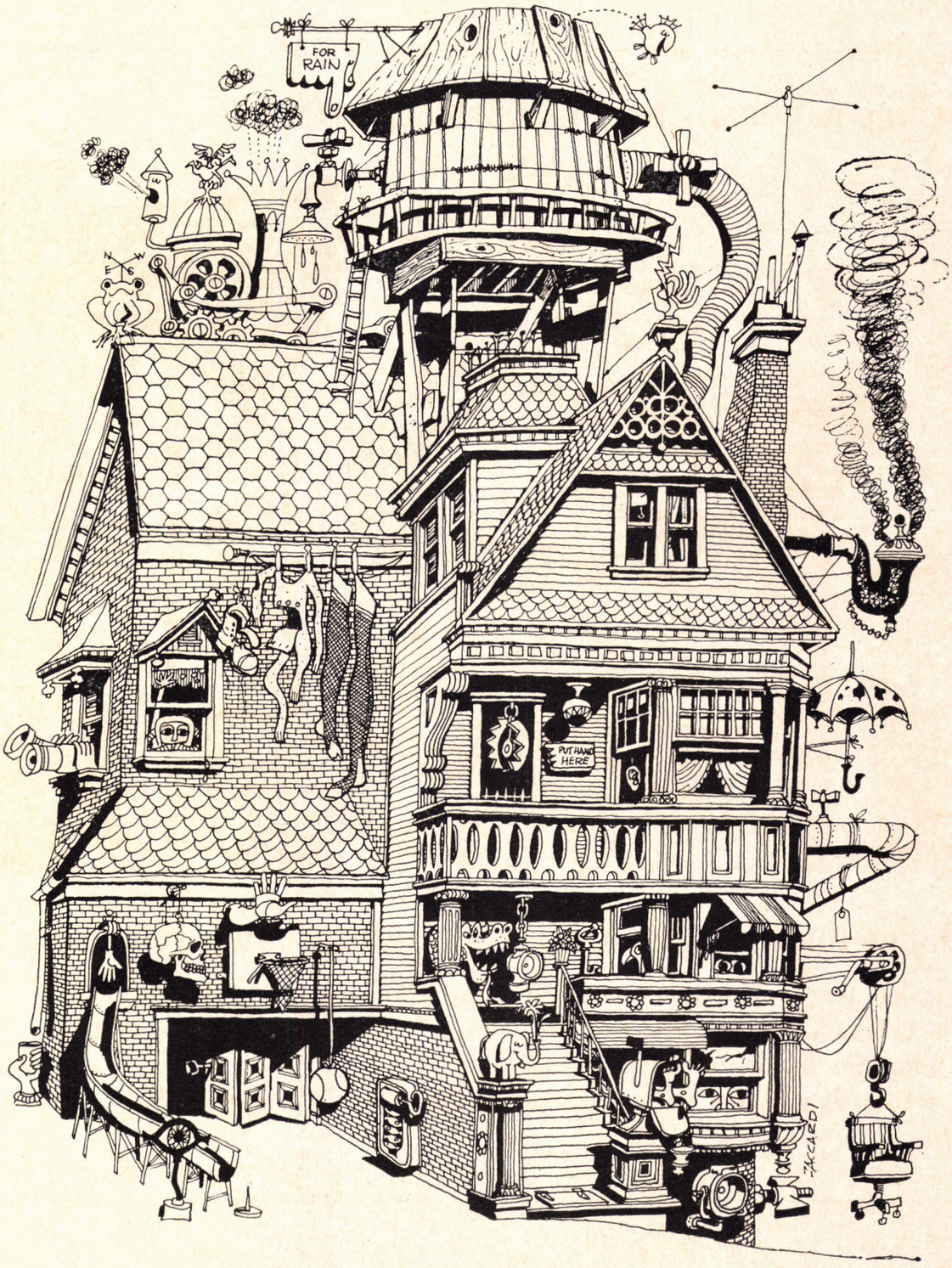

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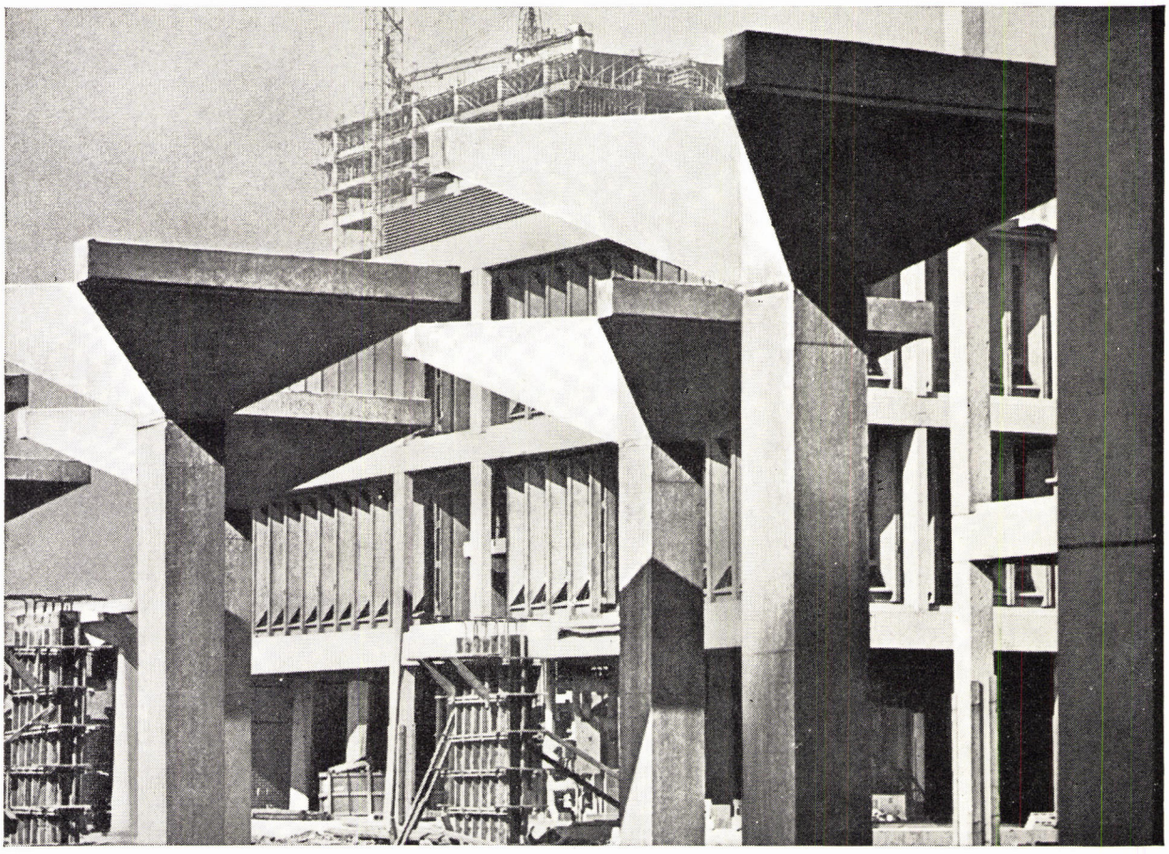

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For copies of free literature, circle the indicated number on the Reader Service card, page 129.

BATHROOM PLANNING. 16-page booklet offers 12 ideas for bathroom design and shows and describes new fixtures. Floor plans available. Borg-Warner Corp., Mansfield, Ohio. *(Circle 301 on Reader Service card)*

WALLPAPER. 16-page catalog shows colonial collection and gives short sketch of each pattern's origin. For copy: send 25¢ to The Birge Co., P.O. Box 27, Buffalo, N.Y. 14240.

TILE DECORATION. 16-page brochure shows 22 ideas for tile-use in decoration. Also, three pages of color schemes for bathrooms. For copy: send 10¢ to American Olean Tile Co., Dept. AO-102, Lansdale, Pa.

PIPES AND TUBES. 54-page technical bookle discusses sizes, weights and internal working pressures and advantages of copper tube and solder-type fittings. Drawings, illustrations and specifications included. Anaconda, Waterbury, Conn. *(Circle 302 on Reader Service card)*

ACOUSTICAL MATERIALS. 90-page performance data bulletin gives laboratory test results for acoustical products of 13 manufacturers. Ten acoustical factors listed; two types of tables included. For copy: send $1 to The Executive Secretary, Acoustical Materials Assn., 335 East 45th St., New York, N.Y. 10017.

BI-FOLD DOORS. Specification sheet describing and picturing DecoraDoors with grillework insert panels. Panelboard Mfg., Los Angeles. *(Circle 303 on Reader Service card)*

POWER TOOLS. 20-page catalog shows 39 electric and battery-operated models. Complete list of accessories available also included. Skil Corp., Chicago. *(Circle 304 on Reader Service card)*

WOOD CONSTRUCTION. 12-page booklet "How to Trim In-Place Building Costs Eleven Ways" gives specification and performance data on specialty and commodity building products. Potlatch Forests, Chicago. *(Circle 305 on Reader Service card)*

LAVATORY. 2-page product bulletin describes round countertop self-rimming lavatory. Features, specifications and installation instructions given. Mansfield Sanitary, Perrysville, Ohio. *(Circle 306 on Reader Service card)*

WHEEL TRACTOR. 12-page product bulletin describes Model 430 Construction King available as loader, landscaper, mower or backhoe. Features listed and photographs and line drawings included. J. I. Case, Racine, Wis. *(Circle 307 on Reader Service card)*

ALUMINUM NAILS. 6-page booklet has packaging data and specifications for aluminum nails. Latest color range included. Nichols Wire & Aluminum, Davenport, Iowa. *(Circle 312 on Reader Service card)*

STRUCTURAL WOOD FASTENERS. 4-page condensed products calalog has information on sizes, packaging, suggested applications and recommended safe working values. Timber Engineering, Washington, D.C. *(Circle 314 on Reader Service card)*

BUILDING SEALANT. 8-page catalog gives properties, performance, suggested joint design, application practices, architectural specifications and description of the five year warranty on this elastometric sealant. Dow Corning Corp., Midland, Mich. *(Circle 315 on Reader Service card)*

BATHROOM FIXTURES. Medicine cabinets, lavatory mirrors and accessories described and illustrated. Lawson, Cincinnati. *(Circle 318 on Reader Service card)*

CAST-IRON BOILERS. 4-page catalog describes gas-fired boilers for hot water and steam systems. Capacities listed. Dunkirk Radiator, Dunkirk, N.Y. *(Circle 319 on Reader Service card)*

VACATION HOUSES. 16-page booklet shows elevations and plans for 11 vacation homes. Complete plans available at additional cost. Western Wood Products, Portland, Ore. *(Circle 316 on Reader Service card)*

REVERSIBLE FORMS. 4-page booklet describes concrete forming panels. Durable Form, Broadview, Ill. *(Circle 320 on Reader Service card)*

KNOBS AND PULLS. Catalog sheet. Description, packaging information and price list of new cabinet hardware line. Stanley Hardware, New Britain, Conn. *(Circle 317 on Reader Service card)*

PREFABRICATED FIREPLACE. 4-page product bulletin shows Chimco fireplace and gives specifications and suggested installations. Savannah Chimney, Savannah (*Circle 308 on Reader Service card)*

FLOORING. 128-page hard cover pattern book describes and illustrates complete line including cushioned vinyl. Specifications given. Congoleum-Nairn, Kearny, N.J. *(Circle 309 on Reader Service card)*

AUTOMATIC MARKER. 2-page specification sheet describes marker for setting studs, rafters, joists and other parts and components. TECO, Washington, D.C. *(Circle 321 on Reader Service card)*

FORGED IRON HARDWARE. 16-page catalog describes and illustrates complete line and gives specifications. McKinney, Scranton, Pa. *(Circle 322 on Reader Service card)*

HARDBOARD PANELING. 4-color catalog illustrates complete line of prefinished hardboard wall paneling. Celotex, Chicago *(Circle 323 on Reader Service card)*

CONCRETE ADMIXTURES. 16-page technical booklet has charts and graphs on product performance. Uses and specifications are discussed. Master Builders, Cleveland, Ohio. *(Circle 324 on Reader Service card)*

FIBER OVERLAY. 6-page bulletin describes vulcanized fiber overlay for lumber, plywood and particle board. Advantages and uses discussed. National Vulcanized Fibre, Wilmington. *(Circle 325 on Reader Service card)*

POWER TOOLS. 8-page brochure describes double-insulated drills, sanders and other tools. Ingersoll-Rand, New York City. *(Circle 326 on Reader Service card)*

SCRAPERS. 8-page booklet called "Rock Handling Costs" discusses use of scrapers in rock. Charts and tables included. Caterpillar, Peoria, Ill. *(Circle 327 on Reader Service card)*

MASONRY WALL TIES. 8-page technical bulletin studies resistance of ties. Charts and photos are included. Dur-O-WaL, Cedar Rapids, Iowa. *(Circle 328 on Reader Service card)*

WOOD CONSTRUCTION. 58-page buyer's manual gives lumber sizes, specification information, rail freight costs and terms of sale. Western Wood Products Assn., Portland, Ore. *(Circle 329 on Reader Service card)*

TV OR FM RECEPTACLES. 8-page bulletin describes, illustrates and gives specifications for recessed receptacles in wall plates. Sierra Electric, Gardena, Calif. *(Circle 330 on Reader Service card)*

COOK-TOPS. Catalog describes built-in kitchen appliances, discusses features and shows colors available. Thermador, Los Angeles. *(Circle 333 on Reader Service card)*

SILICONE PRODUCTS. 8-page brochure gives product information and data on silicone greases, fluids, lubricants, release agents, protective coatings, electrical insulation sealants, antifoam agents, additives, textile finishes, paper release coatings and organosilicon chemicals. General Electric, Waterford, N.Y. *(Circle 310 on Reader Service card)*

TRUCKS. 60-page catalog has information on vehicle specifications, chasis dimensions, weight distribution and types of truck mixer drives for the construction industry. Ford, Dearborn, Mich. *(Circle 313 on Reader Service card)*

BATHROOM ACCESSORIES. 5 price sheets give descriptions and prices of lavatory legs, towel bars, tub and shower safety treads, safety bars, utility rods and a valance rod. Kinkead Inds., Los Angeles. *(Circle 311 on Reader Service card)*

GAS-FIRED BARBECUE. 6-page product bulletin describes models and shows typical installations. Advantages are discussed and specifications given. Waste King, Los Angeles. *(Circle 331 on Reader Service card)*

HEATING. 30-page booklet discusses total comfort system in terms of heating, air temperature, humidification and cleanliness. Lennox Inds., Marshalltown, Iowa. *(Circle 332 on Reader Service card)*

OUTLET RACEWAY. 6-page bulletin lists features of Electrostrip and depicts installation process. I-T-E Circuit Breaker, Detroit. *(Circle 334 on Reader Service card)*

AERATION PLANTS. 6-page product bulletin describes surface aerators for small sewage plants. Charts to calculate average daily flow rates and description of unit are included. Yeomans, Melrose Park, Ill. *(Circle 335 on Reader Service card)*

CONCRETE ADMIXTURE. 12-page technical brochure contains specifications, graphs and charts of water-reducing admixture for concrete. Crown Zellerbach, Camas, Wash. *(Circle 336 on Reader Service card)*

LIGHTING. 30-page catalog shows and describes architectural series line. Specifications and mounting details. Markstone, Chicago. *(Circle 337 on Reader Service card)*

BATHROOM CABINETS. Catalog describes complete line of surface mount bathroom cabinets. Triangle Prods., Chicago. *(Circle 338 on Reader Service card)*

LEAD ROOFING AND FLASHING. 16-page technical booklet has detailed drawings, performance characteristics and specifications. Lead Industries Assn., New York City. *(Circle 339 on Reader Service card)*

STAPLER. Product bulletin describes and illustrates application and operation of 4-lb. stapler. Spotnails, Rolling Meadows, Ill. *(Circle 340 on Reader Service card)*

TRACTOR SHOVELS. 16-page brochure describes technical features of three models. N. P. Nelson Iron Works, Clifton, N.J. *(Circle 341 on Reader Service card)*

LIGHTING FIXTURES. 32-page catalog describes and illustrates complete line including ceiling and wall models. Prestigeline, Amityville, N.Y. *(Circle 342 on Reader Service card)*

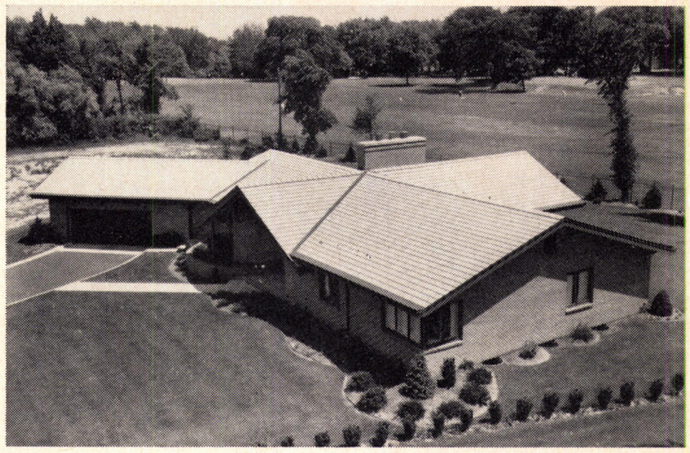
SLIDING GLASS DOOR. 2-page product bulletin shows wood panel sliding doors and gives sizes and specifications. Rolscreen, Pella, Iowa. *(Circle 343 on Reader Service card)*

GARDEN LIGHTING FIXTURES. 8-page catalog illustrates and describes complete line of outdoor lights. Spread pathway, tree and fluorescent lights are included. Shalda Lighting Prods., Bridgeport, Conn. *(Circle 344 on Reader Service card)*

WALL, FLOOR AND CEILING ASSEMBLIES. 4-page folder has cutaway illustrations and descriptions of load-bearing and nonload-bearing assemblies with wood or steel studs. Pabco, San Francisco. *(Circle 345 on Reader Service card)*

PLUMBING FIXTURES. 28-page booklet shows model baths and describes and illustrates fixtures available. For copy: send 10¢ to Advertising Dept., Kohler Co., Kohler, Wis.

Is a Fire-Chex® roof as good as it looks?



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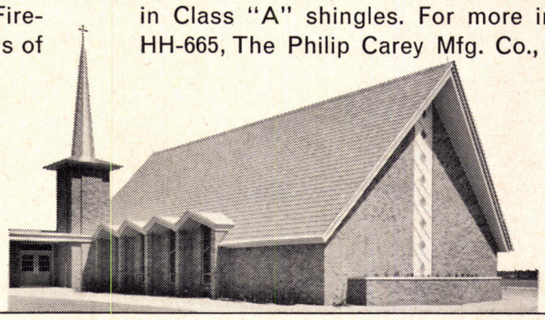

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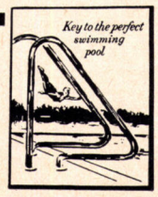

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and the best-known name in building materials, too!

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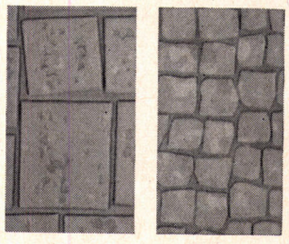

Two styles: Travertine Block, Mosaic

Because Aegean Vinyl Corlon has Armstrong's exclusive Hydrocord Back, you can have it installed at any grade level, even in a basement directly on concrete (except where excessive alkaline moisture makes the use of any resilient floor impractical).

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