

Whatever your kitchen plan, decor has a convertible for you.



Kitchen plans vary and that's why DACOR offers a whole family of convertible cooking centers...cooktops in either 6-burner or 4-burner units...a new free-standing range with a full-size, self-cleaning oven...the same beautiful range in drop-in or set-in models.

They all feature incomparable quality —easy convertibility with barbecue, griddle and rotisserie accessories — stunning black glass control panels and stainless steel surfaces for lifetime beauty — conventional coil or ceramic glass burners — large barbecue areas on grills of heavy steel rods with chrome plating for easier cleaning and long life.

DACOR puts the look of quality in your kitchens — the look that your customers will love and buy.



950 South Raymond Ave., Pasadena, CA 91105

For full information, see Sweet's catalog or call (800) 423-4160 outside of California or (213) 682-2803 in California.

Your home buyers want a garage door opener.

You want trouble-free products, no-hassle service, easy, quick installation, a 2 year warranty.



You want NuTone's Computer-Command.

Turn the page, get the full story.

NuTone Garage Door Openers are virtually trouble-free. Thanks to advanced electronic technology, all the NuTone openers have fewer moving parts... fewer chances for failure.

NuTone Garage Door Openers offer "no-hassle" in-home service. Service that does not require removing the opener and sending it back. Only NuTone has 1,200 trained service centers ready to respond to your needs. NuTone Garage Door Openers install quicker...easier. The installation is simple. There are no tedious limit adjustments...it practically sets itself. You save time and labor costs.

NuTone Garage Door Openers have an exclusive 2 year warranty. There are fewer mechanical parts to wear out because NuTone engineering experience and quality manufacturing are pledged to make things better.

NuTone Garage Door Openers have exclusive "Computer-Command." The

specially developed microprocessor (computer) actually memorizes operational functions on command and repeats them time after time. No gimmicks, simply space-age technology put to work helping you provide better, more dependable, more convenient products to your home buyers.

Model G-585

Sintone

NuTone [

Model G-582



Model G-578

NuTone Garage Door Openers with Computer-Command . . . Another NuTone exclusive to help you sell homes.

See your NuTone distributor today... get all the facts before you select any Garage Door Opener.

NuTone

SEOVII Dept. HH-11 Madison and Red Bank Roads Cincinnati, Obio 45227

Form 5010, Printed in U.S.A.

At NuTone, we're working to make things better for you.



APARTMENTS	20 20	 Demand for rentals is "insufficient" IRS okays tax deduction for non-profit housing losses 				
THE COURTS	Courts rule out damages for bias victims New trial for gypsum producers					
DESIGN	46 85 96	How three top projects cope with problem sites				
ENERGY WATCH	H 26 Results of "Arkansas house" test come in					
MANAGEMENT	92	Does it pay to computerize?				
MARKETS	60	Annual homeshopper survey				
MONEY	11	Credit crunch: what it means for housing				
MORTGAGING	12 12 16 16 16	 2 Citicorp agrees to sell Advance 6 S&Ls look to Europe for mortgage funds 6 Maggie Mae makes a \$50-million debut 				
PEOPLE	32	Eli Broad takes on a new right-hand man				
WASHINGTON	18 18	Faster tax write-offs proposed for buildings and equipment HOW wins one and loses one in bid for new ground rules				
WHAT'S SELLING	42 42	Texas builder offers a 40-year loan They'll still line up to buy if the price is right				
DEPARTMENTS	7 104 123 124 126 127	Classified Literature Advertisers index				
COVER		Illustration by Bob Lapsley				
NEXT MONTH		Sales office round-up 1980 housing forecast Moderate-priced housing from California				

Housing (USPS 448-470) published monthly with an additional issue in July by McGraw-Hill Inc. Subscription rates U.S. and possessions: for individuals within circulation specifications. \$16 per year; for others, \$30 per year. In Canada and Mexico: for individuals within circulation specifications, \$18 per year; for others, \$30 per year. All other countries, \$48 per year. Single copies \$3.00. The publisher reserves the right to accept or reject any subscription. Allow four to twelve weeks for shipment. The publisher agrees to refund that part of subscription price applying to unfilled part of subscription. Allow four to twelve weeks for shipment. The publisher agrees to refund that part of subscription price applying to unfilled part of subscription and advertising offices: McGraw-Hill, 1221 Ave. of the Americas, New York, N.Y. 10020. Controlled Circulation Postage Paid at Strasburg, VA. Title® in U.S. pattent office. Copyright® 1979 by McGraw-Hill Inc. All Rights Reserved. Where necessary, permission is granited by the copyright owner for libraries and others registered with the Copyright Clearance Center (CCC) to photocopy any article herein for the base fee of \$1.00 per copy of the article plus 50 cents per page. Payment should be sent directly to the CCC. Copyring done for other than personal or internal reference use without the express permission of McGraw-Hill is prohibited. Requests for special permission or bulk orders should be addressed to the publisher. ISSN 0161-0619/79\$1.00 + .50. Postmaster: send form 3579 to Fulfillment Manager, Housing, P.O. Box 430, Hightstown, N.J. 08520.





Dress up a house with traditional Andersen beauty. Grilles optional.



What more beautiful way to dress up a house is there than with Andersen[®] Perma-Shield[®] angle-bay and bow windows? And what easier way is there to do it?

With Andersen windows much of the work is already done for you. The units are pre-assembled with head and seat platforms in place. So you can make short work of installation.

Inside finishing with recommended Andersen parts is fast and easy, too.

Now isn't that beautiful?

So is the way Andersen builds strength into its narrow mullion design. It makes for a bigger, brighter, more beautiful view. And it makes the look of these windows match the trim lines of other Andersen windows and gliding doors.

And because these Perma-Shield windows have a lowmaintenance rigid vinyl exterior*, they'll keep their fashionable good looks year after year.

Dressing

There simply isn't an easier, more beautiful way to bring an elegant touch to traditional and contemporary designs. Why not let your Andersen distributor or dealer help you dress up your housing plans with Perma-Shield angle-bay and bow windows. For additional details see Sweet's file 8.16/An., or write us. Andersen Corp., Box 12, Bayport, MN 55003.



*Low maintenance features vary by window style. Printing limitations prohibit exact duplication of Terratone color. See actual sample.



Add a "bay view" with contemporary casement appeal.

79172 Copyright @ Andersen Corp., Bayport, MN 1979



"THE GENERAL ELECTRIC MICROWAVE COOKING CENTER IS A GREAT SELLING TOOL FOR TRIMM CONSTRUCTION COMPANY."

BILL LORD, GE CONTRACT SALES REP. TRIMM CONSTRUCTION COMPANY BIRMINGHAM, ALABAMA

"Their sales representatives have a distinct advantage when they point out the benefits of our unit.

"Benefits like the Micro-Thermometer" control in the microwave upper oven. Self-cleaning in the conventional lower oven. A black-glass front which goes with any decor. And General Electric Customer Care® Service, if it should ever be needed.

"Installation is another factor which is important to Trimm. They can run just one cable to hook up both ovens. And, since the double-oven combination fits in a 27" cabinet, they can offer large oven capacity in minimal space."

Take advantage of over 30 years of consistent service to builders. Call your local General Electric Contract Sales Representative.

THE APPLIANCES AMERICA COMES HOME TO.

Circle 6 on reader service card

ECTRIC

GENERA

housing

John F. Goldsmith

MANAGING EDITOR Natalie Gerardi

SENIOR EDITOR June R. Vollman

ASSOCIATE EDITORS Thomas H. Allen Joel G. Cahn Barbara Behrens Gers Bill Mulligan

ASSISTANT EDITORS Mary Sarlo Cruz Stephen Levin

NEW PRODUCTS EDITOR Jenny Kahn

ART STAFF Joseph Davis, director Sachiko Inagaki, assistant Jan V. White, consultant J. Dyck Fledderus, illustration

EDITORIAL ASSISTANTS Ellen Zoe Golden Constance S. Russell Jennifer A. Wagner

SPECIAL PROJECTS EDITOR Elise Platt

BOARD OF CONTRIBUTORS Kenneth D. Campbell Carole Eichen Alfred Gobar John H. Ingersoll Edward N. Kelley Robert Mylod Lenard L. Wolffe

CONSULTING ECONOMISTS George A. Christie Eric B. Herr

MCGRAW-HILL WORLD NEWS Ralph Schulz, *director* 17 domestic and international news bureaus

ADVERTISING SALES MANAGER Edward C. Weil III

BUSINESS MANAGER Vito De Stefano

MARKETING SERVICES MANAGER Henry G. Hardwick

CIRCULATION DIRECTOR Joseph D. Holbrook

ASSISTANT CIRCULATION MANAGER Robert W. De Angelis

PUBLISHER Maxwell C. Huntoon Jr.



Officers of McGraw-Hill Publications Company: Paul F. McPherson president. Group vice president: R. Bernard Alexander or Gene W. Simpson or Daniel A. McMillan; Group vice president, planning & development: James E. Boddorf; Senior vice presidents, editorial: Ralph R. Schulz; Vice presidents: Robert B. Doll, circulation; James E. Hackett, controller; William H. Hammond, communications; Thomas H. King, manufacturing; Edward E. Schirmer, international.

Officers of the Corporation: Harold W. McGraw Jr., chairman of the board, president and chief executive officer; Robert N. Landes, senior vice president and secretary; Ralph J. Webb, treasurer.

This issue of Housing is published in national and separate editions.

housing for

Even in a boom market, the most successful builders were the ones who kept on top of changing consumer preferences. Now the need to know is far greater.

What features do prospects insist on in new housing, for example? What are they willing to sacrifice to trim costs? And how do these desires differ among different markets and different households? How have these preferences changed in a year?

You'll find answers to such questions in the survey, starting on page 60, of more than 3,000 home shoppers in eight major, and representative, housing markets. -J.F.G.

EDITORS' PAGE

The Fed's prescription: We'll swallow it ... but how about a long-range cure?

Sooner or later bitter medicine was due. This nation has been suffering from an inflation psychosis—buy or borrow now because later it will only cost more. And the dollar has suffered against foreign currencies because foreign markets think the U.S. lacks the guts to bite the inflation bullet.

So even though Federal Reserve Board chairman Paul Volcker may be cast as the villain of the month, we think he did what had to be done. The Fed acted—and none too soon—to shore up foreign confidence in U.S. economic policy, to strengthen the dollar on international markets and to shackle inflation before it runs amok and threatens a deep recession.

For the long pull, the goal is a more stable, more predictable economic climate. And few businessmen can argue with that. Meanwhile, however, housing faces a credit crunch—not just expensive money but also scarce money—with all its attendant evils. Once more, in short, builders and homebuyers—not to mention others with a stake in housing's health—must bear the brunt of an anti-inflation fight.

This time there may have been no other choice because of the urgency of the problem. But the Fed's strong medicine will be wasted—and the housing industry's hardships will be for naught—if monetary measures alone are expected to stem the tide. A lot more is needed.

There will be no long-range answer to the problem until steps like these are taken:

•Develop a national energy plan. Without a plan, the U.S. is at the mercy of OPEC price increases, which fuel our rate of inflation, worsen our balance of payments and weaken the dollar.

•Clamp down on deficit spending—perhaps the primary cause of inflation because it leads to a growth in the money supply without a corresponding growth in productivity. Stopping the expansion of federal bureaucracies is not enough; they must be shrunk.

•Revamp tax policies so that they encourage—rather than discourage investment in plants, equipment and new technology. There must be an incentive for investing in the future—not only for business but also for private citizens.

•Reduce government regulation, which seems to penetrate every segment of the economy and, in too many cases, does nothing more than raise costs. As any builder knows, business is over-regulated—not just by Washington but also at state and local levels.

All this is a lot to ask—and in an election year at that. But the sooner Washington gets on with the job, the less chance of another but worse crisis—and the sooner builders can get on with their job of providing decent housing for every American. —JOHN F. GOLDSMITH

A new look at home shopper priorities



Introducing Concept.



The new generation of patio door systems.

Of course they're from Pease Ever-Strait, the recognized leader in entry door systems. And the hinged patio door of the 80's is available in the styles you want. You can choose from the standard two-panel unit; and, coming soon in 1980, the three-panel Concept (as shown at left) and a single panel unit. In addition to the factory-installed sill flashing, treated and primed frame members and the new magnetic weatherstripping system, other new Concept features include...



Add it all up. Only the new Pease Concept Total Patio Door Systems offer you the energy-saving quality of Pease, the flexibility of style to fit any architecture and the optional Rolling Shutter.

Ask for Concept by name at lumberyards, building supply and home improvement centers. Or, contact your nearest Pease Ever-Strait distributor. Pease Company, Ever-Strait Division, 7100 Dixie Highway, Fairfield, OH 45023.

© 1979 PEASE COMPANY

Circle 9 on reader service card

Ever-Strait Door Systems 79-2



Brick builds a better bottom

Trust brick to sell and rent faster.

Whether it's a townhouse, apartment or other multiple dwelling, it's easier to sell or lease if it looks like it's worth the price. The substantial beauty of brick has always attracted buyers and renters.

As the costs of building, buying and managing housing have soared, the multiple values of brick become increasingly apparent.

Brick, because of its mass, conserves energy. It can reduce heating and cooling costs. Brick saves money on maintenance. It never needs painting, repairs or replacement because it won't peel, rot,

warp, dent or crack. Brick's natural soundproofing and fire safety also make it more attractive for family housing.

Add them up. The life-cycle costs for brick-the initial cost plus the continuing costs of maintenance, insurance and energy-are considerably In today's environment, brick means even more. lower than the costs of any other material.

> That's why you can trust brick to sell or rent faster-in any financial climate. And that, after all, is your bottom line. Trust Brick.





Circle 10 on reader service card

MONEY

Credit crunch: What it means for housing

The Saturday-night special fired at the nation's credit markets last month by the Federal Reserve Board means the feared credit crunch for the housing industry has arrived. "The nation is being driven into a housing recession for the seventh time since World War II," President Vondal S. Gravlee of the National Association of Home Builders said in a statement strongly condemning the Fed's actions aimed at bolstering the dollar and curbing inflation.

What is not known is how long the crunch will last or how deep it will cut into next year's building.

Fewer starts. Housing industry analysts immediately began reducing their forecasts of building starts by 20%. Some feared much worse, and expected housing to reach a depression level of one million or less starts for next year. Others, expecting limited political tolerance for the Fed's actions, guessed the worst could be over by spring when seasonal building for the nation as a whole takes hold.

Either way, however, the soft landing once widely anticipated in the industry is out. With the bank prime rate at 14¹/₂% and likely to go higher, S&Ls and other mortgage lenders no longer could compete for market funds, even if they were completely unrestricted.

No new funds. "We will try to fulfill the commitments we have made from our internal liquidity. I can't see us bidding for funds in this market," says Jerry Pohlman, chief economist for California Federal Savings and Loan Assn., Los Angeles. Unlike eastern state lenders, California associations have had almost unlimited access to money until now.

"Most mortgage lenders were already facing a squeeze on savings flows; now they are looking at a fullblown crunch," says financial economist Allen Sinai of Data Resources, Inc.

"The Fed's decision will have a dramatic impact on housing starts next year. I expect the starts rates will be off about 20 to 25% from present levels during the first half of next year, and that mortgage rates may reach an average of about 14%, up from 11.5% at the time of the Fed's action," predicted Federal Home Loan Bank



NAHB's Gravlee "Disastrous for small builders"

Board chairman Jay Janis.

To be sure, housing will receive new support from government programs. But with interest rates at record levels, even big mortgage buying institutions such as Fannie Mae will be limited in the amount of new mortgages they can buy.

And while the FHLBB intends to pump new cash into S&Ls through its advance window, the high cost of money and the fact that it works against the Fed's plan to limit total credit weakens the agency's leverage.

Aiming at housing. Slowing housing was an important goal for the Fed. But until Oct. 6, the central bank was hoping to bring starts down gradually to a 1.5 million range for 1980. The extraordinary strength with which the industry resisted a downturn, and the inflationary and speculative buying binge that gripped the market in the last year, intensified the Fed's fears. Housing inflation was also a major concern to the Carter Administration.

"As long as people expect the prices of homes to go up, say 15% a year, they will be willing to borrow even at 11% and 12% and to keep bidding up the price this way," Alfred E. Kahn, chairman of the Council on Wage and Price Stability, commented only days before the Fed acted.

But Kahn offered no easy solution for getting housing under control: "We are not sure how to break that kind of spiral without inducing a serious crash," he conceded.

Commitments in hand. Housing economists had long warned that the continued spurt in house prices was colliding with the Administration's anti-inflationary stance. Because of



Bank Board's Janis "A dramatic impact on starts"

this, many builders had lined up commitments or already reduced estimates for next year, NAHB economist Robert Sheehan says. For those with commitments, October's dramatic hike in market interest rates will not hit home until next January, he notes.

If the Fed begins to get results on interest rates and general prices by then, it may be able to ease the pressure, some money market economists speculate. That would mean the worst of the crunch would come during the housing industry's slack winter season.

Usury laws. But builders in many states are going to get clobbered even with a short-lived crunch. Even if buyers could afford above-12% mortgages, usury ceiling in 24 states will dry up credit before Christmas. "If rates stay up much after January 1, thrifts across the country will be out of funds," predicts Sinai.

NAHB's Gravlee said that "while the tight money approach might reduce speculation in the commodities market and slow inflation in other sectors of the economy, the policy is disastrous for potential homebuyers and small builders."

"What we need today is a 180° reversal of economic policy," he said. "We need to look for ways to increase productivity, encourage investment, reduce government regulations, and increase the supply of essential goods such as housing, instead of trying to reduce demand by restricting the supply and pushing up the cost of money."

> -BOB DOWLING, McGraw-Hill World News, Washington

MORTGAGING

Lower down payments proposed for GPMs

Congress is expected to enact a liberalized Graduated Payment Mortgage (GPM) program that would lower the down-payment requirements. This should make it easier for upwardly mobile families to get an FHA-insured loan.

The GPM program keeps monthly payments low during the early years of the loan and raises them later on, when family income is also expected to rise. Already the existing program accounts for one-fourth of all FHA single-family insurance.

Increasing loan balance. The revised program would lower the down payment so much that it would not cover interest charges. On a \$55,000 house, for example, the down payment would be only \$2,250, whereas under the current program it is \$4,200.

This means the loan balance would actually increase for the first few years. As this conflicts with a law that limits FHA-insured mortgages to 97% of a home's value, another change had to be made. The new program gets around this requirement by allowing the "value" used in computing loanto-value ratio to increase by 2.5% a year.

Mortgage 'cap'. The National Association of Home Builders, which has lobbied vigorously for the revised program, argues that this is a conservative increase. However, the legislators, in settling on the final details, were not convinced. They talked about setting a "cap," so that at no time could the mortgage principal grow to more than, say, 113% of the appraised value.

Payment schedules. The most popular of the several current GPM options is one in which mortgage payments escalate at 7.5% a year from the second through the sixth year. "This is a steep increase," says one expert, "but it is popular because it requires the lowest monthly payments the first year." Up to now, 85% of all GPMs issued have had this payment schedule.

The homebuilders expect that under the new GPM program the most popular version would call for level payments the first two years, followed by ten years of payments increasing at the rate of 6% a year.



Rising prices. NAHB president Vondal S. Gravlee told the House housing subcommittee earlier this year that he was aware of the questions raised about the financial soundness of such mortgages "if there were a sharp and unexpected decrease in the value of homes." But, he told the subcommittee, "since 1968, there has not been a year when existing home prices have risen at less than 5.5% a year." In 1978, the increase was 13.5%.

Increasing popularity. GPMs issued have risen sharply from their introduction in October 1977. For the first 15 months, ending in December 1978, they totaled 51,533 (see chart above). For the first seven months of 1979, they totaled 65,714.

During the first eight months of this year, GPMs have comprised about 25% of all FHA mortgages on single-family homes, compared to only 2.1% in January 1978 and 17.4% in June 1978.

Experts expect that as many as half of all FHA single-family mortgages could be GPMs once the liberalized terms can be offered to buyers.

> – DON LOOMIS McGraw-Hill World News, Washington, D.C.

Citicorp agrees to sell its Advance Mortgage subsidiary

After nine years of court battles, Citicorp of New York finds a buyer for its Detroit-based Advance Mortgage Corp. subsidiary.

The proposed sale to Oppenheimer & Co., a Wall Street securities firm, would leave Citicorp with considerable interest in Advance. In addition to keeping 34 of AMC's 70 offices, Citicorp would retain all of Advance's mobile home and secondary mortgage activities. Oppenheimer would acquire AMC's \$3.3 billion mortgage servicing portfolio.

The Federal Reserve Board had ordered Citicorp to divest itself of AMC in 1970 to open the way to "some direct competition" between the two companies.

In June [HOUSING, July] the U.S. Supreme Court rejected a final Citicorp appeal to reverse a lower court ruling which had upheld the Fed's divestiture order.



MAJESTIC MEANS SOLD.

Builders across the country use Majestic® fireplaces, because Majestic helps them sell new homes-and sell them fast.

Almost 3 out of 4 of today's homebuyers say they want a fireplace in their new home." But it shouldn't be just any fireplace. Majestic gives them the authentic look and durability they want. And an easy-to-install Majestic fireplace means less labor and lower costs-more homes sold and higher profits for you.

The Majestic MD series uses the industry's most advanced technology to produce the most aesthetically pleasing firebrick liner-the look of real masonry. This refractory liner is made with steel fiber filler to insure that every one you install will keep its authentic look year after year.

If you're really serious about moving more homes, look into the complete line of Majestic prefabricated built-ins. To get the fireplaces you want, when you want them, call the Majestic distributor in your area, or write the Majestic Company.

Let Majestic help sell more homes for you. Your customers will appreciate your good taste.





Deluxe (MD)



Huntington, Indiana 46750

*based on U.S. Dept. of Commerce Bureau of the Census characteristics of new housing: 1978

Circle 13 on reader service card



"We used to make the cabinets for every home we built...

until we discovered Scheirich could build them better, and deliver them faster."

Superior Homes, Houston, Texas

"Building houses for the popular market range of \$30,000 to \$60,000 used to have us struggling to keep supply equal to demand. We made everything except the major mechanical elements, but we still couldn't keep pace.

"Even though we were building our own cabinets, we soon discovered we couldn't build them fast enough. That's when we turned to Southwest Kitchen Distributors and their associate, Gassco Building Supply, for help.

"Southwest infroduced us to Scheirich. And from the first glance we were impressed with the quality and variety Scheirich offered. Another thing that impressed us was Southwest's delivery schedule.

"Being a Scheirich distributor, Southwest could guarantee delivery when and where we needed the cabinets. And that's really important because we're now building several thousand units a year, including houses, apartments and condominiums. "We're installing Scheirich's Gardencourt Carmel in our medium-priced, single-family homes, Gardencourt Calais in our apartments and condominiums, and in our higher-priced custom homes we're using Scheirich's top-ofthe-line Queenswood cabinets.

"Southwest also showed us how to improve our kitchen layouts for maximum efficiency and they co-ordinated daily deliveries of Scheirich cabinets based on our tight production schedules.

"Thanks to Southwest and Scheirich, we solved our cabinet supply problem beautifully."

FINE FURNITURE FOR THE KITCHEN AND BATH

SCHE

Superior Homes Specializes in the construction of middle-income housing in metropolitan Houston, with the primary market range being homes costing \$30,000 to \$60,000.

Superior built more than 1200 homes and 600 apartments and condominiums last year and plans to double those figures this coming year. And with a volume like that, they don't need supply problems.

That's why Superior Homes turned to Southwest Kitchen Distributors for Scheirich cabinets. Scheirich quality and Southwest's co-ordinated daily deliveries helped Superior keep pace with the demand.

S&Ls look to Europe for mortgage funds

The housing industry's remarkable ability to stand up under high interest rates is now widely credited by housing analysts to two factors: the ability of mortgage lenders to attract funds with the money market certificate and the mortgage lending industry's growing sophistication in using the money markets.

New approach. Nowhere is the money market approach more exotic than in the direction some S&Ls are taking to buy Eurodollars to supplement domestic deposits. "Eurodollar authority represents a new and significant power for S&Ls," says Gilbert Roessner, who pioneered the concept with federal regulators.

Roessner's City Federal Savings and Loan Assn., Elizabeth, N.J., California Federal Savings and Loan Assn., Los Angeles, and several other large associations see the availability of foreign-held dollars as a supplementary source of housing money. While issues so far have been relatively small, the money is cheaper than funds raised in the U.S. with mortgage-backed bonds. And because the offshore Euromarket is unregulated, S&Ls have an assured source of funds if they are willing to pay for them, notes Roessner.

Cheaper funds. California Federal sold a \$10 million issue of unsecured notes in September at an interest rate it would not disclose.

"It represented a significant saving over what we would have paid for funds with mortgage-backed securities here in the U.S.," says vice president and economist Jerry Pohlman.

"The rate advantage will be even better when we're more known in that market," he adds. "But most important, we've wet our feet in a new market and tapped a new source of mortgage funds."

Other associations, such as City Federal, are looking at ways to sell secured Eurodollar certificates that are backed by mortgages in smaller denominations. Some could be as low as \$10,000, says a Federal Home Loan Bank Board economist.

Since U.S. S&Ls are largely unknown to the European investor, S&L analysts feel it will be some time before Eurodollar borrowings provide any significant share of U.S. mortgage financing. But Roessner, noting the ability of U.S. banks to churn billions of Eurodollars a year, says: "As we become better known, we should eventually be able to do anything the banks can." -B.D.

Maggie Mae makes a \$50 million debut

Another privately issued mortgagebacked security emerges.

Dubbed "Maggie Mae" by its issuer, MGIC Mortgage Marketing Corp., the new security—covering \$50 million worth of conventional home mortgages assembled from 35 lenders in 24 states—is bought up immediately by an unnamed insurance company.

Aimed at attracting big institutional investors, Maggie Mae "isn't as susceptible to credit pressure from the Federal Reserve" as its two Washington, D.C.-bred cousins, Fannie Mae and Ginnie Mae, according to an MGIC spokesman.

Returning to the fold? Leon Kendall, president of MGIC Mortgage Marketing Corp., says he hopes to rekindle the old love affair between insurance companies, pension funds and homebuilding.

Institutional investors, Kendall explains, have shied away from the secondary mortgage market "because of the time and effort required to assemble and monitor the individual loans."

The Maggie Mae conduit, however, enables investors "to build a sizeable loan portfolio—at current high lending rates—without dealing directly in the secondary market."

If future Maggie Mae issues are placed as quickly as the inaugural issue, Kendall believes "the increased investment will make more mortgages available on a continuous basis to lenders and homebuyers, thus making the housing industry less cyclical."

MGIC Mortgage Marketing Corp. is a subsidiary of Milwaukee-based MGIC Investment Corp., the nation's biggest private insurer of low-down-payment conventional home mortgages. -T.A.



MGIC's Kendall Gets a buyer

HUD scheme to rescue troubled rentals

Next year HUD will test a financial scheme to rescue conventionally financed apartment projects that are in danger of being abandoned because rental income isn't enough to meet mortgage payments.

The program, spelled out in the Federal Register October 3, would refinance such projects to provide cash flow to lenders "for many years to come," according to HUD official Michael Wells, rather than have them foreclose.

Under the plan, lenders would write

off some of the debt, and FHA would provide insurance on a lesser and longer-term mortgage. This would permit "mortgage payments that are markedly lower" but enough to keep that apartment project in operation, HUD says.

In January, HUD officials expect to select apartment projects in four older central cities to test the program. They are to be in the neighborhoods either undergoing or about to undergo "revitalization," and they must be at least three years old and occupied. -D.L.

Perfect choice for your energy-efficient homes.

KITCHENAID INTRODUCES THE ONLY DISHWASHER DESIGNED TO SAVE MONEY ON THE TOTAL HOT WATER HEATING BILL.

With KitchenAid, home and apartment owners get energy savings around the clock.

The new KitchenAid Energy Saver IV dishwasher is truly unique.

It's the only dishwasher that heats its own hot water in every complete cycle for proper washing and sanitized rinsing.

Now, America can turn down its hot water heaters.



With KitchenAid, it's no longer necessary to keep water heaters set high to get good dishwashing results. Now your customers can save energy 24 hours a day by setting their heaters at a lower temperature.

The KitchenAid dishwasher is designed to operate properly with incoming water of only 120.° That's 20° below what other dishwasher manufacturers recommend. And a savings in water heating costs of about 10%.

KitchenAid gets dishes cleaner than other dishwashers can.

The new KitchenAid not only saves money on total hot water bills, it outcleans other dishwashers. In tests against major competitive brands, using energysaving 120° input water, KitchenAid delivered consistently superior cleaning.

Sparkling clean; sanitized, too.

Dishes not only come out sparkling clean, they come out sanitized, too. That's because every complete cycle is a Sani Cycle in every KitchenAid model. Water is heated to 150° by the dishwasher for the first rinse and the final rinse. Water temperature is also boosted during other washes and rinses.

New drying system saves energy, too. There's no heating

element on during drying



Biggest new product introduction in KitchenAid history.

To generate interest and pre-sell customers on the energy-saving advantages of the new KitchenAid line, we're launching a multi-million dollar campaign of advertising, publicity and sales support. So if you feature Energy Saver IV dishwashers in your homes, the Kitchen Aid national advertising support will be helping vou

using energy. In the new KitchenAid dishwasher, a fan circulates heat built up during washing and rinsing to gently, safely, and efficiently dry the dishes. 140% more insulation.

Thick blankets of fiberglass insulation surround the wash chamber to retain heat for maximum washing/ drying efficiency.

The features that made us famous remain the same. In addition to energy savings, prospective buyers will welcome the other great features that have built the KitchenAid reputation for outstanding performance and freedom from service calls: the Soak & Scrub Cycle for encrusted pots and pans; Load-As-You-Like convenience; adjustable racks; and the Soft Waste Disposer system.

New triple protection warranty: another sales clincher.

The strongest ever offered by KitchenAid! An all new, 10-year limited warranty (parts only) on the porcelain tank and inner door. Plus, a 5-year limited warranty (parts only) on the motor. And a full one-year warranty on the complete dishwasher. attract prospects and close sales.

Now there's a significant difference in dishwashers.

The Kitchen Aid Energy Saver IV is the only dishwasher that can save money on total hot water bills and get dishes cleaner than other dishwashers can. Two advantages that'll make your homes more attractive to energy-conscious buyers. See your Kitchen Aid distributor for his new Builder Package.



KitchenAid. Because it's worth it.

Circle 17 on reader service card

Hobart Corporation, Troy, Ohio 45374

WASHINGTON

HOW wins one and loses one in bid for new ground rules

The 14,000 home builders in 47 states who are in the Home Owners Warranty (HOW) program can still require a customer with a complaint to show up at a conciliation meeting before the customer exercises his right to take his complaint to arbitration.

But the Federal Trade Commission, using its authority under the law that applies to consumer warranties, has denied HOW's request that the home owner be required to put up a \$125 refundable deposit when he requests formal arbitration of his claim against the builder.

Upsurge in claims. In its request to the FTC last April for some changes in the warranty rules, HOW cited increasing costs of "the arbitration process." But FTC said HOW had "presented no evidence showing a substantial number of frivolous or spurious arbitration claims which perhaps might justify an exemption" from the general rule against consumer fees. The Commission said, however, that if HOW came up with evidence showing that a "substantial number of claims are made in bad faith," the Commission would reconsider its decision.

How figures show that more than 1,000 arbitrations had been requested for the first eight months of 1979, whereas there had been only 800 during the first four years of the program.

The original HOW warranty had an arbitration deposit requirement, but this was dropped upon enactment of the Magnuson-Moss law in 1977. Mandatory conciliation is also banned under the law, but the FTC had granted HOW a temporary exemption, which it has now renewed. Under the latest FTC ruling, the homeowner can be required to attend one conciliation meeting during the 20-day conciliation period.

If the homeowner makes himself available for such a meeting, he can then demand arbitration, which must take place within 40 days. An arbitration award is binding on the builder but not on the homebuyers.

HOW had hoped, through the conciliation arbitration deposit procedures, to slow down the flood of arbitration requests. The arbitrations thus far have resulted in rulings in favor of the homebuyer that cost an average of \$2,800.

Comments to FTC. In its letter to Robert J. Reid, HOW president, FTC made HOW's exemption from the FTC rules contingent upon each homeowner's receiving a written notification that includes the following language:

"While it cannot intervene in each individual case, the FTC is interested in knowing how the dispute resolution process is working. Please send any comments which you choose to make (to FTC in Washington.)" In addition, HOW is required to send a questionnaire at regular intervals to a sample of homeowners who participate in conciliation asking such questions as "Would you participate in conciliation again?" The replies are to be compiled by HOW for use by FTC.

FTC also suggested that HOW "include in the homeowners's dispute settlement materials" a complaint form which the homeowner would send direct to the builder before contacting HOW. — DON LOOMIS

McGraw-Hill World News, Washington

Faster tax write-offs proposed for buildings and equipment

A proposal that would radically change the way business depreciates capital investment in everything from automobiles to equipment to non-residential buildings has been introduced in Congress by Representatives James Jones (D-Okla.) and Barber Conable (R-N.Y.). The bill, known as the Capital Cost Recovery Act, is likely to become a central feature of the next general tax reduction, probably next year.

Set schedules. The measure would scrap the decades-old practice of allowing companies to depreciate capital investment roughly in line with the actual useful life of the property or equipment involved. When fully effective in five years, it would substitute new, purely arbitrary time limits.

•Investment in non-residential structures could be written off over ten instead of the 20 years or more the current law requires.

•The cost of most new equipment could be used to offset taxes over five years. Although the current average for all industries is ten years, the useful-life concept dictates that for some items the depreciation schedules stretch beyond 20 years.

•The first \$100,000 investment in automobiles and light vans could be written down in three years, and companies could take a 6% investment tax credit instead of the 3.3% allowed by current law.

Although the Carter Administration has taken no position on the matter, treasury secretary G. William Miller endorsed the concept as Federal Reserve chairman and reiterated his support during confirmation hearings for his current post. "I think the essence (of the proposal) will be endorsed by the administration," says Jones.

Possible changes. But some major changes seem inevitable. Treasury officials believe that even current depreciation schedules for such nonresidential structures as office buildings are too generous, especially as their value has skyrocketed during the past few years of high inflation. The ten-year write-off, they argue, could prove to be the biggest tax shelter to come along in years.

Even backers of the measure admit there are genuine concerns about establishing a new tax shelter. The provision, some admit privately, was included in order to win the backing of the retail and service sectors of U.S. business which otherwise stand little to gain from the measure. Some backers are quietly studying extending the write-down period for most structures to 15 years in an effort to head off further criticism. —STUART JACKSON McGraw-Hill World News,

When it comes to energy efficiency, this might be the only way to beat us.

As a matter of fact, Therma-Tru door systems have much in common with refrigerator doors. They use snug-fitting construction, self-sealing

1

magnetic weatherstripping, and a perfect thermal break. A system designed to keep inside temperatures in, and outside temperatures out.

As a result, they provide about 4-times the insulation value of a conventional wood door. Therma-Tru doors have "R" Factors as high as 15.1. Best of all, with Therma-Tru doors you can choose from more than 75 beautiful styles. So you get a door that works like it belongs on a

refrigerator, but looks like it belongs on a house.

For more information write Therma-Tru, 4747 Holland Sylvania Road, Sylvania, Ohio 43560. Therma-Tru products manufactured at: Colorado Springs, Colorado; Van Buren, Arkansas; Toledo, Ohio.



Circle 19 on reader service card

APARTMENTS

Demand for rentals is 'insufficient'

In its respected quarterly report, "U.S. Housing Markets," Citicorp Realty Inc.—and its Advance Mortgage Corp. subsidiary—arrive at an astounding conclusion.

Calling the current U.S. rental market "a paradox," Citicorp Realty president Philip Kozloff declares:

"Now the tightest it has ever been in peacetime, the rental market is so tight not because of excessive demand but because of insufficient demand."

Vacancies. According to the Citicorp-AMC report, vacancy rates nationwide range between 5% and 7.8%.

"Yes, the rates are low," Kozloff admits, "but with so little addition to the rental stock in recent years, vacancy rates should be half of what they are now if demand were as great as it's supposed to be."

Apartment hunters in most major markets—New York being the biggest exception—"are not walking the streets and going from building to building in desperate search of good apartments," he declares.

And in some previously hot rental markets, Houston for example, "the vacancy rate is creeping up."

Rental demand, Kozloff says, "has dropped sharply over the last five years. In fact, since 1974 fewer than 400,000 rental units a year have been absorbed (rented), compared to an average of 630,000 a year between 1969 and 1973."

Surprise. One noted apartment expert, Edward N. Kelley, president of Edward N. Kelley & Associates of Chicago, is stunned by the Citicorp-AMC findings.

"I'm surprised," Kelley says. "In fact, I'm a little shocked. A statement like that [that demand for rental units is "insufficient"] is amateurish."

Kelley says: "Demand for rentals has never been greater. But because rents haven't come close to keeping pace with inflation, apartment builders, as we all know, aren't building to meet the pent-up demand."

20-year low. Construction of unsubsidized rental units, Citicorp's Kozloff says, "is nearly at a 20-year low—only 1975 was lower."

Unsubsidized apartment units "are being built in only a few Southern and Mountain markets where the costs are



Consultant Kelley Statement is 'amateurish'

relatively favorable."

According to "U.S. Housing Markets," between 140,000 and 165,000 conventional rental apartment units will be started by the end of this year. Of that total, the survey says, Houston and Dallas-Fort Worth will account for nearly 40,000.

Condos. The Citicorp study projects about 150,000 to 175,000 condo starts for 1979, about half of which will be located in Southern California and Florida.

The conversion trend, Kozloff says, is spreading into "medium-sized" markets. And with the threat of a nationwide moratorium in the air, "conversion planning in established markets has stepped up."

The study also projects about 175,000 subsidized starts, adding up to a total of 475,000-500,000 multifamily starts in 1979.

Other findings. Single-family starts for 1979 were estimated at between 1.0 and 1.1 million—down from an earlier estimate of 1.2 million. Advance Mortgage also reported a sharp drop in new-home sales beginning about the middle of the year.

The survey concludes, however: "This will still be one of the five best years in for-sale housing. It suffers only by comparison with last year's boom." -TOM ALLEN

IRS okays tax deduction for losses on nonprofit housing

Section 183 (A) of the Internal Revenue Code forbids tax deductions for losses if "an activity is not engaged in for profits." Now there's an exception for nonprofit housing.

Losses can be deducted, the IRS has ruled (Revenue Ruling 79-300) if the losses were incurred because of government requirements.

Sec. 236 project. The ruling came out of a case involving a limited partnership that had been formed to build and operate 300 low- and moderateincome units under Section 236 of the National Housing Act. A state housing authority had "provided 90% financing for 20 years.

Because the partnership had to manage the project under restrictions laid down by HUD on tenant eligibility, rents, rate of return and methods of operation, it faced possible tax losses for the full 20-year mortgage period.

Legislative history. In making its ruling, IRS balanced the profit require-

ment against the legislative history of the Housing Act. It noted that the Act "declares that it is the policy of the United States to encourage the widest possible participation by private enterprise in the provision of housing for low- or moderate-income families."

The Act also contemplated the formation of partnerships so that private investors would participate in providing housing primarily for these families, and the Senate Banking Committee endorsed the partnership arrangement as a means "to assure an adequate return to investors."

Thus, the IRS concluded that "the legislative history indicates that in limiting rental charges, Congress assumed deductions of tax losses would be allowed to encourage investment in projects providing decent housing for low- and moderate-income families."

> -HERBERT CHESHIRE McGraw-Hill World News, Washington

"The number one insulating sheathing, or an imitation?



If that's your question, here's my answer:"

"I build in the sun belt, where air conditioning costs really pack a wallop. STYROFOAM" brand insulation helps my customers keep their cool."

"I compared STYROFOAM brand insulation with other sheathings before I made it standard on every house I build. For my money-and my customers'nothing delivers both performance and value like it. Lower-priced sheathings can be poor substitutes. Some of 'em even put foil on it and claim a very high theoretical R-value based on ideal conditions. Hey, that's just not realistic.

"I don't want to have to change the way I build a house to offer questionable energy savings. Here in the sun belt, STYROFOAM pays off every

DR. + MRS. John Franke

Baton Rouge Homeowners

"We recommend him every chance we get!"

time the air conditioning is turned on. It'll pay off for you."

ioni

President, Albert H. Hart Corp. Baton Rouge, Louisiana

STYROFOAM brand insulation instead of conventional sheathing can help keep your customers' energy costs under control. STYROFOAM brand insulation insulates the entire outside wall and also cuts energy-stealing air leakage. You may even be able to install

Molded polystyrene foam, sometimes referred to as "beadboard", varies widely in guality. It has an irregular internal structure that often contains voids between beads. It is less efficient as insulation and in certain applications in a wet environment can allow moisture accumulation which further reduces insulation performance.

STYROFOAM extruded polystyrene foam is of consistent quality. It has a uniform internal structure without voids, so that it retains insulation performance—and moisture resistance. And its extra strength better resists handling abuse and vandalism.





When you compare price with documented, long-term insulating performance, you'll discover that STYROFOAM is actually a better value than lower-priced

insulating sheathings. So-called bargain types like "beadboard" or laminated fibrous board, whether foil-faced or not, simply can't compare to the real value of STYROFOAM.

Only STYROFOAM brand insulation Cover offers performance proof, Dow testing, research and innovation. Plus an unprecedented national advertising and public relations

Just use STYROFOAM brand insulation instead of standard sheathing, from roofline to footing.

Drywall Vapor Barrier-Covering

tions

program tells your energy-aware customers about the special advantages of STYROFOAM. STYROFOAM is the proven answer for energy savings. Tell your customers about it if they haven't already asked.

> Write for your free builder brochure: The Dow Chemical Company, STYROFOAM Brand Insulation, Dept. L 38 Midland, MI 48640.



*Trademark of The Dow Chemical Company

WARNING: STYROFOAM brand insulation is combustible and should be properly installed. For residential construction, a minimum of v_2 " gypsum board interior finish should be used. For specific instructions see Dow literature available from your supplier or from Dow.

"One look at Dow's brochure will show you why STYROFOAM is best."



For a complete look at how easy it is to use STYROFOAM brand insulation instead of conventional sheathing, ask your Dow Representative for your copy of: "STYROFOAM Brand Insulation—The Proven Answer." Or circle the reader service number.



*Trademark of The Dow Chemical Company



Our roots go all the way back to 1889, making us one of the oldest title firms in America. Age is important in selecting a title insurer, as it denotes stability, experience, knowledge, expertise...all qualities you'll find in First American. And with our more than 1,000 issuing offices, plus hundreds of agents, throughout the United States, you have the added advantage of convenience for all of your title needs, regardless of location. For your next transaction, order your title policy from First American. We're NINETY and We're NATIONAL!



First American Title Insurance Company NATIONAL HEADQUARTERS: 114 E. FIFTH ST., SANTA ANA, CA 92701 • (714) 558-3211 NATIONWIDE TOLL-FREE, EXCEPT ALASKA, CALIFORNIA, HAWAII: (800) 824-7888, OP 328

A Subsidiary of The First American Financial Corporation

ENERGY WATCH

'Arkansas house' passes the test

Results of a study comparing the energy-saving "Arkansas house" [HOUS-ING, Oct. '75] and houses built to minimum property standards are now in. The findings: Heating bills in the Arkansas houses were 80.2% lower and cooling bills 59.7% lower than bills for the MPS houses (see table below).

The three year study—conducted by the Arkansas Power & Light Co. compared electric bills in nine energysaving houses, built in Marion, Ark., and nine MPS houses. The energysaving houses, which averaged 1,310 sq. ft., used $1\frac{1}{2}$ -ton heat pumps, while the MPS houses, which averaged 1,372 sq. ft., used $2\frac{1}{2}$ -ton air conditioners and electric furnaces.

The Arkansas system—whose standards were set by AP&L—uses $2'' \times 6''$ studs on 24'' centers so that the walls will accommodate 6''-fiberglass batts, with an R-value of 19, rather than the 4'' batts with a value of 11 or 13 normally used. with an R-value of 38. The system also calls for reduced

window areas, wide overhangs, foundation insulation, vapor barriers, storm windows, extra caulking and other energy-saving items.

According to the builder, these homes cost about the same to build as a conventional house because money spent for insulation and the like is offset by use of a smaller, less costly heat pump and some construction savings. -S.L.

The attic accommodates 12'' batts

Comparison of electric energy use for heating and cooling

	Av	erage monthly co	Three-year		
	1976	1977	1978	average	% Saving
HEATING: (Six-month average)				a manager and the second	and the
Minimum property standard homes	\$40.87	\$48.81	\$48.27	\$45.98	
Energy-saving homes	7.96	9.98	10.89	9.61	80.2
cooling: (Six-month average)	AND THE AREA		THE PROPERTY		1999
Minimum property standard homes	\$38.56	\$64.44	\$51.47	\$51.49	
Energy-saving homes	16.17	24.31	21.70	20.73	59.7
Heating degree-days below 65°F.	2852	3480	3718	3350	A REAL PROPERTY
Cooling degree-hours above 80°F.	6284	9342	9169	8265	

One-and-a-half-ton heat numps were used in energy-saving homes

One-and-randarton near pumps were used in energy-saving nomes

Three-ton air conditioning with electric furnaces were used in minimum property standard homes

THE COURTS

Courts rule out damages for bias victims

Race discrimination by anyone selling housing is banned by the 1968 Civil Rights Act. The law lets would-be homebuyers hurt by discrimination sue for damages. It also lets the Department of Justice sue on behalf of individuals when the issue is "of general public importance."

But there's a question: Can such government suits force developers to pay damages to those persons who were discouraged from buying?

Justice claims it has that power. But now three U.S. circuit courts—the only ones to have ruled on the question—have disagreed with that stand. The most recent ruling comes from the Court of Appeals in Chicago. Judge Robert A. Sprecher explained that the government can collect "monetary restitution" for discrimination victimsif, say, a black was charged more for a house than a white buyer would have had to pay—but not damages.

The government's case was brought against Rent-a-Home Systems of Illi-

nois, Inc., which, court papers show, went out of business before the appeals court decision. — DAN MOSKOWITZ McGraw-Hill World News,

Washington

New trial for gypsum producers

Four major gypsum producers will be tried for the second time on criminal charges that they conspired to fix wallboard prices for more than a decade.

The producers—United States Gypsum, National Gypsum, Georgia-Pacific and Celotex—were convicted in the first trial.

The Supreme Court overturned the conviction on grounds that the judge's instructions to the jury had been faulty. But it refused to accept the companies' arguments that there was not enough evidence to warrant a second trial and in fact that a second trial would place them in double jeopardy.

The criminal indictment followed civil suits by private plaintiffs which were settled in November 1973 for \$67.6 million, plus interest. Of the total, 36.9% was set aside for restitution to homebuilders and first buyers. -D.M. and H.C.

Frank Collins is using PPG tinted glass in the best of U.S. Homes.



This is Village on the Green in Florida. It was built by the largest, most experienced residential builder in the country, U.S. Home. And it illustrates vividly that company's commitment to quality and extra built-in value.

For example, every patio home and condominium villa here has been made more attractive by PPG *Solarbronze*[®] tinted glass.

Frank Collins, Vice President of Construction for the Florida Condominium Division, explains: "We wanted a bronze tinted glass to help merchandise the look of our project. PPG's *Solarbronze*[®] does just that. It gives a better appearance to the homes, espe-



cially a richer look to the exterior and a warm view from the interior."

Mr. Collins' opinion of the results: "We are highly satisfied and will be using this glass in other projects in the future."

For your projects, PPG offers a range of solar control glasses

that help control heat gain and fight the excessive brightness of a strong sun.

In addition to *Solarbronze*, there's also heat absorbing *Solargray*[®] and our green-tinted *Solex*." Deep-tinted *Graylite*[®] remains a very effective choice in areas where brightness is especially hard to control.

All of PPG's tinteds can easily be combined in doubleglazed construction or as add-on panels for improved thermal performance.

Find out more about adding PPG tinted glass to your sales package. Write for a free copy of "Home Styles for the Eighties" a color booklet about PPG products. PPG Industries, Inc., Dept. HS - 2119, One Gateway Center, Pittsburgh, Pa. 15222.

PPG: a Concern for the Future





Village on the Green, Clearwater, Florida, Frank Macagnone, Division President, U.S. Home Corporation

Innovation and craftsmanship, bearing fruit.



The perfect blending of form, strength and function. It's a law of nature. It's also the rule that governs us at Peachtree in the making of our wood-framed patio door.

We specifically designed the Carvel system to make full use of wood's natural advantages. Wood is a more effective insulator than aluminum. And the rich natural beauty of

wood is better suited to creating a warm home atmosphere.

But we don't stop there. At Peachtree we know that an energy efficient patio door is only as good as its design, construction and weather-sealing. We have developed a unique single plane perimeter weather-seal that when hard-pressed by water or wind, only seals tighter. Our new Insul-Plus Lite System offers a special triple glazing option for additional energy savings.

When choosing a wood-framed patio door consider these exclusive Peachtree features along with our many other advantages like an unsurpassed security system and maintenance-free factory finishes.

The choice is yours. We hope it's Peachtree's Carvel, the fruit of 20 years of innovation and craftsmanship. For more

information about our patio doors or insulated entry door systems, write to Peachtree Door, Marketing Services Dept., P.O. Box 700, Norcross, Ga. 30091. "A Growing Concern For Better Products"



An Indal Group Company



Circle 29 on reader service card

Introducing



the first central air conditioner with the brains to help you sell the house.

This year Americans want to save energy more than ever before.

And York's new Champion Deluxe High Efficiency Central Air Conditioner has the brains to help you help them do it.

A unique solid-state brain that continually monitors and controls 11 different money-saving/reliability functions. All at once. All the time.

A brain that allows you to offer the impressively high efficiency SEER rating of up to 10.25. Along with some state-of-the-art features found in no other central air conditioner today.

Like a delayed blower-off timing that permits the indoor blower to continue operating a full two minutes after every thermostat satisfaction. Squeezing out "free cooling" other air conditioners let go to waste.

Other "brainy" features include loss of charge detection. Loss of charge protection. A 4-minute power failure delay. A 4-minute anti-recycle timer. And a thermostat—included with the unit featuring a malfunction consumer warning light.

You also get a popular style cabinet, too. (Although this isn't exactly what you'd call a "brainy" feature, good looks certainly is a smart idea!)

Additional house-selling brilliance to help you.

York also offers you Yes II. Our outstandingly successful energy-oriented computer program that makes you the local "energy expert."

Because it lets you calculate each home's exact heat loss and heat gain at design conditions. Select the York heating and/or cooling equipment to best match that load. And be able to tell the homeowner, almost to the penny, the estimated equipment operating cost for that specific house under those conditions.

The York CDHE Central Air Conditioner and Yes II computer program.

If you're selling energy-efficient homes, York has the brains to help.

For more information, see your York dealer.





We have the brains to save you energy.

Circle 31 on reader service card

PEOPLE

Eli takes on a new right-hand man

Kaufman and Broad Inc. kingpin Eli Broad invites an outsider to share his chairman's suite.

In a move that leaves Wall Streeters somewhat bewildered, Broad taps Sanford C. Sigoloff—an old friend and noted resuscitator of ailing non-homebuilding companies—to serve as his chief operating officer, vice chairman and right-hand man.





Sigoloff—who calls K&B an "untroubled company"—supplants Robert Levenstein as chief operating officer. Levenstein, who was slated to head K&B's North American homebuilding operations, resigns. Broad says Sigoloff "will assume some of my responsibilities as well as some of Bob's (Levenstein) former tasks" thus freeing up the chairman, he says, "to pursue potentially attractive business and acquisition opportunities."

In June [HOUSING, July], Broad confirmed that he's been approached by at least one Canadian developer about selling K&B's homebuilding arm.

BUILDERS/DEVELOPERS: Jeffrey P. Payson is elected president and chief operating officer of General Homes Consolidated Cos. (Houston). One of the company's founders, Payson moves up from executive vice president and general manager. General Homes Consolidated Cos. is a wholly owned subsidiary of Cadillac-Fairview Corp. (Toronto).

Milton W. Cowden, vice president/loan processing at Superior Homes (Houston), resigns and rejoins Gibraltar Savings and Loan as vice president. He'll be responsible for Houston area loans. Cowden had been with the lender for 20 years before joining Superior 19 months ago. Jeff Harris, Superior's vice president/finance, assumes Cowden's duties.

At the Irvine Co. (Newport Beach, Calif.), Thomas H. Nielsen moves up to senior vice president, community development. Nielsen had served as vice president and head of that division.

Two assistant vice presidents are tapped at Shappell Industries of Northern California. John P. Moore, a Shappell Industries forward planning manager, becomes assistant vice president for land acquisition and forward planning. Cheryl L. Balogh, assistant vice president/customer service, moves up from warranty manager.

Fred Winfield is appointed director of operations for Leisure Technology of Florida, a division of Leisure Technology (Lakewood, N.J.). Winfield was the parent's vice president of consumer affairs.

J.M. Peters Co. (Newport Beach, Calif.) loses Greg Erickson, vice president of marketing, who forms his own company, The Gregory Group, Inc. Tom Hover succeeds Erickson.

Jeffery B. Lewis takes the reins as president of Arbor Home Corp. (Houston), the newly formed subsidiary of Village Developers (Houston). Lewis was president of U.S. Home of Texas. Also at Arbor, Pattie Free is named director of product development and purchasing.

Christopher C. Gibbs, formerly a partner of GWC Development Corp. (Irvine, Calif.), forms Christopher Homes (Irvine). The firm opens up shop with a \$4.5 million residential development—The New Woodlands in Rancho Penasquitos, North San Diego County. Gibbs also forms Christopher Homes in Houston and taps **Bart** Hansen as director of operations. Ron Carl, also a GWC alum, is named general manager of the Houston office.

At the Northern California Division of Regis Homes (Newport Beach), William W. Thompson becomes vice president.

Under the guidance of chairman W. Scott Biddle, The Biddle Group expands with a flourish. Biddle acquires American Building Arts (Irvine), California Building Arts (Sacramento), Public Financial Services and Public Escrow, both of Sacramento. Kenneth A. Lipinski, formerly president of American Building Arts, is appointed president and chief executive. Presley W. Carter, previously president of Biddle Carter Development Co., is named the parent's vice chairman and chief operating officer. Also at the parent, Robert O. Ruff is chosen senior vice president/administration and Timonthy C. Collins is named vice president/finance.

At H.C. Elliot Inc. (Sacramento), George Dulas is appointed sales director for Oakridge, the firm's new single-family development.

Douglas Schnorr joins Harry L. Summers, Inc. (San Diego) as vice president of commercial development. Schnorr was director of commercial/industrial design and construction at the Irvine Co.

Ronald Selves becomes vice president/operations at Wausau Homes Inc. (Wausau, Wisc.) Selves had been sales and marketing manager.

Jerome N. Ernst is named general manager of Wick Homes' Coldwater, Mich. manufacturing plant.

Another Levitt and Sons veteran returns to the fold. George M. Ciaccio joins Bill Levitt's International Community Corp. (Greenvale, N.Y.) as director of marketing. Ciaccio was sales manager for Arunder Corporation's Long Island division.

Herbert M. Hutt, former U.S. Home executive vice president, joins a New York based executive search firm, Barton Sans Inc., as vice president.



APPRAISERS: Real Estate Research Corp. (Chicago) gets a new president and chief executive officer. M. Leanne Lachman, author of several real estate books and an RER senior vice president, succeeds former Illinois Lt. Gov. Neil Hartigan as president.



There are a kitchenful of reasons to put Hotpoint in your kitchens.

The most important one is your customers' satisfaction. When you install Hotpoint, you're installing quality appliances that will please them now. And for years to come.

1 Hotpoint has everything you need. We make a full line with the kind of features today's buyer is looking for. And our nationwide distribution system makes it easy to get the appliances you need, when you need them.

2 You'll like Hotpoint's ease of installation. For instance, our large capacity refrigerators can be installed almost flush to walls and

cabinets. And that's just the beginning. Hotpoint makes a variety of ranges for every kitchen style: hi-low, drop-in, free-standing, surface sections, plus 24" and 27" wall ovens. And Hotpoint dishwashers' front panel allows easy access to leveling legs and electrical and plumbing connections. You can install our dishwasher and disposer on a single 20 Amp circuit where local codes permit. And our washers and dryers can even be installed on an inside wall.

3 Service that's a selling point, not a sore point. We have

factory service centers in over 800 cities plus over 5,000 franchised service organizations across the country. Knowing service is always available takes a load off your shoulders.

4 If you'd like to know more about all the benefits of dealing with a single source supplier, get in touch with your Hotpoint builder representative. Or write Hotpoint Contract Sales Division, Appliance Park, AP4-256, Louisville, Kentucky 40225.

We hustle for your business. And it shows.

A Quality Product of General Electric Company

Circle 33 on reader service card

If You Have **Apartment Deals** In Any of These 60 Key Market Areas, Here's an Invaluable Information Source

Albany, New York Albuquerque, New Mexico Atlanta, Georgia Austin, Texas Baltimore, Maryland Billings, Montana Birmingham, Alabama Bismarck, North Dakota Boise, Idaho Boston, Massachusetts Charleston, West Virginia Charlotte, North Carolina Chicago, Illinois Cincinnati, Ohio Cleveland, Ohio Columbia, South Carolina Columbus, Ohio Dallas, Texas Denver, Colorado Des Moines, Iowa Detroit, Michigan Hartford, Connecticut Houston, Texas Indianapolis, Indiana Jackson, Mississippi Jacksonville, Florida Kansas City, Missouri Las Vegas, Nevada Little Rock, Arkansas Los Angeles, California

Louisville, Kentucky Memphis, Tennessee Miami, Florida Milwaukee, Wisconsin Minneapolis, Minnesota Nashville, Tennessee Nassau-Suffolk, New York New Orleans, Louisiana Oklahoma City, Oklahoma Omaha, Nebraska Orlando, Florida Philadelphia, Pennsylvania Phoenix, Arizona Pittsburgh, Pennsylvania Portland, Oregon Providence, Rhode Island Raleigh/Durham, North Carolina Richmond, Virginia Rochester, New York Sacramento, California Saint Louis, Missouri Salt Lake City, Utah San Diego, California San Francisco, California San Jose, California Seattle, Washington Tampa/St. Petersburg, Florida Tulsa, Oklahoma Tucson, Arizona Washington, D.C.

It's Ed Kelley's comprehensive book **Cost, Rent and Profit Computer: Rental Apartments**

This book provides vital data on:

- Land and construction costs
- Operating expenses
- Typical apartment sizes
- Densities
- Parking ratios
- Turnover rates

And includes a unique system of charts that shows the relationship between these key factors: Rents

- Average apartment sizes
- Hard and soft construction costs
- Operating expenses
- Efficiency factors
- Mortgage rates
- Investor yields

The charts include:

Standard Rent Calculator-for fifteen mortgage constants ranging from 9.25% to 12.75%.

High-cost-rent calculators-for use in certain highcost situations

A Vacancy-and Collection Loss Calculator-to show the additional monthly rent which must be charged at various rent and vacancy levels

Option-and Adjustment Charts-that allow you to measure and analyze countless combinations of variables

A Feasible-Cost Calculator-that helps you quickly determine the maximum you can spend per unit and still realize a profit

Key Financial Tables-including Capitalization, Mortgage Constants, Present and Future Worth, and Reciprocals

HOUSING PRESS					H 11/79
McGraw-Hill, Inc.					
1221 Avenue of the Americas					
New York, N.Y. 10020					
	Name				
Please send me copy					
(copies) of COST, RENT AND	Address				
PROFIT COMPUTER: RENTAL					
APARTMENTS at \$47.00 each.	City		State	Zip	1. S. A. L.
For overseas airmail delivery					
please add \$5.00	Payment must accompany your order.				
Prevay Energy-Mizer IV. 4 ways more efficient.



Add heat-efficient, sales-making charm to your homes.

There are 4 ways to improve fireplace efficiency. Preway's U.L. Listed Energy Mizer IV fireplaces include them all...so you can easily add charm and energy-savings to your homes.

- Unique, antique brass, sliding glass doors are standard to keep heat in the home, not up the chimney.
- Outside air intakes let fireplace burn air from outdoors. New barometric dampers close automatically when glass doors are opened, or lock shut when fireplace is not in use.
- Built-in heat circulating design draws cool room air through heating chamber, sends it back warm. (Optional fan available for faster air flow)
- Energy Mizer IV design accepts optional heat flow ducts to route additional heat to the room.

Feature articles and ads in national magazines have presold the benefits of the fine line of Preway fireplaces. Put this reputation to work for you. Built-in or freestanding models available. Call or write Preway for complete details.



The Kenmore Clean-Up Trio. Convenience that sells.

In today's increasingly competitive marketplace you have to do a little more to make your homes more attractive.

Like putting the Kenmore Clean-Up Trio in your kitchens. The Clean-Up Trio consists of three of the most asked for major appliances. Dishwasher. Disposer. Compactor.

They represent the kind of convenience discerning home buyers and renters want.

Kenmore. Our name helps vou sell.

These appliances are designed with the features your customers are looking for. Dishwashers include sound insulation, the energyefficient Power Miser option and some even feature our Water Miser cycle. Kenmore continuous feed 1/3 and 1/2 HP heavy-duty disposers

are sound insulated for quiet operation. And our deluxe compactor has a Touch-Toe opener for added ease. Like all Kenmore appliances they're made to deliver the quality, reliability and performance your customers expect.

The Single Source.

Sears Contract Sales gives you your choice from an extensive selection of appliances styles, colors, features, and prices-to suit your appliance needs.

And Sears service is available to provide expert help when and where it's required.

The Clean-Up Trio is just one way Kenmore -and Sears Contract Sales-help make convenience sell for you.

Kenmore. Solid as Sears



©Sears, Roebuck and Co., 1979

Contract Sale

a housing seminar

Fundamentals of professional professional professional marketing directors and

sales managers.





a housing seminar

Fundamentals of professional professional marketing An intensive two-day course designed to help small and medium-volume builders

develop marketing skills and strategies

In today's market, the competition for homebuyers is stiffer than ever. And often, this competition comes from big builders with heavy marketing expertise and big marketing budgets. That same marketing expertise can work for youand within your budget-as long as you know...

Who your buyers are and what they want

How to design and build a product that appeals to your buyers

How to merchandise your product effectively and efficiently

That's what this shirt-sleeve seminar will teach you

Miami, FL. Dec. 13-14, Omni Hotel You'll study with Lester Goodman, one of homebuilding's top marketing consultants-who has taught more than 1000 housing seminar alumni over the past three years.

He'll teach you the basics of a marketing program including . . .

- Research
- Advertising and Public Relations
- Promotion
- On-site
 Merchandising
- Budgeting
- Sales Management

And he'll show you how to apply these basics to your own projects.

Specifically:

In Market Research

- How to gather information
- How to use this data to target your market
- How to develop floor plans that meet the needs of that market
- How to shop your competition

In Advertising and Public Relations

- How to get the most from your advertising budget
- How to hit specific markets with your ads
- How to work with the media
- How to handle
 advertising production
- How to build a strong public relations program

In Promotion

- How to design an effective sales brochure
- How to create project identity
- How to build traffic with special promotions

In On-Site Merchandising

- How to plan a successful model site
- How to set up an effective sales office
- How to utilize graphics to create a cohesive project image
- In Budgeting
 - How to determine how much to spend on marketing
- How best to allocate your funds
- How to chart your accounts and maintain control
- How to project your cash flow

In Sales Management

- How to get the most from your sales staff or brokers
- How to keep your buyers happy
- How to make
- referrals count
- Why the sale never ends

And you'll have ample time to discuss all these subjects plus your own problems with Les Goodman and your fellow students at both formal and informal sessions.

Special Seminar Features

A brainstorming session where Lester will work with you, on marketing problems, brochures, and floor plans

A comprehensive workbook that will serve as a permanent reference guide

A personally developed management action plan for ideas and programs you can begin to implement immediately

A set of audio cassettes covering the entire program

Lester Goodman is president of his own marketing services company, Lester Goodman Associates, based in Brea, California. The firm specializes in marketing planning, research and consultation for housing developers, builders and lenders. Goodman has almost 25 years of housing experience, over 30 years as a marketing specialist.

During his career as an active marketing director and consultant, he has been responsible for the marketing and sales of more than 40,000 housing units for builders throughout the United States and Canada.

Goodman is on the Board of Trustees and past president of the Institute of Residential Marketing of NAHB, which supervises a college level educational program for industry professionals, he is now teaching that program at California State University in Orange County, California. He has received the "Bill Molster Award" for marketing achievements and service to the housing industry.

a housing seminar

Fundamentals of professional marketing

How to register

Please complete and return the coupon below to; Seminar Dept., Housing 1221 Avenue of the Americas New York, N.Y. 10020

Or you may register by calling (212) 997-6692. All registrations will be confirmed by mail.

Seminar fee

S495 The full registration fee is payable in advance, and includes all luncheons, workbooks, tapes and other meeting materials.

Cancellations and refunds

Registrations may be cancelled without charge up to two weeks before the seminar date. Cancellations received later than that are subject to a \$50 service charge.

Seminar hours

Registration starts at 8:30 a.m. the first day. Programs run from 9:00 a.m. to 5:00 p.m.

Hotel reservations

While Housing does not make individual reservations for seminar participants, we have arranged with the Marriott O'Hare Hotel in Chicago, The Southcoast Plaza Hotel in Costa Mesa, and the Omni Hotel in Miami to hold a special block of rooms for our attendees. You can reserve your room at the Marriott O'Hare by calling (312) 693-4444; at the Southcoast Plaza by phoning (714) 540-2500; and at the Omni by phoning (305) 374-0000.

Please be sure to say that you are attending the Housing seminar. This will identify your reservation with the block of reserved rooms, and assure you of the special seminar rate. Hotel space is limited, so please make your reservations as early as possible.

Tax Deduction of Expenses

An income tax deduction is allowed for expenses of education (includes registration fees, travel, meals, lodgings) undertaken to maintain and improve profes-sional skill. See Treasury regulation 1.162-5 Coughlin vs Commissioner 203F.2d 307.

Continuing Education Units

Continuing Education Units (CEU's) will be awarded by HOUSING to attendees successfully completing seminars. The CEU was established in 1974 as a uniform unit of measurement for noncredit continuing education. Proof of completion will be supplied on attendees request.

Seminar Dept.	Name		
Housing 1221 Avenue of the Americas New York, N.Y. 10020 Please register me in the	Title Company	- Corres	from my company:
"Fundamentals of Professional Marketing" Seminar checked below:	Address City	Zip	Name
	Phone		- Title
	Signature		

- Miami, FL. Dec. 13-14 **Omni Hotel**
- Check payable to Housing enclosed
- Bill my company

□ Bill me

Double-glazed SUNGLAS®

can mean annual cooling and heating savings up to 20%.

The burning summers of Phoenix. Wet, bone-chilling Boston winters. Both were part of our Sunglas Test, a sophisticated computer simulation involving conditions in nine cities over 12 months. The results: average annual energy savings of up to 20%. That means cold, hard cash for your cost-conscious customers.

Double-glazed Sunglas blocks 28% of the sun's heat.

Sunglas absorbs and reflects the sun's rays. That means your customer's air conditioner won't have to work as long or as hard as with clear glass in warm weather. And interior air-conditioned temperatures are more easily maintained.

Double-glazing retards heat loss.

In chilly weather, double-glazing retards heat loss by allowing less internal heat to be transferred to the outside through the trapped air space between the lites.

Sunglas lets the daylight in.

Unlike dark, tinted glass, Sunglas is designed to let in a maximum amount of daylight. Sunglas won't discolor or peel, as stick-on materials can. It looks like clear glass, too. So it's aesthetically right for any residential or commercial design. And Sunglas gives customers a natural view of outdoor colors, while reducing the need for artificial illumination. That can mean extra energy savings.

Sunglas. Just hang it on.

Giving a home Sunglas protection is simple. Doubleglazed heat shields are hung on window exteriors or slid into existing storm window tracks. In effect, Sunglas double glazing is a heat shield in summer, a storm window in winter.





Get all the facts on energy-saving Sunglas. Write: Environmental Products Mgr., Ford Glass Division, Sales and Marketing Office, 300 Renaissance Center, P.O. Box 43343, Detroit, Michigan 48243.

Annual Utility Savings Per Test City:

Double-glazed Sunglas vs. Single-glazed clear glass. * Percent of Utility Costs Saved.

City	Cooling	Heating	Total
Boston	5.4%	21.4%	19.0%
Atlanta	9.1%	24.1%	11.6%
Cincinnati	8.5%	21.5%	17.6%
Boise	9.3%	22.7%	20.6%
Ft. Worth	10.0%	35.8%	15.2%
Phoenix	14.8%	26.6%	16.1%
Memphis	8.7%	22.3%	12.9%
Omaha	20.5%	20.4%	20.4%
Los Angeles	5.2%	37.9%	7.7%

*By computer simulation.

The double glazing utilized in this computer simulation was a storm window glazed with one lite of single-strength Sunglas over a prime window glazed with one lite of single-strength clear glass. Utility cost savings may differ depending upon the size of the home, glass area, utility rates, home construction, climatic conditions, and family use variables. Because of Sunglas' efficiency in absorbing and reflecting the sun's rays, it also blocks some of the sun's heat in the winter, thus reducing the heating season's total potential savings.



WHAT'S SELLING

They'll still line up to buy if the price is right

The scene at right proves the point. These buyers lined up for a chance at duplexes priced below \$43,000.

Ramos/Jensen Co. sold the last 274 units at its Peacock Hills adult community near San Diego in a single Saturday morning.

"The line was almost two blocks long at dawn," says Ronald J. Ramos, president of the San Marcos-based developer. "More than 100 people had camped out in front of the sales office for days. Frankly, we were overwhelmed by the response."

Buyers came because Ramos/Jensen was offering units well-suited to the modest budgets and housing needs of empty-nester couples who must get along on fixed incomes. (Two plans, 850 and 950 sq. ft., sold for \$41,900 and \$42,900.)

"We eliminated unnecessary frills that these people would gladly do without to get their own home," explains Ramos. "And we kept square footage down wherever possible. Thus, we avoided the two biggest contributors to high building costs."

Here are other ways in which Ramos/Jensen cut costs.

Approved lots. The company bought land that was already approved for



duplexes. That cost more than unapproved land, admits Ramos, but it also eliminated expensive carrying costs during a lengthy approval process.

Simple plans. The duplex plans (above) are very basic and almost identical. And they avoid such costly-tobuild features as vaulted space, wood decks and fancy ceiling treatments.

"Our buyers can have any kind of home they want," says Ramos, "as long as it's a two-bedroom, one-bath, side-by-side duplex connected at a onecar garage."



Basic duplex plan offers 950 sq. ft. of space and sold for a low \$42,900. Smaller version without hobby room has 850 sq. ft. and sold for \$41,900. Units are attached at garage. Front and side yards were included in fee-simple purchase package.

Waiting line of buyers for last 274 duplexes at Oceanside, Calif. adult community. Builder sold out within hours of opening and got 150 additional names for back-up list.

No-nonsense merchandising. Ramos/Jensen also held down soft costs with a minimal sales office, unfurnished models and an inexpensive, newspaper-style brochure.

And no amenities. Finally, the builder reduced monthly buyer carrying charges by eliminating all recreational amenities.

"We stressed two basic appeals price and the absence of association dues," says Ramos. "To our buyers, these are the ultimate amenities."

-JOEL G. CAHN

Texas builder offers a 40-year loan

To attract "marginal" homebuyers those who want to buy but can't qualify for a 25-year loan—one of Houston's biggest builders, with an assist from its lender, comes up with a 40year conventional mortgage.

The builder, Superior Homes Inc., and the lender, Gibraltar Savings & Loan, believe they are the first to make 40-year loans available.

"We found that we were losing too many contracts because buyers with good credit—and, in many cases, two incomes—were being disqualified," explains Julian Pugh, Superior's vice president of marketing.

Marketing tool. Superior, which builds about 670 single-family detached homes in the \$40,000 to \$60,000 range annually, tells potential buyers that the longer mortgage is available for all Superior-built homes. "But we don't encourage them to use it unless they have to," Pugh notes.

Most homebuyers, he adds, "like the idea that it's available. It's proven to be a valuable marketing tool."

Since Superior and Gibraltar began

making the longer-term loans available in mid-September, about 15% of Superior's buyers have opted for the 40-year mortgage.

Success. Through August, Superior sold 231 new homes, up 42% over the same period last year. However, Pugh declares, "we are in a down market right now." The longer-term mortgages "have enabled us to go back to a lot of buyers whom we had to turn down 60 days ago. As the market here continues to soften, the new mortgage can only help us." -T.A.



"GE REFRIGERATORS LIKE THESE HELP WESTGATE APARTMENTS GET THEIR TENANTS AND KEEP THEM."

"It takes more than one kind of refrigerator to give builders and apartment house owners the right one for their different budget and design requirements. Which is why the professionals come to General Electric.

"Today, however, the trend in refrigerator buying is clearly toward larger-capacity units, and GE gives you a choice.

"At Westgate Apartments in St. Louis, Lewis Levey of Lincoln Property Co. is using both the TBF16S with a spacious 15.6 cu. ft. and the TBF16A with large capacity plus an automatic ice maker.

"The TBF14 model is frost-free in both the freezer section and the fresh food section.

"And with a GE refrigerator the need for service calls is greatly reduced. Should service be needed, GE's famous Customer Care[®] service is available to every one of your tenants. You have no worries where servicing a GE appliance is concerned."

Take advantage of over 30 years of consistent service to builders. Call your local GE Contract Sales Representative.

THE APPLIANCES AMERICA COMES HOME TO.



Circle 43 on reader service card

We cover high-rises from the ground up.

B 1 X 25

The more complex your real estate transaction, the more you need a Ticor Title Insurer.

We cover every kind of real estate there is, just about anywhere in America. In addition to serving private homeowners, we've become experts at handling all the title needs of commercial builders, big and small. We have the experienced title officers, title plant resources and advisory counsel necessary to turn an insurmountable problem into a routine transaction.

Whenever you need title insurance, whatever you need it for, call one of the Ticor Title Insurers: Pioneer National Title Insurance Co. provides title services in 49 states. Title Insurance and Trust does business in California, Nevada and Hawaii. Title Guarantee issues policies in New York. Home Office: 6300 Wilshire Blvd., L.A., CA 90048.



PIONEER NATIONAL TITLE INSURANCE TITLE INSURANCE AND TRUST TITLE GUARANTEE-NEW YORK TICOR TITLE INSURERS



The bottom line beauty of cedar is multiple.

Multiple housing designs can be beautifully realized in Western red cedar. That's a given. But when you specify quality PenPly exterior 303 plywood panels, beauty becomes more than a surface thing. The savings are beautiful, too.

The bottom line is real economy that comes from reducing labor intensity. For example, a 2,000 square foot surface requires only 62 panels, minus windows and doors. And, PenPly goes on in less time, using less manpower than masonry and other piecework sidings. This means faster completions, quicker sales, earlier occupancy and greater profits. Our Western red cedar plywood panels also give you the advantage

Our Western red cedar plywood panels also give you the advantage of low maintenance, weather resistance and the ability to take a wide variety of stains.

Side with PenPly and show a good-looking bottom line, too. For additional information, contact your nearest wood products distributor or see Sweet's General Building and Light Residential Files under Siding/Cladding Section (7.6 Pen).

Circle 45 on reader service card

Ira Paul, A.I.A., Seattle WA

Multiple housing design concept by:



DESIGN

Housing for the elderly comes up a two-way winner

It works well for its tenants. And although it is a subsidized multifamily project, it was accepted—and is now regarded with pride—by the citizens of rural Stockbridge, Mass. (pop. 2,000).

In fact, there are lessons here for anyone who wants to introduce lowrent apartments to a small town with a fierce sense of tradition.

The project—known as Heaton Court—was acceptable to the town because of careful planning and design by the architectural firm of Goody, Clancy & Associates of Boston. Specifically:

•It retains the natural character of the site, which was formerly occupied by the old Heaton Hotel.

This was important for two reasons. First, the four-acre site is located on a hillside in a resort area where people are very environmentally aware. Second, it is highly visible from the center of town.

Thus earth-moving was kept to a minimum. This was achieved by siting the buildings on a plateau halfway up the hill. Parking was located further uphill, on the second-floor level (see section and site plan facing page). A path winds gradually from the town to the project, with benches and plantings at resting stops along the way.

•Although the project contains 51 units plus a community center, a garage, a work shop and a greenhouse, the buildings are small enough to be in scale with neighboring houses.

•The buildings are also reminiscent of the old Heaton Hotel with its porches—both front and rear—and its rough-sawn cedar siding. The siding, incidentally, also blends well with the natural surroundings.

Making the design acceptable to the town did not mean sacrificing any of the benefits for the elderly tenants.

•Stair-climbing was kept to a minimum despite the hillside location. The buildings were sited so that tenants need only walk up or down one flight to reach their apartments (see section facing page).

•Covered—and ramped—walkways



Typical plans (above) allow for cross ventilation, minimizing the need for air conditioning. The project includes a congregate unit (plan below): four unrelated tenants (including two handicapped) share living/dining/kitchen facilities.



link the units to each other and to the community center. This gives tenants a feeling of security, and allows them to move about the project even in bad weather.

•Living rooms are oriented to a central courtyard so tenants can see what's going on, and bedrooms face the back for privacy (see plans above). Note the benches, lights and landscaping in the courtyard (photo above).

•All units have cross ventilation, with windows both front and back.

Heaton Court was built by the Stockbridge Housing Authority and completely funded by the Massachusetts Department of Community Affairs. Since the introduction of multifamily housing in this small residential town was of major concern to local residents, John Rhind, then chairman of the Stockbridge Housing Authority, helped form a 15-member housing



planning committee chosen from elected boards, appointed committees and civic groups. Up until groundbreaking, these citizens were actively involved in the decision-making at Heaton Court.

Following the tradition of the committee, an active resident committee was formed upon move-in. And town residents are encouraged to use the community center's facilities.

Looking back, John Rhind feels that the Authority had dealt successfully with a typical small-town reaction to the prospect of major change. Residents were particularly worried about hidden costs. But giving them a chance to participate diffused their fears. "The reaction was fantastic," says Rhind.

Adds architect Joan Goody: "We've only received one complaint: People who are too rich wish they could get in." — MARY SARLO CRUZ



wrap up energy savings all around the house.



There are many kinds of insulation and many ways to insulate. But if you want to insulate best, start with the best insulation...rigid urethane foam.

> Inch for inch, urethane foam is almost twice as efficient as the next best insulating material. That's why urethane foam is used for:

Sheathing

Lightweight sheathing with a uniform urethane or glass-reinforced isocyanurate foam core and foil facers offers the highest R



value of any sheathing product. It's readily available in standard sizes and provides you with an ideal way to maximize the thermal efficiency of any wall system with minimum effect on wall thickness. Urethane and isocyanurate foam sheathing are used for both new construction and renovation projects.

Walls

Spray-in-place rigid urethane foam between the studs delivers maximum

thermal efficiency; it also acts as an effective barrier to air infiltration because self-sealing urethane foam completely fills all crevices and spaces.

Siding

Properly installed over uninsulated wood framing, urethane-foam-

insulated siding can reduce heat loss by as much as 40 percent or more. Installed in combination with urethane sheathing, such insulated siding products can result in a dramatic improvement in energy conservation in the home.

Doors

Metal doors with cores of super-efficient urethane foam insulation offer excellent and attractive way

lent and attractive ways to minimize entry way heat loss. Many such insulated doors have an R value of 15 or greater.

Cellulose						6	5.13"
Glass Fiber Batts						6.	0"
Mineral Fibers						5.5″	
Expanded Polystyrene Foam Board	Ĺ				4.9		
Extruded Polystyrene Foam Board				3.96"			
Urethane			2.66"	13			A STATE

Proportionate values shown graphically are based on current data published by manufacturers of these insulating materials in industry reference manuals, such as Sweet's General Building File.

Urethane foam, like any organic material, will burn if exposed to open flame. Check with your local code authorities before specifying insulation material.

Roofs

Roof systems tend to be born losers in the energy conservation battle. This is the area of greatest heat loss for most homes. But



it doesn't have to be that way. Urethane foam boardstock is an ideal way to build thermal efficiency up and keep roof weight down. It's especially good for cathedral ceilings.

Perimeters

Urethane foam is also great for insulating subgrade walls and concrete slab floors. Whether applied in lightweight boardstock or slab-



stock, or in spray-in-place form, rigid urethane foam insulation helps keep basements cosy in any kind of weather.

Thermal Breaks

While double and triple glazing can significantly reduce exposure of room interiors to external temperature levels through window units.



the window frame can still be a problem in this respect. Thermal breaks made of polyurethane such as Mobay's Baydur structural foam help to maintain the structural integrity of the frame while keeping the internal surface of the frame at room temperature.

If you're interested in knowing more about any of the urethane foam products discussed here, we'll be happy to put you in contact with the manufacturers. If you'd like to know more about urethane foam insulation for the building and construction industry, write for a copy of Mobay's "Energy Saver" manual or contact us directly about your specific problem.

Technical Partner to the Building Industry



Mobay Chemical Corporation Polyurethane Division Pittsburgh, PA 15205

There's just one word for America's favorite brand of gas and electric ranges.

Kenmore.



Our name helps you sell.

The single most important appliance you select for your kitchens is the range. So you don't want to choose any brand. You want to be sure that the ranges you pick are the ones that, given the choice, more people would select for themselves. You want Kenmore.

The Kenmore line of ranges covers the entire spectrum—from the latest, most indemand microwave ovens, to Smooth*Top® ceramic cooktops; from free-standing to builtin to drop-in models; self-cleaning and continuous cleaning ovens; Visi-Bake, "Cool-Flow" and full black glass oven doors; beautiful colors; and of course a complete choice of gas or electric models.

Whichever Kenmore ranges you choose, you get the added benefits of one of the most extensive service networks in the industry.

And you get the brand that more Americans have in their own homes than any other.



THIS CHRISTMAS GIVE BIG: A whole year of corporate strategies, economic forecasts, investment counseling, business news from Capitol Hill.

When price is not the object but value is...there's no bigger gift for the holidays than *Business Week*.

Business Week is a big gift because it's such a big help. For the top executive who likes to keep his perspective broad. For the young "comer" who needs more than just facts and figures to keep moving up. For the hard-pressed manager who has to plug into the best thinking and brightest achievements outside his own company to do his own job right.

And you won't find a more prestigious, more welcome gift anywhere at such an economical price.

Special Gift Rates

One gift subscription costs \$28.50. Two or more cost only \$25.00 each. And when you give 25 or more, the cost drops to only \$20.00 each.

Gift subscriptions begin with our valuable double-sized issue: "Investment Outlook for 1980." But to be sure of delivery, we must have your order by December 3rd.

As soon as we hear from you, we'll send you handsome gift announcement cards, so you can personally inform your friends of your present.

So now...while you're thinking about it...use the special gift order form bound into this issue. Or call toll-free, 800-523-7600. (In Pennsylvania, call 1-800-662-5180.)





After investing thousands in the kitchen to help sell a house, it doesn't pay to cut corners Sure, you may be saving a few tra dollars. But putting a cheap oking floor in an otherwise expen

extra dollars. But putting a cheap looking floor in an otherwise expen-

sive looking kitchen can send your investment right down the drain.

That's why we at GAF, makers of Gafstar[®] vinyl



A cross section of kitchen and a k Gafstar® 5400 Series sheet vinyl. that really sells.

flooring, want you to know about our floors. Floors that can help mean the difference between just another kitchen and a kitchen

GAF's colors and patterns are designed to reflect the quality you put into your homes. But the shining feature of our sheet vinyl floors is that they're no-wax. And these days, with convenience being so important to every home owner, no-wax floors are becoming a must. Our Gafstar® 5400 Series sheet vinyl is an especially clusive Brite-Bond™ finish-a high gloss, urethane coating - is tough

enough to stand up to years of wear. And underneath that tough exterior lies a Quiet-Cor® interlayer that provides comfort and warmth underfoot.

But our no-wax floors won't just make life easier for your customers. They'll lighten your work load as well.

For example, our wide widths make installation a breeze. And we have a wide range of designs and earth-tone patterns that make choosing the right floor for the right room a cinch. At prices that even the most economical of builders can live with. So help make your investment pay off. And get the selling strength of our

no-wax floors in your corner.

Circle 54 on reader service card



For more information or for the name of your nearest GAF Gaistar dealer, call anytime, 800-223-0344. In N.Y. State call 800-442-8169. In metropolitan N.Y. area call (212) 582-7600 ext. 8027. © GAF Corporation 1979.



ahousingsaminar



A two-day seminar for Builders, Developers, Marketing Directors, Architects and Designers

ANNOUNCING THREE NEW SESSIONS

Washington D.C., Nov. 8-9 Denver, CO., Dec. 6-7



ahousingsaminar

HOW TO PLAN, SITE AND MERCHANDISE

Two days of intensive study in ... Site Planning, Floor Planning, Merchandising and Model Presentations for Single Family Attached and Detached, Townhouses,

MALLER HOUS

Here's why you should attend ...

Because today's rapidly rising land development and construction costs have made the small house homebuilding's key product for the immediate future.

Because small houses demand special skills in siting, planning, and merchandising if they are to be successful in the marketplace.

And because prospects have to be sold on a different kind of lifestyle before you can turn them into small-house buyers.

Housing's "How to Plan, Site, and Merchandise The Smaller House" Seminar will show you...

How to site medium and high-density housing

How to design small houses that appeal to specific market segments

How to effectively merchandise small houses to these specific markets

Washington D.C., Nov. 8-9 Hyatt Regency Washington

Denver, Dec. 6-7 Fairmont Hotel

Specifically, you'll study these key subjects:

Site Planning:

- Why site-planning subtleties become critical as living units become smaller
- How to avoid the "toy village" look of small-home developments.
- How to increase density without sacrificing market appeal.
- How to provide privacy in high-density housing.
- How to develop street patterns based on actual need rather than outmoded conventions.
- How to determine how much common space is needed and where it should be.
- How to design for and around the automobile.
- How to handle the problems of garage doors, narrow front elevations, and setbacks.

uplexes, and Patio Homes

Product Design:

- How to create floor plans that feel — and live — bigger than they really are
- How to relate floor plans to density
- How to make the most of smaller living spaces indoors and outdoors
- How to gear floor plans to specific market segments
- How to use natural light to open up tight floor plans
- How to maximize square footage in key areas
- How to make creative use of interior volume

Merchandising and Model presentation

- How to create models that show buyers the comfort of living in a small space
- How to make your models appeal to market groups
- How to scale furnishings for small houses
- How to use color and light effectively
- How to present the unfurnished model effectively

You'll study with these experts:

Barry A. Berkus, AIA, is president and founder of Berkus Group Architects, a 20-year old firm with headquarters in Santa Barbara, California and offices in Santa Ana, California and Offices in Santa Ana, California and Washington, D. C. Mr. Berkus is a member of the AIA and the Urban Land Institute and a past member of the subpanel of the National Academy of Sciences reviewing certification of new building technology.

Responsible for programs in Canada, Mexico, Japan, Puerto Rico, and France, his firm currently has projects in various stages of production and design in 22 states, including a 60-acre downtown redevelopment in Dallas, Texas.

Walter J. Richardson, FAIA, is president of Richardson-Nagy-Martin, the 20-year old Newport Beach, California, architectural and planning firm which has gained a national reputation for excellence in residential developments and community design. The firm has projects in 25 states and four foreign countries and has received over 30 national and regional awards. Mr. Richardson is a registered architect in ten states and has headed his own firm since 1958.

A frequent speaker at industry seminars and conventions, he is a past chairman of the American Institute of Architects' National Housing Committee and a past president of the Orange County Chapter of the AIA.

Gene E. Dreyfus is president of The Childs/Dreyfus Group, an interior design firm based in Chicago, with offices in New York, Palm Beach, and Toronto. He is a former builder who sold nearly 2,300 homes in the Chicagoland area from 1950 to 1960. Since 1960, first as head of Gene E. Dreyfus Associates and for the past 11 years with his present firm, Mr. Dreyfus has served as a merchandising consultant to more than 150 builders in the U.S., Canada and Europe. He is currently an instructor for Housing's "Effective Marketing and Merchandising" Seminar.

Special Seminar Features

Problem-solving clinics where instructors will work with your floor plans, site plans, model areas, layouts, etc. Please bring any such materials with you to the seminar. (Blueprints are better than brochure floor plans.)

A personally developed Marketing Action Plan for ideas and programs that you can put to work immediately.

And as permanent reference guides to the seminar you will receive **1**) A full set of audio cassettes of the presentation and **2**) A comprehensive workbook.

For special Acapulco registration information, see the back page.

ahousingseminar

HOW TO PLAN, SITE AND MERCHANDISE

How to register

Please complete and return the coupon below to Seminar Dept., Housing Magazine, 1221 Avenue of the Americas, New York, N.Y. 10020

Or you may register by calling (212) 997-6692. All registrations will be confirmed by mail.

Cancellations and refunds

Registrations may be cancelled without charge up to two weeks before the seminar date. Cancellations received later than that are subject to a \$50 service charge.

Seminar fee

The full registration fee is payable in advance, and includes all luncheons, workbooks, tapes and other meeting materials.

Seminar hours

Registration starts at 8:30 a.m. the first day. Programs run from 9:00 a.m. to 5:00 p.m.

Hotel Reservations

The Pierre Marques Hotel in Acapulco is holding a limited block of rooms for those attendees who wish to arrive as early as October 2nd or stay as late as October 7th.

Housing has reserved a block of rooms at the Pierre Marques Hotel in Acapulco at a special seminar rate of \$47 single and \$70 double. The hotel will only hold this room block until one month before the conference. After that, hotel space can only be reserved directly through the Pierre Marques on a regular availability basis. To make your hotel reservations, fill in the space provided on the registration coupon below, and enclose with your registration fee a *separate* check or money order payable to the *Pierre Marques Hotel* for two night's deposit on your room. Reservations for the hotel will not be honored by the hotel unless accompanied by a deposit.

Housing has arranged with the Hyatt Regency in Washington D.C. and the Fairmont Hotel in Denver to hold a special block of rooms for our attendees. You can reserve your room at the Hyatt Regency by calling (202) 737-1234; and at the Fairmont by phoning (303) 571-1200.

Please be sure to say you are attending the Housing seminar. This will identify your reservation with the block of reserved rooms, and assure you of the special seminar rate. Space is limited, so please make your reservations as early as possible.

Tax Deduction of Expenses

JERH

\$445

An income tax deduction is allowed for expenses of education (includes registration fees, travel, meals, lodgings) undertaken to maintain and improve professional skill. See Treasury regulation 1.162-5 Coughlin vs. Commissioner 203F.2d 307.

Continuing Education Units

Continuing Education Units (CEU's) will be awarded by HOUSING to attendees successfully completing seminars. The CEU was established in 1974 as a uniform unit of measurement for noncredit continuing education. Proof of completion will be supplied on attendees request.

79

Seminar Dept. Housing 1221 Avenue of the Americas New York, N.Y. 10020 Please register me in the "How to Plan, Site and Merchandise the Smaller House" Seminar checked below:	Name Title Company Address	from my company: Name Title
	CityStateZip	
	Phone	Title
□ Washington D.C. Nov. 8-9, Hyatt Regency	Signature	
Denver, CO. Dec. 6-7, Fairmont Hotel Washington		
□ Check payable to Housing enclosed		
□ Bill my company		
🗆 Bill me		
Hotel Reservations for Acap	ulco	
Arrival Date Departure Date Single □ Double □ (check of Check payable to Pierre Marques H for two nights deposit enclosed for	ne) Totel	н 11

The best place to look for top quality garage doors...

Raynor offers you a wide choice of industrial/ commercial doors with electric operators that only a complete, full line manufacturer can offer. Whether your preference is steel, wood, aluminum, fiberglass or a combination of materials, Raynor has a door to fit any building type or door opening size. When you select a Raynor door, however, there are certain

things that don't require a choice. Like Quality...in design and construction. Raynor uses only the best material for springs, rollers, hinges, locks and other hardware. The only steel door available prefinished with a coat of baked-on enamel and two types of insulation and



LONDING B

weather-stripping. And Service...like undamaged delivery by our own truck fleet. Plus professional installation by our factory-trained distributors located through-

out the country. They pledge prompt follow-up service for parts and repairs if ever needed. In the end, the best place to look for top quality doors and expect satisfaction...is Raynor. Preliminary specifications can be found by referring to Sweets Catalog, Section No. 8.9 Ra. For a copy of our catalog write Raynor Manufacturing Company,

Dixon, IL 61021. Or call a Raynor distributor near you. You'll find his number in the Yellow Pages under "Doors".

Circle 59 on reader service card



housing special



Who's shopping model houses in today's market? What do the shoppers want? And what can they afford?

Broadly speaking, that's what this survey reveals.

More specifically, it tells about the income and household makeup of 3,836 new-house shoppers.

It tells what kind of floor plans they prefer and what options they favor.

It tells where they'd shave space, and where they'd hate to cut back.

And it tells which features are essential and which ones shoppers would sacrifice for economy's sake.

Because housing is a local business, questions were asked in eight representative metropolitan areas—Chicago, Dallas, Denver, Miami, Phoenix, San Diego, Southern California* and Washington, D.C.

The survey was conducted for HOUS-ING by Walker & Lee, a California real estate firm that has sold 4,367 new houses in the first eight months of '79. —BARBARA BEHRENS GERS

*Los Angeles, Orange, Riverside and San Bernardino counties. HOUSING magazine's annual homeshopper survey typifies the kind of in-depth research only the biggest builders can do for themselves—but it's not meant to replace the fact-finding needed to plan a particular project.

Questions are based on those raised by Walker & Lee's builder clients. George Fulton, the company's senior vice president/corporate marketing, headed the team that developed this year's questionnaire. And Fulton invites HOUSING readers to submit questions they think should be asked in future surveys.

Shoppers were surveyed earlier this year at a cross-section of model-home complexes in each of the eight cities.

Walker & Lee did the field work in Dallas, Phoenix, San Diego and Southern California. In Chicago, Gary Meyers of Meyers, Stuart and Alan surveyed shoppers. In Miami, field work was done by Kitty Omura of Dudley Omura Inc., North Palm Beach. The Washington survey was conducted by researcher Bruce Hanson of Bethesda, Md. The Denver survey was done by the Housing Research Council.

Walker & Lee compiled and tabulated the findings: some of the most interesting results are presented at right and on the following 21 pages.

DETACHED-HOUSE SHOPPERS FAMILIES IN THE MAJORITY - BUT NOT BY MUCH

Case in point: Denver's shoppers. Only 51% categorize themselves as families (see chart below).

The overall proportion is not much higher-55%.

The family strongholds: Chicago and Washington. In these cities close to two-thirds of the shoppers are parents with children at home—about the same as when Chicago and Washington were surveyed last year. But, as in 1978, the families are small: most include only one or two children. (Nineteen percent of all families surveyed have three children; only 6% have four or more.)

Who besides families is house shopping?

Couples, for one thing. In Dallas, young marrieds account for 30% of the detached-house shoppers. And in San Diego, nearly a quarter (24%) are older couple-only households.

Overall, young couples make up 21% of the 2,730 detached-house shoppers surveyed. More mature couples—those with a household head older than 35—make up 13%.

What's more, the proportion of couples shopping is up a few percentage points in each of the cities also covered in last year's survey (Chicago, Miami, Phoenix, San Diego and Washington, D.C.).

Singles are a smaller, but significant, market segment.

Whether buying alone or together, singles account for more than 10% of the shoppers in cities as dissimilar as Miami and Dallas.

But the wave of singles entering the housing market may have crested: the proportion of single shoppers is a little lower this year than last.

They're young - but their intentions are serious

More than half the shoppers (57%) are 35 years old or younger—evidence of the baby boom generation's big role in the marketplace.

Shoppers in magnet cities are even younger. In Dallas, for instance, 76% of the shoppers are 35 years old or less. In Denver, 65% are. (Thirty-one is the median age of the principal wage earner in both cities.)

San Diego is at the opposite end of the spectrum. Sixty-one percent of the shoppers surveyed there are over 35. (Median age of principal wage earner: 39.)

When buying intentions are taken into account, the younger market segments look even more important—especially the non-family shoppers.

Specifically, 34% of young couples say they plan to buy now, and 31% of singles say so, too. (Singles' median age: 31.) Only 23% of older families, on the other hand, say they're going to buy right away.

Which of these categories best describes your household?

	All shoppers*	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Single adult	5%	2%	6%	9%	7%	5%	6%	5%	3%
Couple without children: head of household under 35	21	24	30	25	20	20	11	18	23
Couple without children: head of household over 35	13	5	9	12	18	14	24	17	7
Family with children: head of household under 35	27	28	36	30	21	30	20	28	31
Family with children: head of household over 35	28	36	14	21	29	27	34	30	34
Single parent with children	2	2	3	3	2	2	1	2	1
Unrelated individuals	2	3	3	2	3	2	3	1	2

*Percentages are based on weighted figures to adjust for city-to-city differences in sample size; in this table and others in this section, "all shoppers" refers to all detached-house shoppers surveyed in the cities shown.

Note: Because percentages have rounded off, totals on tables may not add up to 100%

FOR MORE ABOUT THIS YEAR'S HOME SHOPPERS, TURN THE PAGE SHOPPERS

and a second second second second second	All	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Median annual household income	\$30,440	\$32,030	\$29,580	\$27,410	\$29,110	\$28,880	\$31,310	\$30,660	\$32,790
Median current home value	74,670	79,110	57,410	70,580	61,250	63,780	92,310	85,270	72,500
Median new home maximum price	84,050	97,030	68,750	71,860	68,180	70,560	101,040	94,840	86,850
Median new home maximum price ÷ income	2.76	3.03	2.32	2.62	2.34	2.44	3.23	3.09	2.65

In general, this year's shoppers are serious, but not eager. Twenty-eight percent plan to buy immediately, and another 37% plan to buy sometime this year.

Miami shoppers feel most pressed: 43% say they'll buy now.

Builders in Chicago, on the other hand, may have a hard time turning lookers into buyers—a feeble 16% of Chicago shoppers plan to buy immediately.

What sparks the house hunt?

For many, it's the desire for larger living quarters—especially in cities like Chicago with a high proportion of older, established families.

Investment runs a close second. In fact, it's the most important motivation for shoppers in Miami and Dallas.

A third reason: need for a "tax benefit/hedge against inflation."

Incomes are high-but so are house prices

Median household incomes range from a high of \$32,790 in Washington to a not-so-low low of \$27,410 in Denver (see chart top of page).

Incomes are well up from last year's in almost every city. The exception: Washington. In 1978 shoppers there earned a median of \$33,142 annually—a figure slightly higher than this year's median.

Chicago is a more typical example. Last year's shoppers reported a median income of \$27,521. This year's figure: \$32,030.

Besides inflation, incomes get a boost from the growing proportion of working wives: 61% of the shoppers are from two-incomes households.

Young couples are most likely to say both husband and wife work -86% say both do. But the majority of family shoppers say so, too. Fifty-four percent of young families rely on two incomes and so do 61% of older families.

Even so, many shoppers will have to stretch their resources in order to buy a house. In Chicago, San Diego and Southern California, shoppers indicate they'll spend more than three times their annual income on a new house.

San Diego shoppers plan to pay the most (median maximum new-house price: \$101,040) and to stretch the farthest to do so (3.23 times annual income).

Eighty-three percent of San Diego's shoppers already own a home, however, as do a whopping 88% of the Chicago shoppers surveyed ("stretch factor" in Chicago: 3.03 times income).

In market with a much lower proportion of owners trading up, shoppers tend to be more conservative. One example is Dallas, where about half the shoppers are making their first house purchase. The median maximum new-house price in The Big D-\$68,750— is only 2.32 times median annual family income.

How do prices compare with last years'?

It's no surprise that they're up. The real question is by how much. The biggest difference from last year's survey results was in Phoenix. Last year's Phoenix shoppers expected a median maximum new-house price of \$52,306. This year they expect to spend a. maximum of \$70,560 (median). Other medians from the 1978 survey: Chicago, \$81,732; Miami, \$61,770; San Diego, \$95,300; Washington, \$73,926.

Another yardstick: the estimated value of the house the shoppers already own. In most cases, it's several thousand dollars less than the one they're looking at. Chicago shoppers anticipate the biggest move up from a house valued at \$79,110 to one priced at \$97,030 (median estimated current value and median maximum expected new-house price).

Shoppers expect to pay more on a monthly basis as well. The highest monthly payments are anticipated by shoppers in Washington-\$662 (median). The 33% of shoppers who now rent pay \$352 (median). The 66% who own pay \$454 (median).

The lowest monthly payments are planned by shoppers in Miami (median: \$471) and Phoenix (median: \$482). Miami renters currently pay a median of \$306 (36% are renters) or monthly payments of \$336 (median). In Phoenix the figures are \$295 (22% are renters) and \$332. Everywhere except California and Miami, about 90% of the shoppers expect property taxes to be included in the monthly payment. In Southern California, 66% do. In San Diego, 56% do. And in Miami, looking at resales, too.

77% expect property taxes to be part of the monthly payment.

And a final word to builders, half the shoppers are ooking at resales, too.

ATTACHED-HOUSE SHOPPERS

	All shoppers*	Chicago	Denver	Miami	San Diego	Southern California	Washington D.C.
Single Adult	18%	18%	31%	21%	15%	13%	9%
Couple without children: head of household under 35	22	38	13	12	22	21	27
Couple without children: head of household over 35	21	8	19	34	25	25	18
Family with children: head of household under 35	13	16	7	11	15	14	14
Family with children: head of household over 35	17	15	18	10	15	20	24
Single parent with children	4	1	8	6	3	4	2
Unrelated individuals	5	3	5	6	5	3	6

In Denver, 31% are singles buying alone. In Washington, 9% are.

In Miami, 34% of attached-house shoppers are older couples. In Chicago, only 8% are.

In short, who's shopping for attached housing is a question best answered on a city-to-city basis. The chart (*above*) gives a breakdown of shoppers by house-hold category for the six cities where attached-house shoppers were surveyed. And here is more information about them:

Age. Miami's shoppers are the oldest (median age: 40). Chicago's are the youngest (median age: 29). Overall, about half are under 35 years old.

Intentions. Forty percent of Chicago's shoppers plan to buy now. Southern Californians feel the least pressed. Even so, a substantial 25% in Southern California plan to buy right away. In general, attached-house shoppers are more serious than those looking at detached houses: 32% plan to buy now and another 40% say they will later this year.

Income. Washington's attached shoppers have the highest median income. In fact, at \$34,500, it's even higher than that of D.C.'s detached-house shoppers. The same is true in Miami, where the median income is \$33,210 vs. detached-house shoppers' \$29,110. In the other four cities, income is somewhat lower than the detached-house shoppers'. Denver has the lowest median: \$24,580. (Note: even though incomes are lower, the proportion of two-income households is about the same.)

House price. San Diegans expect to pay \$88,200 (median maximum new-house price) for a new attached house. Shoppers in Denver, Miami and Chicago plan on a maximum price of about \$64,000. The overall median maximum price: \$73,110.

Stretch factor. Shoppers in the two California cities will spend nearly three times income. Miamians are much more conservative; they'll spend only 1.94 times earnings. In Chicago, Denver and Washington, shoppers will pay close to 2.5 times annual income.

Reason for buying. Desire for an investment and need for a tax shelter/inflation hedge spur shoppers.

Type of house desired. A higher proportion of attached-house than detached-house shoppers are looking at both new and resale units. More than half in every market are looking at both, and in Denver, 70% are.

Most prefer a townhouse. On a scale of one to five, shoppers rate this type of attached dwelling five ("very desirable") 30% of the time. Thirty-six percent give townhouses a "four".

Duplexes rank second. Nineteen percent score them very desirable. There is some disagreement, though. In Miami, for example, 15% say a duplex is very desirable, but even more -23%—view duplexes as undesirable (score of one).

Least-liked: multi-story buildings with other units above or below. Nearly half the shoppers in Washington and Miami rated this type of unit undesirable (one): overall, 34% did.

DREAM HOUSE FLOOR PLAN PLAYS THE STARRING ROLE

The plan sparks the buying decision no matter where shoppers live, what type of household they belong to and whether they're looking at an attached or detached house. Next in importance: room sizes (see chart below).

What type of floor plan is favored and how big should the rooms be? One clue is the amount of square footage shoppers expect (*chart*, *bottom of page*). Even more important: how shoppers say they'd allocate space, a topic discussed in more detail on the following three pages.

	1 Not important — -	2	3	4	5 Very important
1. Floor plan layout	1%	1%	6%	21%	71%
2. Room sizes	1	2	10	29	58
3. Planning concept	3	8	25	30	35
4. Exterior design	2	7	27	34	30
5. Lot size	3	8	28	31	30

Note that none of the five factors is considered unimportant. Some regional differences: Washingtonians are least impressed by project layout: only 24% rate planning concept very important. Shoppers in Miami are most sensitive to looks: 38% rate exterior design very important. Attached-house shoppers agree with detached-house shoppers on the relative importance of floor plan, room sizes, etc. But they don't always agree with each other. Planning scores high in Denver, for example, (47% rank it very important) but not in Chicago (16% rank it so).

Square footage: Chicago wants the most

How many square feet do you expect in your next house?

	All shoppers*	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Under 1,000	1%	1%	1%	0%	2%	0%	0%	0%	0%
1,000-1,250	3	1	2	5	5	3	1	1	5
1,250-1,500	9	3	9	16	15	8	5	8	6
1,500-1,750	15	8	15	15	12	17	18	20	18
1,750-2,000	24	20	36	28	24	26	27	22	15
2,000-2,500	29	35	24	26	21	29	31	30	32
2,500-3000	14	22	9	8	14	11	14	14	15
Over 3,000	6	11	4	2	7	7	4	5	10
Median	1,987	2,256	1,914	1,876	1,921	1,961	1,988	1,994	2,104

*Percentages are based on weighted figures to adjust for city-to-city differences in sample size; in this table and others in this section, "all shoppers" refers to all detached-house shoppers surveyed in the cities shown.

Note: Because percentages have been rounded off, totals on tables may not add up to 100%.

Note the relatively low overall median: 1,987 sq. ft. *Attached-house shoppers* expect less. Overall median: 2,042 sq. ft.

1,703 sq. ft. Denver is low: 1,544 sq. ft. Washington is high: 2,042 sq. ft.

Here's where a	hoppers	want the most	space
----------------	---------	---------------	-------

	Eliminate	Minimum Space	Average Space	Maximum Space
1. Master bedroom	1%	4%	42%	54%
2. Closets	1	8	47	44
3. Kitchen	1	11	50	38
4. Family room	11	7	36	46
5. Master bathroom	3	12	54	31
6. Living room	10	19	50	21
7. Secondary bedrooms	4	21	69	6
8. Secondary bathrooms	4	28	64	5
9. Dining room	14	23	55	9
10. Hallways	11	41	43	5
11. Guest bedroom	25	36	37	3
12. Den	40	21	32	7
13. Breakfast nook	41	25	30	5

Most important is master bedroom and closet space.

That's what shoppers replied when asked where they'd want the most space and where they'd sacrifice, if the high cost of housing forced them to accept a smaller house.

And the answer is the same in each city, for each household type and in samples of both attached-house and detached-house shoppers. (Percentages in the chart above are overall figures for detached-house shoppers only.)

The only break in the pattern: Washington and Chicago. Detached-house shoppers in these two cities would be as generous with master bedrooms and closets as other shoppers, but they put kitchens even higher on the maximumspace list. Washington shoppers in general seem to want more rooms and larger ones than shoppers in other cities.

While most shoppers would sacrifice square footage used for guest bedrooms, hallways, dens and breakfast nooks, many Washington shoppers are reluctant to do so. In the case of breakfast nooks, for example, 45% of the Washingtonians said they want at least average space for nooks and 7% prefer maximum space. Even for hallways they resist cutting back: 42% want average-sized hallways and 7% would give them maximum space.

For details on how shoppers in each city rate some of the most important rooms in the house, see the charts below and on the following two pages.

The kitchen: Build it big in Chicago and Washington

had, surficient in a	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Eliminate	1%	1%	3%	1%	1%	2%	0%	1%	1%
Minimum space	11	8	13	10	14	13	12	19	2
Average space	50	34	55	52	51	54	59	52	44
Maximum space	38	57	28	37	35	31	29	28	54

While Washington and Chicago shoppers want a lot of kitchen space (over half in each city say maximum space), Southern Californians are less insistent: 19% would give it the minimum, though the majority would like more.

The picture in Denver is more representative. Here, a few would minimize the kitchen and a substantial number would maximize it, but the majority opt for average space.

Of the various shopper types, singles and older couples are less likely to emphasize kitchen space. Twenty-four percent of singles assign it minimum space, 42% want average space and 32% maximum space. The percentage of older couples giving the kitchen maximum space is a little lower -28% - but more would give it average space -58%. Older families tend to be most generous with kitchen space: 44% would give it maximum space.

Attached-house shoppers differ less city-to-city. Overall, 30% of them would give the kitchen maximum space, 54% prefer average space and 15% would accept minimum kitchen space.

High and low were Washington and Denver. Forty percent of Washington attached-house shoppers would give the kitchen maximum space, while only 28% in Denver would. What's more, 22% in Denver would give the kitchen minimum space.

Least interested in kitchens: unrelated individuals. Only 12% would give the kitchen maximum space.



The family room: Play it up in the East and Midwest

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Eliminate	11%	4%	17%	13%	15%	14%	12%	10%	4%
Minimum space	7	4	4	9	8	8	11	8	2
Average space	36	34	33	41	27	31	38	40	44
Maximum space	46	58	46	37	50	47	39	42	50

Note that more than 90% of the shoppers in Chicago and Washington would give the family room average or maximum space and very few would eliminate it. In other markets, the emphasis is less and 10% or more of the shoppers would eliminate the family room.

Most likely to do without: singles (20% would eliminate) and older couples (21% would). Even in these groups, however, about a third would give the family room maximum space. fact, this is the only room where ratings are quite different from the detached-house shoppers'. Specifically:

Twenty-four percent of attached-house shoppers would eliminate the family room. The proportion jumps as high as 35% in Miami.

A much lower proportion of attached-house shoppers would give the family room maximum space-28%. Most interested in family rooms: Southern Californians (36% want maximum space) and Washingtonians (34% maximum space).

Attached-house shoppers have different sentiments. In r

The master bathroom: Make it massive in Miami

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Eliminate	3%	5%	2%	7%	1%	2%	1%	1%	2%
Minimum space	12	21	10	17	5	12	10	12	11
Average space	54	55	55	50	50	51	59	50	61
Maximum space	31	20	32	26	44	35	31	37	26

Close to half the Miami shoppers would maximize space in the master bath. Chicago, on the other hand, is least impressed with the master bath; only 20% there would give it more than average space.

Household type has a lot to do with how shoppers feel on the subject. Couples-only households are the most interested: 37% of both younger and older couples prefer generous baths. Young families, on the other hand, are most likely to accept a utilitarian one: only 24% rate the master bath worth maximum space. Attached-house shoppers disagree even more from city to city. Though about the same proportion of Miamians voted for maximum space (43%), an even lower percentage in Chicago did (15%).

Overall, about a third of the attached-house shoppers would give the master bathroom maximum space. About half think it worth average space.

Among attached-house shoppers, younger and older couples disagree. Forty-two percent in the over-35 group want maximum space; only 24% in the younger group do.

The living room: Downplay it in Dallas

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington, D.C.
Eliminate	10%	8%	31%	. 7%	12%	13%	4%	6%	5%
Minimum space	19	17	18	20	25	26	14	22	10
Average space	50	60	30	56	42	42	59	51	55
Maximum space	21	15	21	17	21	19	22	20	30

Note the 31% of Dallas shoppers who'd do without a separate living room.

Conversely, note the 30% who'd give it maximum space in Washington.

In general, regional differences of opinion are much greater than those between shoppers of different household types. Singles seem a little more willing than others to accept a scaled-down living room, however.

Attached-house shoppers score the living room higher perhaps because they'd play down the family room (see chart top of page). Twenty-six percent would prefer maximum space; 57% average space.

San Diego shoppers are most enamored of the living room: 37% would give it as much space as possible.

The dining	room: Do	It up W	ashington
------------	----------	---------	-----------

	All						San	Southern	Washington.
	shoppers	Chicago	Dallas	Denver	Miami	Phoenix	Diego	California	D.C.
Eliminate	14%	9%	27%	15%	14%	20%	13%	11%	4%
Minimum space	23	19	24	22	29	24	25	29	13
Average space	55	62	44	56	50	49	55	50	70
Maximum space	9	9	6	7	8	6	7	10	14

Eighty-four percent of Washington shoppers would give the dining room average space or better—that's significantly higher than in any other city.

Dallas is least interested (27% would eliminate the dining room and 24% would give it only minimum space). And in most other cities, shoppers consider a formal dining room worth no more than minimum or average space.

Singles would sacrifice a separate dining room most readily. And older families prefer to hang onto one.

Another group that wants at least an average-sized dining room: young couples (two-thirds want it average-sized or better). Attached-house shoppers rate the dining room about the same as detached-house shoppers. The biggest change: a fall-off in interest among Chicago shoppers. Eighteen percent would eliminate the dining room and another 23% would minimize it.

Overall, 13% of attached-house shoppers would eliminate the dining room, and 26% would give it minimum space. The majority-54%—think it's worth average space. Only 7% would give it maximum space.

And singles are a surprise. When shopping for attached houses, they're just as interested in the dining room as young couples.

Secondary bedrooms: Don't stint on size

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Eliminate	4%	2%	3%	2%	8%	2%	2%	.5%	3%
Minimum space	21	13	25	23	24	20	29	23	14
Average space	69	79	63	69	64	72	66	67	72
Maximum space	6	6	8	6	5	6	3	6	10

More than two-thirds of the shoppers in every city would make secondary bedrooms at least average sized. And note the 10% in Washington who give them maximum space.

About a third of singles would accept minimum-sized secondary bedrooms. And it's no surprise that people with children are most eager to keep them at least averagesized.

Shoppers also scored secondary bathrooms, and some would give them up. Nine percent of singles would, for example. And very few would give secondary bathrooms the maximum (see chart p. 67).

Attached-house shoppers feel about the same as detachedhouse shoppers on the subject of secondary bedrooms. Of this group, older couples are least generous with secondary bedrooms: a third would allot only mimimum space.

Attached-house shoppers are more willing than the detached-house shoppers to sacrifice square footage for secondary bathrooms, however. Though the majority want one, 35% would give it only mimimum space and 6% would bypass it entirely.

The breakfast nook: Nix it if necessary

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Eliminate	41%	49%	34%	44%	41%	42%	42%	41%	34%
Minimum space	25	20	. 29	28	28	25	27	28	14
Average space	29	23	31	24	28	28	28	26	45
Maximum space	5	8	7	4	3	6	3	5	7

Breakfast nooks have a chance in Washington, but even there almost half would make it only average sized. In most cities, a good number of shoppers would eliminate the breakfast nook entirely.

Attached-house shoppers are generally not interested: 47%

would eliminate the nook vs. 29% who'd make it averagesized or larger.

One group dissents: single parents. Only 20% would knock out the nook and over half would give it average space or better.

THE SAME IN EVERY CITY

Washingtonians like a country kitchen. Californians don't. Ceramic-tile counters score high in San Diego, but laminated plastic is just fine in Chicago. Lighting and appliance choices vary, too.

In fact, there's little that shoppers agree on when it comes to the kitchen. For details, look below and on the following two pages.

If there were only one eating area in your home, which room arrangement would you prefer?

	FK		FR		02
Plan 1	Г,	Plan 2	L	Plan 3	I,

	All shoppers*	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Plan 1	28%	26%	27%	30%	27%	24%	29%	19%	41%
Plan 2	38	35	32	35	43	37	41	45	33
Plan 3	34	39	41	35	30	39	30	36	27

*Percentages are based on weighted figures to adjust for city-to-city differences in sample size; in this table and others in this section, "all shoppers" refers to all detached-house shoppers surveyed in the cities shown.

Note: Because percentages have been rounded off, totals on all tables may not add up to 100%.

Eating-area preferences seem to be changing. Specifically: •Last year, Plan 2, the living/dining "L", was number one in Washington. This year it fell behind.

•Last year's Chicago shoppers were evenly split. This year's shift away from Plan 1, a country kitchen, and give a slight edge to Plan 3, which has no separation of formal and informal living areas.

•Last year Miami's shoppers wanted Plan 3. Now the

"L" arrangement is more popular.

Attached-house shoppers in each city have likes and dislikes similar to those of the detached-house group.

Miami shoppers don't like the country kitchen (Plan 1), instead favoring Plan 3 (44%) or Plan 2 (40%).

Washington's attached-house shoppers give the edge to Plan 2, the "L", rather than to the country kitchen. (The percentages: 40% versus 35%.)

Which of these informal eating arrangements would you prefer?

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Breakfast bar	25%	15%	18%	22%	32%	31%	39%	31%	13%
Nook	28	21	41	38	24	30	23	33	18
Table space in kitchen	47	64	40	40	44	40	38	36	69

A nook is low on the space-allocation list (see previous page), but many prefer a nook to a breakfast bar.

Singles show the most interest in a breakfast bar: 33% would like one. (Even more want table space, though.)

Table space in the kitchen is especially important to family shoppers. Fifty percent of older families prefer it.

Attached-house shoppers are more willing to accept a breakfast bar: 29% say they want one.

Where they'd sacrifice to cut the price

Shoppers were asked this question: "Assuming your 'dream home' was priced out of reach, what features would you be willing to give up in order to afford it?"

Results shown below and on the next page indicate that

California shoppers tend to insist on the "feature" item whether tile, flooring or lighting—more often than other shoppers do. And a substantial number in many cities actually prefer the replacement item.

Feature: Ceramic tile countertops Standard replacement: Plastic laminate countertops										
	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.	
Must have feature item	35%	26%	27%	21%	26%	30%	55%	65%	24%	
Prefer feature but would accept replacement	38	35	42	49	37	36	31	27	53	
Prefer replacement	27	39	31	31	38	34	14	8	. 24	

Here's evidence that regional preferences, not incomes, are the deciding factor.

In Southern California at least half in every income bracket say they must have the tile. In Chicago, even the most affluent shoppers (those making over \$40,000 a year) are not as insistent on tile: only a third must have it, and 30% say they prefer plastic laminates.

Attached-house shoppers are more willing to go with plastic laminate countertops: 30% say they must have ceramic tile; 40% prefer tile and 30% prefer the plastic.

Feature: Double oven or microwave plus single oven Standard replacement: Single oven										
	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington D.C.	
Must have feature item	38%	37%	32%	23%	34%	40%	51%	50%	36%	
Prefer feature but would accept replacement	43	40	47	48	45	37 .	38	39	50	
Prefer replacement	19	23	21	29	21	23	10	11	15	

Denver has the most who prefer the single oven -29%.

This finding probably is tied to the high proportion of singles in the Denver market. As a group, singles are least likely to demand a double oven or a single oven plus a microwave: only 31% say they must have them.

Older families show the greatest desire for two ovens: 47% say they must have a double oven or an oven/microwave combination. Only a third of younger families say they must have two ovens. This may be due to price sensitivity, for 27% of shoppers earning less than \$20,000 a year say they must have two ovens, but the percentage goes up to 49% at the \$40,000-a-year-or-over level.

Attached-house shoppers show a little less interest in a double oven or oven plus microwave. Thirty-five percent must have one, while 23% say they prefer a single oven.

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington D.C.
Must have feature item	32%	16%	16%	20%	46%	52%	46%	50%	13%
Prefer feature but would accept replacement	44	41	50	53	38	33	40	40	61
Prefer replacement item	23	44	34	27	16	15	15	10	26

Older buyers find luminous ceilings more of a necessity than other groups do. Forty-two percent of couples over 35 say they must have one and so do 36% of families over 35. *Attached-house shoppers* are a little less interested in

luminous ceilings. Twenty-six percent must have one; 46% prefer one and 29% prefer light fixtures.

The most divergent: attached-house shoppers in Chicago. Fifty-one percent prefer light fixtures.

THE KITCHEN CONTINUED

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington D.C.
Must have feature item	15%	12%	12%	18%	15%	15%	22%	16%	11%
Prefer feature but would accept replacement	51	44	49	50	44	47	56	54	61
Prefer replacement item	34	44	39	32	41	38	22	30	27

Compare the above with last year's findings:

In 1978, 62% of the shoppers in Washington said they'd pay \$250 extra for a greenhouse window. Sixty-five percent of the shoppers in Chicago said they would, too, and so did 62% of the San Diego detached-house shoppers.

Attached-house shoppers are just as willing to sacrifice greenhouse windows. Over half of the Chicago shoppers (55%) even prefer standard windows.

Feature: Tile or wood par Standard replacement: V				Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Must have feature item	28%	27%	20%	25%	35%	25%	36%	34%	23%
Prefer feature, but would accept replacement	49	49	50	50	39	49	51	51	52
Prefer replacement item	23	24	30	25	26	26	14	15	25

Though most shoppers would like tile or wood parquet, shoppers in Southern California and San Diego are likely to feel cheated if they don't get one or the other.

Sentiments are significantly different in Phoenix, Washington and Dallas: here there's a substantial percentage who prefer vinyl or linoleum.

Miami has shoppers in both camps. Preferences are price-related to some degree. Twenty-six percent of shoppers earning less than \$20,000 a year say they must have tile or wood parquet; 38% insist on the more expensive flooring at the \$40,000-a-year-or-over level.

Attached-house shoppers differ more from city to city. The same proportion of Miamians say they must have tile or wood parquet, but the percentage slips to 14% in Denver and 17% in Chicago. And 37% of Chicago attached-house shoppers prefer vinyl or linoleum.

The laundry: Keep it near the kitchen

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington D.C.
Laundry room near kitchen	50%	63%	56%	40%	37%	56%	48%	51%	50%
Laundry room near bedrooms	18	15	25	23	10	21	18	17	21
Laundry area in garage	31	22	20	37	53	24	34	33	29

Note the lone dissenter: Miami. Here laundry facilities in the garage get the nod.

Attached house shoppers don't always agree with their detached-house counterparts. Some examples:

•In San Diego, 44% of the attached-house shoppers prefer laundry facilities in the garage, making this the most-favored location.

•In Miami, 40% want laundries near the kitchen and the proportion who want one in the garage falls off to 41%.

•In Southern California, votes are split evenly between

kitchen and garage laundry locations (44% kitchen; 42% garage).

Other findings about attached-house shoppers:

•60% of single parents want a laundry near the kitchen, and so do 57% of older families.

•42% of singles buying alone favor a kitchen laundry, but about the same number -41% - prefer one in the garage.

And although there's no majority vote for a bedroomwing laundry, 24% of older couples shopping for an attached house would put one there.
THE MASTER SUITE LOTS OF UPGRADES AND LOTS OF PRIVACY

And there are lots of ways to provide the two:

•With floor plans that keep the master away from other bedrooms or noisy lower-level living areas (see charts below for a bedroom count; charts on following page for how shoppers want them arranged).

•With ample closet space (chart, following page).

•With a properly compartmented master bath (chart, p. 75).

•With double fixtures so a busy husband and wife can use the bath at the same time (charts, pp. 75 and 77).

•And, finally, with upgraded fixtures and finishes (charts, pp. 76 and 77).

How many bedrooms do you want in your next home?

	All shoppers*	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
One	0%	0%	0%	1%	1%	1%	0%	0%	0%
Two	6	2	4	6	16	7	9	4	1
Three	41	30	47	54	52	46	43	41	24
Four	46	62	45	36	30	41	40	48	64
Five or more	6	-6	4	3	1	6	9	7	12

*Percentages are based on weighted figures to adjust for city-to-city differences in sample size;

in this table and others in this section, "all shoppers" refers to all detached-house shoppers surveyed in the cities shown.

Note: Because percentages have been rounded off, totals on tables may not add up to 100%.

Note that over half the shoppers in Miami and Denver prefer three bedrooms, while the majority of Washington and Chicago shoppers want four.

Number of bedrooms desired generally correlates with household size—i.e., singles want fewer (23% want two) and young families want more (65% want four). The exception: a substantial proportion of young couples-42%-are looking for a four-bedroom house.

Attached-house shoppers usually want three bedrooms (57%). Only 21% want two and 19% want four.

Washington's attached-house shoppers want the most: 41% say they want four.

How many bedrooms would not be used for sleeping?

and the second	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
None	23%	23%	22%	29%	24%	25%	20%	22%	21%
One	58	61	65	57	62	55	61	53	52
Two	16	15	10	14	13	18	16	21	22
Three	3	2	3	1	1	2	3	4	6
Four	0	0	0	0	0	0	0	0	0

Most shoppers expect to use an extra bedroom as a den/library (60%) or as a guest bedroom (53%). About a third (36%) would use one for a hobby or sewing room.

Washington and Dallas are the only two cities where a guest bedroom takes priority over a den/library.

Singles (72%) and young couples (71%) are most likely to

use an extra bedroom as a den.

Attached-house shoppers have similar ideas: 18% expect to use all bedrooms for family sleeping; 63% plan to use one bedroom for a purpose other than family sleeping and 17% plan to use two. The other purpose: den/library (65%); guest bedroom (55%); hobby/sewing (31%).



Bedroom arrangement: Isolate the master suite

If you prefer a single-story, which of these bedroom arrangements would you prefer?												
	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.			
Master bedroom separate	74%	62%	70%	69%	89%	75%	68%	80%	76%			
Guest bedroom separate	8	7	13	7	2	11	8	8	9			
All grouped together	18	32	17	24	9	14	25	13	15			

Older couples show the greatest preference for a masterseparate arrangement; it's favored by 82%

Attached-house shoppers also prefer the master-separate arrangement: 75% picked it. Seven percent like a guest bedroom separated from the others and 18% like grouped bedrooms.

Miami shoppers are most insistent: 86% say they want the master separate.

Chicago has the most votes for an alternate arrangement: 24% want grouped bedrooms.

Attached-house shoppers differ depending on household type, too.

Ninety-three percent of young couples prefer the masterseparate arrangement, for example, while only 52% of young families do (35% of them like all bedrooms grouped).

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Master + 3 bedrooms upstairs/ No bedrooms downstairs	42%	66%	22%	33%	26%	32%	36%	34%	59%
Master + 2 bedrooms upstairs/ 1 bedroom downstairs	36	21	33	49	35	28	46	47	32
Master + 1 bedrooom upstairs/ 2 bedrooms downstairs	9	2	10	14	16	23	5	6	6
3 bedrooms upstairs/ Master downstairs	9	8	22	2	11	14	12	9	2
2 bedrooms upstairs/ Master + 1 bedroom downstairs	5	4	13	3	12	2	1	3	2

Note that the overwhelming majority of shoppers would keep the master suite upstairs, away from living areas.

Dallas shoppers are hard to pin down: each of the five arrangements has a following.

Not surprisingly, young families are most interested in grouping all the bedrooms upstairs.

Attached-house shoppers have similar preferences. A major difference: 52% in Miami like the second option.

Closets: Give shoppers a choice

Plan 1	Plan 2					nave the : <u>∏∏∏∏</u>		Plan 4		
	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.	
Plan 1	21%	23%	36%	21%	29%	19%	12%	11%	21%	
Plan 2	36	40	26	35	37	36	48	39	27	
Plan 3	23	19	17	20	20	22	26	29	28	
Plan 4	20	18	21	24	14	24	15	21	23	

There's no clear winner on this question, but note these atypically high scores:

•48% of San Diego shoppers like the single large walk-in closet (Plan 2).

•36% of Dallas shoppers like side-by-side, "his-and-her", closets (Plan 1). Attached-house shoppers' responses fall into the same

pattern, except in Miami, where 40% prefer Plan 1.

The bath: Compartmentalize it

Which of these bathroom a	rrangemen	ts would	l you pr	efer, ass	uming	all were t	he sam	ne size?			
Plan 1 Plan 2 Plan 3 Plan 3											
						the second se					
	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.		
Plan 1		Chicago 27%	Dallas 20%	Denver 25%	Miami 36%	Phoenix 24%					
Plan 1 Plan 2	shoppers			and a start of the		4	Diego	California	D.C.		

Note that Plan 2 (toilet separated from tub and vanity) gets nearly half the votes overall. Shoppers in Southern California are particularly interested in this bathroom arrangement; 57% of them prefer it.

Miami bucks the trend. There Plan 1 (vanity separate) edges out Plan 2.

And the uncompartmentalized bath has the best chance in Washington: 35% of the shoppers there like one room.

Variations in preference seem to be a matter of region, not of household type. Plan 2, the toilet-separate arrangement, got the highest percentage of the votes in every segment when results were broken down by household type.

Attached-house shoppers give a few more votes to Plan 1, especially in Chicago where 38% say they prefer that arrangement. A third of the attached-house shoppers in Denver want the vanity separate, also.

Overall, 31% of attached-house shoppers prefer Plan 1, 45% prefer Plan 2 and 24% prefer Plan 3.

Older families showed a slightly stronger-than-average preference for Plan 1 (37%). And young families show a stronger-than-average preference for Plan 2 (54%).

Where they'd sacrifice to cut the price

Shoppers were asked this question: "Assuming your 'dream home' was priced out of reach, what features would you be willing to give up in order to afford it?"

Choices included two full baths or just one (below) and a

sampling of master bath fixtures and finishes (overleaf). Answers show that shoppers would rather not cut back in the master bath, with the California markets showing a few more "must haves" than the others.

Feature: Two full baths Standard replacement: On	e bath								
	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Must have feature item	83%	85%	85%	75%	82%	87%	86%	84%	79%
Prefer feature but would accept replacement	14	11	13	22	14	11	11	14	18
Prefer replacement item	3	4	2	3	4	2	4	3	3

Note that Denver shoppers are less insistent on two full baths, although the vast majority must have two.

Household type and income influence shoppers' opinions. Specifically:

•Single parents are more insistent than any other market segment: 95% say they must have two full baths.

• Families – whether young or old – are more likely to say they must have two full baths than older couples are. In fact, though 80% of older couples insist on two full baths, 8% of them say they prefer one-the largest proportion of any group.

•High-income shoppers must have two full baths: a full

90% say so. At the low end of the income scale (under \$20,000 a year), 73% insist on two baths. (Few-5%prefer one bath, however.)

Attached-house shoppers are a little less insistent, on the whole. Seventy percent say they must have two full baths, 24% prefer two, but would accept one and 6% prefer one.

Miami takes the hardest line: 88% must have two full baths.

Denver is softest: only 53% say they must have two full baths and 12% say they prefer one.

Of attached-house shoppers, older couples are most determined to have two baths.



Master bath feature: Separate tub and shower Standard replacement: Combination tub/shower

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington, D.C.
Must have feature item	29%	27%	30%	29%	27%	26%	40%	39%	15%
Prefer feature but would accept replacement	47	38	46	45	39	48	46	48	64
Prefer replacement item	.24	35	24	26	34	26	14	13	21

Note that Southern California and San Diego shoppers place the most importance on having a separate tub and shower in the master bath. This is especially so at the upper end of the income scale. A mere 7% of Southern California shoppers earning \$40,000 a year or more prefer a combined tub/shower.

(Overall, 15% of shoppers earning \$40,000 a year say they prefer the less-expensive combination. Thirty-five percent of shoppers with annual earnings less than \$20,000 say they do.)

Results substantiate last year's. In a related question in '78, shoppers were asked if they'd pay \$900 to get a separate tub and shower in the master bath. A high of 37% in San Diego said they'd pay extra. Chicago (21%) and Washington (19%) were low.

Older couples favor the separate tub and shower more than younger ones: 39% of the over-35s say they must have the two, while only 25% of the under-35s must. Attached-house shoppers seem slightly more price-sensitive: 29% say they prefer the combination tub/shower in the master bath. Twenty-six percent say tub and shower must be separate. Forty-five percent prefer separate fixtures, but would accept a combination.

High and low are Southern California and Chicago. Forty-two percent of attached-house shoppers in the former city must have a tub and a shower: only 15% in the latter must. What's more, 40% of the Chicago attached-house shoppers say they like the combination better.

There's also a split between high and low earners. Fortytwo percent of attached-house shoppers at the \$20,000a-year level or below say they prefer the combined tub/shower. At the \$40,000-a-year-or-above level, only 21% say they prefer the combination.

Singles are most willing to accept a combined tub/shower (34% say they prefer it), but the majority would like them separated.

Master bath feature: Cast-iron or simulated marble tub Standard replacement: Fiber glass tub

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Must have feature item	42%	31%	33%	33%	51%	43%	55%	53%	35%
Prefer feature but would accept replacement	38	34	46	44	35	36	34	39	37
Prefer replacement item	21	36	21	23	14	21	12	9	29

Shoppers fall into two camps on this option. Washington, Denver, Chicago and Dallas shoppers are less insistent on a cast iron or simulated marble tub than the rest.

Last year 59% of Washington shoppers picked a fiber glass tub rather than a cast iron tub with a \$400 price tag. This year, only 29% say they prefer fiber glass (no specific extra cost given for the cast iron or simulated marble). This may indicate that Washington shoppers find simulated marble the more attractive alternative to cast iron.

Other results from last year: 66% of Miami shoppers picked the \$400 cast-iron tub with tile enclosure rather than the fiber glass tub. So did 60% of Chicago shoppers and 67% of San Diego shoppers.

How much is choice related to income?

Southern California is an indication: 24% in the under-\$20,000-a-year category say they prefer fiber glass. Only 4% at the upper end of the income scale say they do.

Overall, 26% in the under-\$20,000-a-year category prefer fiber glass; 14% earning \$40,000 or more prefer it.

Attached-house shoppers in every city but Miami are somewhat less sold on having a cast iron or simulated marble tub. In Miami, 54% say they must have one—about the same percentage as for detached-house shoppers there.

The overall score: 37% must have cast iron or simulated marble; 40% prefer one or the other, but would accept fiber glass; 23% prefer fiber glass.

Attached-house shoppers also differ depending on income level, just as the detached-house shoppers do. Specifically:

•32% of those earning \$20,000 a year or less prefer a fiber glass tub.

•19% of those earning \$40,000 a year or more prefer a fiber glass tub.

Master bath feature: Ceramic-tile tub/shower enclosure Standard replacement: Fiber glass enclosure

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Must have feature item	48%	49%	35%	45%	60%	49%	55%	53%	38%
Prefer feature but would accept replacement	38	34	48	40	26	34	37	40	45
Prefer replacement item	14	17	18	15	15	17	8	7	17

Note that a fiber glass tub enclosure is less acceptable to shoppers than a fiber glass tub is *(see preceding chart)*. Even in Washington and Dallas, the cities with the fewest "must haves," the proportion of shoppers prefering the fiber glass enclosure is relatively low.

It's a price-related issue, as well. In Washington, for instance, 21% of shoppers whose income is under \$20,000 a year say they must have the ceramic tile enclosure. The percentage more than doubles—to 46%—at the \$40,000-a-year-or-over level.

Older couples are the must reluctant to give up a ceramic

tile enclosure: 60% say they must have one, regardless. Unrelated individuals buying together are least reluctant: only 28% say they must have one.

Attached-house shoppers are more willing to take a fiber glass enclosure — but not much more. Forty-two percent say they must have the ceramic tile; 41% prefer it; 17% prefer fiber glass. The biggest vote for a fiber glass enclosure: 28% in Chicago say they prefer it.

Young couples seem least convinced they must have ceramic tile: in the attached-house group, only 32% say they must have it.

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Must have feature item	35%	28%	30%	26%	38%	43%	46%	45%	25%
Prefer feature but would accept replacement	49	47	47	57	47	39	44	47	59
Prefer replacement item	17	25	23	17	15	17	10	8	16

Note that a substantial number of shoppers in the West and Southwest feel they must have a double-basin vanity in the master bath. And demand is unshakable. The evidence:

Even at the lowest income level—under \$20,000 a year— 44% of Southern Californians say they must have a double basin. That's not significantly different from the way the most affluent shoppers (\$40,000 a year or over) feel: 55% of them insist on a double basin.

Attached-house shoppers are less demanding. Twentyseven percent say they must have a double-basin vanity in the master bath; 47% say they'd like one, but would give it up; 26% say they prefer a single basin.

The extremes: 41% in Southern California say they must have two basins; only 16% in Chicago say they must.

Master bath feature: Ceramic tile vanity Standard replacement: Simulated marble vanity

	All shoppers (Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington, D.C.
Must have feature item	23%	19%	14%	20%	29%	23%	34%	27%	19%
Prefer feature but would accept replacement	52	47	45	57	42	49	52	59	62
Prefer replacement item	25	33	41	24	30	28	14	14	20

Note the extreme city-to-city variations.

Opinions depend on ability to pay. At the lowest income level in Dallas, for instance, 50% say they prefer simulated marble. At the highest (over \$40,000 and over) a reduced number -33%—say they do.

Attached-house shoppers lean more towards the simulated

marble: 33% overall prefer it. Denver shows the greatest interest: 41% say they want simulated marble. The percentages in Chicago and Miami aren't much lower -38% and 40%.

Other ratings: 18% must have a ceramic tile vanity; 50% prefer one.



French doors, skylights and bay windows score high, as do wet bars and whirlpool baths or hot tubs (see below).

But all the emphasis isn't on design or relaxation. There's substantial interest in high price-tag energy-savers, too. Insulation packages, in particular, will be picked up by shoppers this year (see chart on following page for more information).

Assuming each of these features would add to the price, which would you most like to have in your next home?

	All shoppers*	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
French doors	28%	27%	31%	34%	25%	35%	23%	29%	23%
Wet bar	33	29	42	29	32	27	36	41	31
Skylight*	36	30	45	47	35	32	36	33	30
Planter	14	9	18	16	14	18	11	16	10
Whirlpool bath or hot tub	30	21	23	30	48	24	32	40	18
Bay window	38	50	41	52	24	32	25	36	46
Conversation pit	14	13	8	17	15	21	10	17	12
Intercom system	20	26	18	14	33	19	10	16	22
Central vacuum	21	30	20	17	23	15	15	17	26
Small-pane windows	9	10	17	10	7	9	5	9	5
Decorative stained glass	14	10	14	18	13	17	12	19	6
None of these	11	9	4	11	7	10	18	7	21

*Percentages are based on weighted figures to adjust for city-to-city differences in sample size;

in this table and others in this section, "all shoppers" refers to all detached-house shoppers surveyed in the cities shown.

Note: Because percentages have been rounded off, totals on tables may not add up to 100%

Note that Washingtonians are least apt to go for extras: 21% say they'd pay for none of the items listed.

Some income-related differences:

Interest in bay windows is strong across the board; about 40% at every earning level would like one. Wet bars, on the other hand, are more desired by the most affluent shoppers (those earning \$40,000 a year or more). Forty-four percent want one, compared with 25% of the least-affluent group (under \$20,000 a year).

And some responses may be a matter of passing fashion: •40% of Washington shoppers surveyed in '78 wanted French doors, this year only 23% do.

•A third of Miami shoppers last year said they'd pay

extra for a planter; this year only 14% would.

•Chicago shoppers have discovered the whirlpool bath/hot tub. Last year only 8% wanted a whirlpool bath. This year 21% want one or a hot tub.

Attached-house shoppers have the same likes and dislikes, in general. Two deviations:

•A skylight takes the whirlpool bath/hot tub position in California's top two.

•23% of Chicago shoppers say they'd pay for none of the items.

And there are a couple of variations according to household type: Skylights are number one with young couples (45%), while young families like wet bars the best (44%).

Other options: Build in bookshelves

Which of these decorator items would you like to have included by the builder, assuming you would be charged extra for them?

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington, D.C.
Wood paneling	36%	38%	51%	43%	33%	27%	35%	32%	35%
Wall paper	27	19	50	35	26	20	19	23	26
Built-in bookshelves	45	41	56	47	40	35	49	44	46
None of these	30	37	13	26	27	36	35	30	34

Note that built-in bookshelves are chosen by a high proportion of shoppers in each city.

Paneling has its supporters also, especially in Denver and Dallas.

In Dallas, in fact, half or more of the shoppers would pay for each of the items listed. This is especially significant in the case of wallpaper—Dallas shoppers show much more interest than those in any other city.

Household category seems to have little effect on shoppers' feelings about the three decorator items listed.

Attached-house shoppers are less willing to spend for these items: 40% say they'd take none of them. Built-in book-shelves have the best chance: 37% say they'd like them.

Related findings:

Detached-house shoppers were asked if they'd like a

Energy-savers: Stress insulation

Which of these energy-saving features would you like to have, considering the extra costs shown?*

	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington D.C.
Upgraded insulation	79%	66%	80%	73%	72%	83%	64%	72%
Double-pane windows	60	59	71	23	46	35	31	66
Solar water heating	18	25	22	26	25	35	19	17
Solar water plus space heating	18	14	17	10	23	28	19	15
Heat pump	39	37	28	15	N.A.	N.A.	N.A.	68
None of these	N.A.	N.A.	N.A.	N.A.	6	8	10	N.A.

*In Chicago, Dallas, Denver, Miami, Washington, D.C.: insulation, \$1,750; double-pane windows, \$2,500;

solar water heating, \$3,000; solar water plus space heating, \$13,000; heat pump, \$750.

In Phoenix, San Diego and Southern California: insulation, \$500; doublepane windows, \$800;

solar water heating, \$2,000; solar water plus space heating, \$7,500.

Note: Most surveys were conducted prior to or at the onset of recent hikes in oil prices.

Income plays a small role in shoppers' preferences about energy savers. Rather, these preferences seem to be a matter of perceived need.

In Denver, for instance, the level of interest in insulation is high at the lower end of the income scale (73% want), and not much higher at the upper (83% want).

Though added insulation is a popular option, the percentage willing to pay for it is lower than found in last year's survey. In '78, 90% to 95% of the shoppers said they'd pay for upgraded insulation. (Price tag in '78: \$500 in warmweather cities, \$1,500 in cold ones.)

Double-glazed windows also look less attractive to this year's shoppers. Last year 90% of the shoppers in Washington said they'd pay \$2,000 extra for double glazing. And 70% in Miami said they'd pay \$600 extra for double-glazed or solar-bronze windows.

Solar water and space heating systems suffer a similar fate. Fifty-eight percent in Miami said they'd pay \$1,200 for solar water heating last year (the most willing shoppers) and 25% in Chicago said they'd spend \$2,000 for it (the least willing). And last year 48% of Miami shoppers said they'd pay \$7,000 extra for solar water and house heating.

wood-ceilinged family room (18% would pay extra for one), an indoor brick barbecue (22% would pay) and/or an indoor atrium (37% would pay). Thirty-seven percent of the shoppers said they'd pay for none of the items on this list. An atrium, the top-scorer, is especially well-liked in Miami; 45% of the shoppers there said they'd take one.

In another question, shoppers were asked where they'd like fireplaces, assuming they'd pay extra for them. The most-favored spot: the family room—especially in Washington, where 85% said they'd like a family room fireplace.

Shoppers are, on the whole, not interested in builderprovided draperies. When asked if they'd like the builder to include drapes, only 17% said yes. Sixty-seven percent said they'd add them later. And 17% said they didn't want drapes at all.

THE EXTRAS CONTINUED

De usu profer bigh sland as

	ceilings, knowing that high ceilings will increase your heating/air-conditioning bills?											
*	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.			
High-sloped ceilings	47%	35%	51%	46%	53%	54%	56%	63%	20%			
Standard flat ceilings	53	65	49	54	47	46	44	38	80%			

Note the conservatism of Washington and Chicago shoppers.

Income level seems more of a factor here than it does with other energy-related features. In Denver, 33% of the most price-sensitive group (in this city, it's those earning between \$20,000 and \$25,000 a year) would take a cathedral ceiling. The percentage jumps to 57% for the most affluent shoppers (\$40,000 a year or over).

Attached-house shoppers like high ceilings, but the majority (57%) would take the standard, flat ones.

Recreation: Handle with care

Would you be willing to pay monthly homeowners association dues for community recreation facilities (pool, tennis courts, etc.) and greenbelt area maintenance at your next home?

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington, D.C.
Yes, both	35%	23%	34%	34%	47%	34%	37%	29%	46%
Only recreation fees	13	13	20	18	15	10	6	8	14
Only greenbelt maintenance fees	9	7	7	10	8	6	13	11	7
No, neither	44	57	40	37	31	51	44	52	33

In addition to city-to-city differences, feelings about fees are influenced by income and family composition.

•28% of shoppers earning less than \$20,000 a year are willing to pay both fees; 48% of shoppers earning more than

\$40,000 or more will pay both.

•42% of singles and 39% of older families will pay both; only 30% of younger families and 22% of single parents will pay for both recreation and greenbelt maintenance.

Here's how attached-house shoppers answer amenity questions

Attached-house shoppers were asked three more-detailed questions on recreation facilities.

1. Do you prefer a single large facility or several smaller ones?

Thirty-four percent want the former; 66% the latter.

Young couples, single parents and unrelated individuals have the strongest preferences. About three-quarters in each group would rather have the smaller facilities.

2. Which facilities are most important to you?

The responses, in order of preference: swimming pool (80%); tennis courts (47%); clubhouse/recreation room (43%); whirlpool bath (28%); racquetball courts (22%); sauna (18%).

Eight percent of the attached-house shoppers say they like none of the items on the above list.

The whirlpool bath scored highest in Southern California, where 58% put it among the most important facilities. Tennis got more votes in Washington (56%) than it did anywhere else. And the clubhouse/récreation room has the most support in Chicago (50%).

Shoppers in four cities (Chicago, Denver, Miami, Washington) were asked about a golf course. Not surprisingly, Miami shoppers show the most interest: 36% say it's one of

the most important facilities. Only 15% of Chicago shoppers, on the other hand, rank a golf course among the most important.

Shoppers in Southern California and San Diego were asked about volleyball courts. Only a few-6%-put them on the "most important" list.

Age seems to make a difference in how shoppers feel about facilities for active sports. Tennis, for example, is much more important to singles (58%) and young couples (51%) than it is to older couples (31%). Less taxing amenities—saunas, whirlpools, etc.—rate about the same regardless of shopper's age.

Here's a final preference of note: 65% of single parents think a clubhouse is one of the most important facilities.

3. Since larger recreational complexes require higher monthly maintenance fees, which program would you prefer?

•\$70 a month for tennis courts, pool, clubhouse, whirlpool bath and greenbelts. Percent who'll pay: 34%.

•\$50 a month for pool, whirlpool and greenbelts. Percent who'll pay: 42%.

•\$25 a month for greenbelt maintenance only (no recreational facilities). Percent who'll pay: 24%.

THE STREETSCAPE INDIVIDUALITY IS IMPORTANT-BUT A BIG YARD ISN'T

The evidence for individuality: 82% of the shoppers prefer a neighborhood combining a wide variety of architectural styles to one featuring variations on a single style.

Another case in point: Not even a third of the shoppers in any city agree on a favorite architectural treatment. In Southern California, for example, Tudor is the choice of 29%. Yet nearly as many shoppers there like Spanish architecture (26%), and there's interest in Cape Cod, contemporary and other styles as well.

A third point: thumbs go down on impersonal grid-type subdivisions. Fifty-eight percent prefer houses clustered around courtyards.

The evidence is even stronger when answers to related questions shown below and on the next three pages are considered. But here's another finding that deserves special attention:

Although shoppers want a house that stands out, it doesn't have to be one that's standing in the middle of a large lot. Many say they prefer entry courtyards to big front yards, for instance. And some who do want land would accept a smaller lot more readily than they'd settle for less than the best roofing and siding materials.

Which of the following plans would you prefer assuming each was the same size?										
	All shoppers*	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.	
Single-story	43%	37%	53%	35%	53%	69%	41%	41%	21%	
Two-story	30	39	24	33	24	12	28	27	52	
Split-level	26	25	23	33	23	19	31	33	26	

*Percentages are based on weighted figures to adjust for city-to-city differences in sample size;

in this table and others in this section, "all shoppers" refers to all detached-house shoppers surveyed in the cities shown.

Note: Because percentages have been rounded off, totals on tables may not add up to 100%.

Note that Phoenix shoppers are sold on single-story houses, Washington has the largest proportion of shoppers who go for a traditional two-story, and each city has some who like split-levels. (These results are similar to last year's findings.)

In answering a similar question last year, Washington and Chicago detached-house shoppers indicated they wanted basements. Last year's Phoenix shoppers wanted a basementless house.

Older couples are most likely to be shopping for a single-story house: 67% say they prefer one. Singles show interest in single-stories, too: 46% want one. Otherwise, regional differences seem to play a larger role than house-hold type.

Attached-house shoppers are somewhat more likely to be looking for a two-story or split-level unit than a single-story one. Overall, 35% prefer a two-story and 22% want a split-level. The majority of attached-house shoppers in Denver (58%) and Chicago (56%) prefer single-story, however.

As with the detached-house shoppers surveyed, older couples show a preference for single-story units (59%), as do singles (45%).

Unlike the detached-house sample, more than half of the older families in this group -51%, to be exact—want a single-story unit.

Also notable: younger attached-house shoppers like splitlevel units more than older ones do.



The front yard: Emphasize impact, not square footage

Which front yard would you prefer?										
	All	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.	
A conventional front yard and entry	47%	54%	48%	51%	49%	35%	36%	34%	70%	
A large front porch and smaller yard	13	13	19	16	10	11	15	10	9	
A private walled-in entry court plus small front yard	40	33	34	33	41	54	49	56	22	

Smaller-yard options are favored by more than half the shoppers overall. There are, however, some important regional differences:

•70% in Washington would go with the traditional front yard and entry—a proportion far higher than in any other city surveyed. And only about 22% in the nation's capital would take the entry courtyard. (Note that in Chicago, which is generally also conservative, 33% want the private walled-in entry court plus small yard.)

•56% in Southern California and 54% in Phoenix vote for the entry courtyard, a stronger preference than in most other cities.

In general, shoppers' front yard preferences depend more on where they live than on who they are. Young families, however, show a greater desire for a conventional front yard than other groups do: 56% prefer one.

Assuming front yard landscaping would add to the price of your home, would you like the builder to include it or would you prefer to add it later?

	All						San	Southern	Washington,
	shoppers	Chicago	Dallas	Denver	Miami	Phoenix	Diego	California	D.C.
Builder include	56%	72%	48%	46%	71%	45%	39%	53%	69%
Add later	38	26	43	48	23	47	56	42	28
Don't want	5	3	9	6	6	8	5	5	3

More than half the shoppers will pay extra to have landscaping done by the builder before move-in—an indication that they consider it a must. This is true even for shoppers whose income is under 20,000 a year: 53% of them would pay for landscaping. (At the highest income level, 59% want the builder to provide landscaping.) Note some regional differences:

Chicago, Washington and Miami shoppers are most willing to pay the builder for landscaping. More than two-thirds in each city would do so.

And San Diego has the most shoppers who say they'll add landscaping later (56%).

Assuming front yard sprinklers would increase the	price of your home,
would you like the builder to include them or would	you prefer to add them later?

	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Builder include	51%	42%	45%	53%	70%	42%	54%	71%	28%
Add later	28	13	32	36	21	41	38	25	26
Don't want	21	44	23	11	9	17	8	5	47

Note the disagreement between shoppers from different regions. Sprinklers are considered very important in Southern California and Miami: more than two-thirds of the shoppers there would have the builder include them. On the other hand, almost half the shoppers in Washington and Chicago would do without a sprinkler system. And it's not a question of Sunbelt cities versus the rest—more than half of the shoppers in Denver, where there have been water problems, want the builder to include sprinklers.

Shoppers' incomes influence how they feel about frontyard sprinkler systems. Overall, 43% of shoppers earning less than \$20,000 a year say they want sprinklers, but the

proportion jumps to 61% at the \$40,000-a-year-or-over level.

Related findings:

Shoppers were also asked if they'd like the builder to provide an outdoor barbecue. Overall, only 25% would have the builder do so, though 37% in Miami would.

Forty-seven percent would add a barbecue later. Washington has the largest proportion of shoppers who plan to add one later-57%. Miamians are least interested in adding a barbecue later-only 34% would.

Twenty-nine percent don't want a barbecue at all. Dallas shoppers are least interested: 36% don't want one.

What they'd sacrifice to cut the price

Shoppers were asked this question: "Assuming your 'dream home' was priced out of reach, what features would you be willing to give up in order to afford it?"

The charts below and on the next page show shoppers' answers when it comes to lot size, roofing, exterior materials and garage vs. carport. Although comparing preferences on these items falls into the apples-and-oranges category, it is interesting to see which more shoppers insist on.

If Dallas shoppers' answers are ranked, for example, this is the result: The most insist on an enclosed garage (78% must have one). Next comes a brick, stone or wood shingle exterior (66% must have). In third place: the larger lot (29% must have). And the fewest insist on a shake or tile roof (only 13% must have shake or tile).

Feature: Large lot (8,000 sq. ft. or more in Phoenix, San Diego and Southern California; 10,000 sq. ft. or more in the other five cities.)

Standard replacement: Smaller lot (less than 8,000 sq. ft. in Phoenix, San Diego and Southern California; less than 10,000 sq. ft. in the other five cities.)

· · · · · · · · · · · · · · · · · · ·	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego		Washington, D.C.
Must have feature item	33%	38%	29%	21%	27%	42%	39%	34%	32%
Prefer feature but would accept replacement	45	48	46	47	45	36	38	44	53
Prefer replacement item	22	15	25	32	28	22	23	22	15

Note that two-thirds of the detached-house shoppers prefer or would accept a smaller-than-standard lot.

Least interested in the smaller lots: shoppers in Chicago, San Diego and Phoenix. (This squares with a finding in last year's survey: in 1978 nearly 90% of Phoenix shoppers said they'd pay extra to get a lot larger than 8,000 sq. ft.)

Singles, especially single parents, are most likely to prefer a smaller lot: 33% of single adults do and so do 47% of the single parents. Families are most apt to insist on the larger lot.

Income also makes a difference. Only 19% of shoppers earning \$40,000 a year or more prefer the smaller-thanstandard lot, and 39% of them insist on the larger one. At the other end of the income scale (under \$20,000 a year), 27% of the shoppers prefer the smaller lot and only 26% want the larger one no matter what.

Attached-house shoppers were also asked about lot size. The results: 21% must have the larger lot; 42% prefer the larger, but would accept a smaller one; 37% prefer the smaller lot.

The most interest in the larger lot is among Miami attached-house shoppers: 27% feel they must have one.

The parameters attached-house shoppers were given: everywhere but in California, a larger lot was defined as 2,500 sq. ft. or more. In San Diego and Southern California, the larger lot was defined as 8,000 sq. ft. or more.

Feature: Shake or tile roof Standard replacement: Standard composition shingle roof										
	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.	
Must have feature item	24%	10%	13%	18%	27%	22%	46%	44%	12%	
Prefer feature but would accept replacement	49	46	39	57	52	53	44	45	56	
Prefer replacement item	27	43	47	26	21	25	10	11	32	

The insistence on a shake or tile roof in Southern California and San Diego cuts across income lines. In San Diego, for example, a substantial proportion (44%) in the under-\$20,000-a-year bracket must have shake or tile. And few in any earnings category prefer the standard composition shingle roof.

The story is different in Dallas. In this city, where 47% prefer the standard composition shingle roof, income plays a much larger role in preferences. Sixty-seven percent of

Dallas shoppers in the least affluent bracket say they prefer the standard. Only 25% of the most affluent (over \$40,000 a year) do.

Attached-house shoppers are less quality-conscious. Overall, 18% say they must have shake or tile; 52% would prefer such a roof, but would accept the standard; and 30% say they prefer the standard. The biggest deviation: Chicago attached-house shoppers. Here, 59% say they prefer a standard composition shingle roof.

THE STREETSCAPE CONTINUED

would accept replacement

Feature: Enclosed garage

replacement item

Prefer

Feature: Brick, stone or wood-shingle exterior Standard replacement: Stucco plus wood trim All San shoppers Chicago Dallas Denver Miami Phoenix Diego Must have feature item 36% 36% 66% 46% 33% 36% 22% Prefer feature but

48

17

27

7

48

6

50

17

47

18

50

13

Note that Dallas and Denver collect the most "must haves" on this question - 66% in Dallas and 46% in Denver. The percentage drops quite a bit in the lower-income groups, however. Only 42% of Dallas shoppers at the under-\$20,000-a-year level say they must have a brick, stone or wood shingle exterior.

More important, there's no large group in any city most pleased with the stucco-and-wood-trim choice.

Attached-house shoppers are only a little less insistent. Thirty-one percent must have brick, stone or wood shingle; 52% prefer it and 17% prefer stucco with wood trim.

Denver and San Diego attached-house shoppers feel the

same as their detached-house counterparts, but there's a fall-off in some cities and an increased insistence on brick, stone or wood shingle in others. Specifically:

63

15

Southern Washington,

D.C.

29%

61

11

California

27%

57

16

•In Washington and Miami more shoppers insist on brick, stone or wood than in the detached-house sample: 35% do in the former city; 37% do in the latter.

•In Chicago and Southern California, fewer insist on brick, stone or wood; 24% do in the former city, 21% do in the latter.

(In last year's survey, shoppers in Washington and Chicago favored brick. In other cities, they split their votes between brick or stone and wood.)

and product of the second	All shoppers	Chicago	Dallas	Denver	Miami	Phoenix	San Diego	Southern California	Washington, D.C.
Must have feature item	80%	95%	78%	87%	69%	74%	88%	94%	57%
Prefer feature but would accept replacement	16	4	18	11	25	19	10	4	34
Prefer replacement item	4	2	4	2	6	7	2	2	9

Note who's the oddball here: Washington shoppers. Though they're unwilling to sacrifice space indoors (see "Dream House" section, p. 66), they're most willing to pass up an enclosed garage.

And shoppers in Chicago and Southern California agree for once; in those markets all but a few must have an enclosed garage.

Household type has little influence on the garage versus carport question, but income does. Of shoppers whose

earnings fall below \$20,000 a year, 26% will accept a carport if necessary and another 5% prefer one. Only 9% of the most affluent group would accept a carport though the same proportion -5% prefer one.

Attached-house shoppers also prefer a garage, though fewer—only 67%—feel they must have one.

And in this group, Miami shoppers show some willingness to accept a carport—only 51% insist on an enclosed garage.



Note that Washington shoppers disagree with those in the other seven cities on this garage question as well; it's the

only place where two single doors got the majority of the votes.



How three top projects cope with problem sites

In citing these projects for awards in the 1979 Homes for Better Living program*, the multifamily jury was impressed by the way each is planned and built to overcome natural and man-made site problems: For example, on page 86 you'll find how expensive rental units were developed on a site barren of natural amenities; on page 88 you'll see how condo flats were secluded on a hemmed-in site; and on page 90 you'll learn how townhouses were designed to fit the changing terrain of a hillside. — J.R.V.

*The Homes for Better Living Awards program is sponsored by the American Institute of Architects in cooperation with HOUSING. The full list of winners in the 1979 program appeared in May.

HOWARD J. BA



FIRST HONOR AWARD Architect: Backen Arrigoni & Ross Inc. Builder/Developer: The Irvine Co. Landscape architect: POD Landscape Architects (See page 86)



AWARD OF MERIT Architect: Fisher-Friedman Associates Builder/Developer: Prometheus Development Co. Landscape architect: Omi Lang Associates Structural engineer: L.F. Robinson & Associates (See page 88)



AWARD OF MERIT Architect: Fisher-Friedman Associates Builder/Developer: Broadmoor Homes Inc. Landscape architect: Anthony M. Guzzardo & Associates Structural engineer: L.F. Robinson & Associates (See page 90)

85



Golf-course frontage (lower edge of site) is loaded with a maximum number of units. Where proximity to roads or parking is a problem, outdoor living areas are enclosed with 5'6'' rather than 2'6'' privacy fences.

Con

How to rescue a barren site

Except for a golf-course view on its southern boundry, this rental project started life with little going for it except its address: Rancho San Joaquin in Irvine, Calif.

The 17-acre site—a flat, barren parcel—is hemmed in on two sides by single- and multifamily housing and on a third by a highway.

What's more, the developer required a high density (368 units) and fairly high rents to make the numbers add up, and that meant creating many more premium locations than the golf-course frontage provided. So \$4 a square foot was spent to build a system of streams and lakes. One reason for the high cost: For maintenance purposes, the bottom of the waterway and the edges of the grassy banks (*photo left*) are coated with Gunite [HOUSING, Sept. 1977].

To help the project draw from a variety of high-income prospects, six plans were designed. They ranged from a 560-sq.-ft., one-bedroom flat to a 1,180-sq.-ft., two-bedroom/den unit. Eight-unit buildings—each containing a single type of apartment—are designed so every unit lacking a golf-course view faces the water or a landscaped plaza (*small photo, left*). When the project opened in 1977 rents ranged from \$245 to \$410; today's figures: \$380-\$615.





Typical layouts show how all units are planned so that both living and dining rooms have a view of water or landscaping. Plan at top, one of project's most popular, contains 905 sq. ft. At left is largest unit—1,180 sq. ft.—located on the golf course.

100 FT

87



90 F'I

How to create a private enclave

Sandwiched as it is between a busy road and a bustling community of single-family houses, this skinny 3.4-acre project—with 72 condo flats—could have been overwhelmed by its surroundings.

Instead, the developer and archtect made sure it would dominate its neighborhood by designing it to look a lot like a country club.

The look starts on the street side where swaths of landscaping signal the approach of the main entrance and at the same time muffle the traffic sounds. More landscaping on the other edges of the site buffer residents from the comings and goings of the single-family homeowners.

A meandering artifical lake, whose fountains are visible to neighbors and passers-by, adds to the country-club-like aura. These fountains are more than visual amenities; they mute sounds from within the project.

The 500-foot shoreline is staggered to give each apartment a close-up view of the water and to increase privacy between buildings.

The Waters, in Mountain View, Calif., sold out two years ago (before build-out) at \$75,000 to \$98,000 for 1,000 and 1,200-sq.-ft. units.



Lush landscaping adds sense of arrival to entrances (right). Note how horizontal siding tends to lower building profile (above). Using lattices on balconies increases privacy without blocking light and air.





Shingled townhouses step up the rolling terrain to top of the hill. Note high privacy walls between groundlevel patios and roads. Also note how much privacy there is between upperlevel balconies.

How to tackle a hillside site

Sensitivity to the terrain makes the difference between a project that scars a hillside and one-like this-that blends into its surroundings.

The project is Summit Ridge, a 27-acre complex of shingled townhouses in Walnut Creek. Calif. As the site plan shows, the project's 161 units are arranged along a loop road that follows the contours of the rolling land. Some units are entered off the loop, while others are reached via cul-de-sacs that branch off the loop and form mini-neighborhoods.

A majority of the units are open to views of distant hills to the east and west of the site. Others look out on broad landscaped areas that wind up the hill to the project's recreational amenities.

To accommodate the terrain, four basic floor plans were developed - two for uphill siting and two for downhill/flat locations (some examples are shown below).

The 1,820 to 2,571-sq.-ft. townhouses are priced from \$137,000 to \$162,000.



Uphill plan: a special design



SECOND LEVEL



FIRST LEVEL

Views are hard to come by in uphill layouts. One way to stretch whatever views there are is to leave rooms open to each other wherever possible.

Here, for example, all public spaces are treated as one large skylit roomeven though there is a marked difference in levels between the family room and other entertainment areas.

Opening a plan this way also creates entry impactimportant in a plan like this where views are not visible from the front door.

Note how in contrast to the open public areas, private space in this plan is quite secluded.

D





In the downhill layout (near left), entry impact is immediate-furnished by views across the stepdown living room and raised dining room.

Capturing the same kind of intial impact is a bit more difficult in the flatsite version (left) since the living and dining rooms are a level below the entry. So the wall directly opposite the front door is opened to provide an unobstructed sight line to the view side of the house.

One possible drawback in the flat-site version: There is no access from the garage to the kitchen. But there is bonus space-a second-floor sitting area.

GAR GAD EAT U K K LIVING LIVING DIN DIN PATTO PITTO FIRST LEVEL FIRST LEVEL

0

5 LOFT

Does it pay to **COMPUTERIZE?** Many builders now think so-and some David G. Kleid 79

of them are surprisingly small. Here's what you should know about a versatile management tool...

puter answers questions and solves problems faster and more efficiently than could be done by hand.

com-

It can perform functions ranging from general accounting to cost estimating to property management.

But no matter how it's used, its benefits can be summed up in two words: better control.

For example, it can spit out a wide range of reports and do it fast, while there's still time to correct something that's gotten out of line. Or it can keep accurate tabs on costs, so that selling prices will be realistic.

What's more, computers cost less today than they did a few years ago. So the time is ripe to consider what a computer can do for you.

HOUSING magazine asked a number of users-including a builder who builds ten custom homes a year, a property manager who handles 1,000 units and a remodeler who does 2,500 jobs a year (see listing p. 95) - how they use the computer and what they have learned about it. On the following pages you'll see what they say.

And because the computer industry has a language of it's own, on p. 94 you'll find translations of the most common terms.

Computers reach into every aspect of the building business

Some of the most common applications are listed below. These applica-

tions are common enough so that

the programs (see glossary p. 94) are usually available from manufacturers or firms that specialize in creating them. Those builders with special needs, however, can have programs written to suit their purposes.

General accounting. Here's where most builders start out. Accounting programs usually include general ledger, accounts payable and payroll. Some are more comprehensive, including such functions as accounts receivable, cash-flow analysis and trial balance.

Job costing. These programs are used to provide an up-to-date accounting of the costs of work in progress. According to David Smith, president of the Four Oaks Group in Atlanta, this is the most valuable computer application. "It lets you know when your costs are going up," he says, "so you can adjust your sales price." Adds Seymour Salant, controller for Rosen-Michaels, Clifton Park, N.Y.: "We wouldn't know our real costs without it."

Programs for job costing usually include variance reports, which allow you to pinpoint cost overruns as they occur. "We're able to catch duplicate invoices or errors immediately," says Chuck Ricks, financial officer for American Family Homes, Charlotte, N.C.

Most job-costing programs are included in general accounting programs, although they are sometimes obtained separately.

Cost estimating. This is a more sophisticated application, providing cost projections on future projects. The better programs can be remarkably accurate.

"All my houses come to within 2% of the estimated cost," claims Scott Sloan, a custom builder in Gaithersburg, Md. "And it only takes about two hours from the time I start entering information until final printout."

Estimating programs can do more than just estimate cost. Sloan's system also calculates the quantities of materials.

Some production builders who put up only a few models claim they would have no use for an estimating program. Not so, replies Sloan: "It allows you to compare prices from suppliers with the prices in the program. And it lets you easily update the cost of your product as prices change."

One variation on this type of program is a feasibility study. This allows builders to vary the mix, density, unit sizes and selling prices of the proposed project at will until they find the right combination. Then they can have the computer produce a print-out which they can present to the loan officer.

Not only does the computer help them determine what to build, but it helps them create a professional image with the lender.

Scheduling. When PERT (Project Evaluation and Review Technique) or CPM (Critical Path Method) systems are put on the computer, you can usually determine the progress of your projects more quickly than if you rely on a manual system.

Goodvalue Homes of Anoka, Minn., uses a CPM-based scheduling program to keep track of the 400 units it builds annually. Each superintendent submits a form at the end of the day indicating which activities were completed that day. At the end of the week, this information is fed into the computer, and the superintendent's schedule is automatically adjusted. "We can evaluate his performance on a weekly basis," says Paul Olson, systems administrator, "and also see if he's on ime."

Several variations of this type of p. ogram are possible. For example, H. rris Development Corp., Houston, Te., uses a CPM-based program to record and document each step of the closing process.

Property management. These programs keep track of rents due, rents collected, delinquencies, vacancies, maintenance costs and schedules. They usually also include general accounting functions, so property managers can provide owners with itemized reports.

Some programs will perform additional tasks. The one used by Rosen-Michaels, for example, calculates the interest due tenants on their deposits.

The key benefit of a property management program is the time saved in posting, calculating and compiling reports. Says Sandy Cox, of Investment Property Management, Oakdale, Calif.: "You can't continue to do your books by hand if your business is going to grow."

Customer service. Computers can also be used to help manage HOW (Home Owners' Warranty) programs. Systems have been developed to record service calls, assign jobs to subcontractors and keep tabs on performance. Says Goodvalue's Olson, "We've processed nearly 50,000 phone calls since the fall of 1977."

Financing. The primary use of financial programs is to record construction loans and payments. Some builders, such as Houston's Harris Development Corp., also use them to keep track of mortgage commitments.

Costs vary according to what you decide to get

There are a number of ways to obtain the services of a computer. Buying from a manufacturer is only one option. It is also possible to use a computer service, to time-share or to lease.

Direct purchase. Buying an in-house system calls for the largest initial investment, but in the long run it may make the most sense in terms of both money and convenience.

For a builder who builds fewer than 150 units a year, a good mini-computer system can be obtained for between \$25,000 and \$33,000. (Though there are systems on the market for as little as \$10,000 and as much as \$100,000, these will generally be too small or too large for your needs.) Depreciation and income investment credits help to offset the initial cost.

1111111111111

Every system includes hardware and software. Hardware is the machinery; software is the programs. Hardware without software is like a car without an engine: it won't get you anywhere.

Beware of buying too much hardware. Many builders spend \$50,000 or more on a computer system, according to Scott Sloan, because they're buying more hardware than they need. "For example, you don't generally need more than one terminal," he says. "The cost of extra terminals adds up. And you can always add more later on anyway." (For a description of the basic components, see glossary.)

Some hardware manufacturers also sell software. If you buy from one who doesn't, you'll either have to go to a software vendor or have software custom made. Readymade software usually presents the fewest problems, since it's already been tested and most of the kinks have been worked out. If you can't find a package that suits your needs, however, you will probably have to go the custom route.

Converting your operation to computer usually takes about two to six months. It can, however, take as little as a week or as long as a year, depending on your experience and the complexity of your system. As Brian Becker, controller for Henry A. Knott

Glossary

Entering the computer world will confront you with a host of strange new terms. This glossary should help guide you through the jargon jungle.

Byte—a unit of information storage. One byte of storage capacity will hold one piece of information. The information is stored in the computer's central memory or on fixed or floppy discs. CPU—central processing unit. This is the brain of the computer. It performs all calculations and computations and stores information in its memory banks.

CRT—cathode ray tube. This is shorthand for the terminal. It includes a keyboard and a viewing screen. (The actual "cathode ray tube" functions like the picture tube in a television.)

Fixed disc—a hard magnetic disc on which programs or data are recorded. It will hold more instructions or information than a floppy disc, and remains fixed in the computer.

Remodeling Co., Timonium, Md., points out, "there's always the chance that unanticipated problems will arise." His suggestion: "Make your most optimistic conversion schedule and add two months."

dile

At the time you convert, you generally have to run both the manual and computer systems simultaneously, so you may need to take on some temporary help. In the long run, however, most builders find they can either cut back on staff or maintain its present size as the business grows.

Computer services. A computer service processes the information you submit. It provides you with standardized forms on which raw data must be entered. The completed forms are then sent to the service, where the information is run through a computer. Final print-outs are then returned to you.

Costs vary, but they generally range between \$200 and \$900 a month. Most services charge by the amount of information processed, though some charge a flat monthly rate.

Services can create two problems: delays and extra work. There is always a time lag between submittal of completed forms and receipt of final print-outs. And the forms that are used may not really suit your purposes. Speaking of his experience with a service, Chuck Ricks, of American Family Homes, Charlotte, N.C., says "a lot of accounting entries had to be made just for the sake of the system."

Time-sharing. With this arrangement, a terminal is rented and placed in your office. The terminal is linked to a central computer owned by the timesharing service.

Fees are based on the amount of computer time used. The costs are

about the same as for a computer service, though there is usually an additional \$100-\$150 rental fee for use of the terminal.

Time-sharing provides reports more quickly than computer services. But since, as a rule, you are using the time-sharing service's software, formats may still be cumbersome and involve extra work.

How does the cost of time-sharing compare with the cost of buying a computer? Says Lee Evans, a builder management consultant in Nederland, Colo.: "Over the long term, it's more expensive."

Lease and lease/purchase. When you lease, a computer is installed in your office. The leasing company retains title, and you pay a monthly fee. Lease/purchase is leasing with an option to buy.

Monthly leasing fees are generally calculated at around $2\frac{1}{2}$ % of the computer's purchase price. Depending on the unit installed, this will range from around \$450 to \$1,000.

In a lease/purchase arrangement, all money paid in fees goes towards the purchase price of the computer. There may be \$150-\$200/month fee for a maintenance contract, but this is offset by additional tax benefits.

Leasing is a good idea if you don't want to make the large one-shot investment involved in direct purchase. It allows you to switch more easily to a different computer if your needs change or if you want a more advanced unit. In the long run, however, leasing is still more expensive than buying.

If you decide to buy, beware of the pitfalls

There are many success stories, but

there are also tales of woe. The reason: Some builders get involved with computers without knowing what to expect.

Here are a few suggestions that may spare you some headaches:

•Get good software people if you plan to customize. The problem with programmers is that they know a lot about computers and relatively little about homebuilding. If the programmer doesn't understand your needs, it's going to be hard for him to come up with suitable software.

The best rule of thumb is to try to find a programmer who has had experience with and understands the nature of your business. If that's not possible, make sure you get someone who is willing to learn.

Jim Holladay, of the D.C. Burns Realty & Trust Co., Denver, says it should have taken his company only three to six months to adapt to its computer; instead it spent one-and-a half years. "If I had it to do over again," he says, "I'd take my programmer and teach him the property management business, so he'd understand clearly what we're trying to accomplish."

•Make sure you're organized and disciplined. A computer is a logical, methodical machine. Your procedures must also be logical and methodical if they are going to mesh with the computer.

Bobby Collins, president of Constructive Concepts Corp., Raleigh, N.C., asserts: "I thought we were very organized before we had this machine." Adds Mike Lucas, controller for the Arnold Corp., Denver: "If you have a good working manual system, it isn't difficult to convert. If you have a Floppy disc — a flexible magnetic disc that looks like a 45 rpm record, on which programs or data are recorded. It must be inserted into a drive connected to the computer when it is to be used. Floppy discs will hold fewer instructions or data than fixed discs.

Hardware – pieces of computer machinery. It is a general word that covers CPUs, CRTs, printers and any additional mechanical items, such as card readers.

Integrated system — a software system in which each program feeds into the other programs. In an integrated accounting package, for example, information entered using an accounts payable program will be transferred automatically to general ledger and job costing.

Interactive system — a software system which provides computer prompts. These are questions that tell the user what piece of information should be entered or what procedure to follow next.

K—shorthand for one thousand bytes. A 100K floppy disc contains 100,000 bytes of storage capacity.

Megabyte—one million bytes. A three megabyte (3MB) fixed disc contains three million bytes of storage capacity.

Minicomputer and microcomputer — terms which, when used in the past, distinguished between computers with different storage capacity and programmability. Microcomputers used to store less information and be less flexible than minicomputers. Nowadays, these terms tend to overlap, since new technology has eliminated many of the differences.

Multiterminal system—a hardware system that will accept more than one CRT.

Program—a set of instructions that tells the computer what operations and calculations it should perform.

Software—computer programs, usually recorded on fixed or floppy discs. The terms "program" and "software" are of-

ten used interchangeably.

What you will need: Any basic computer system must include a CPU, a terminal, a printer and the necessary software. With many systems it is possible to buy additional terminals or printers, but this adds to the total cost and may not be necessary.

The most important thing to watch for is the CPU's storage capacity. Computer storage space tends to fill up fast, so it is wise to buy extra memory at the start.

According to Scott Sloan, a system that uses floppy discs should have at least a 4MB capacity and one using fixed discs at least a 9MB capacity.

lousy system, a computer will only make it worse."

•Train your staff and help them to adjust. Resistance to new routines and hostility to computers in general is not uncommon. Says Paul Olson: "The biggest struggle we had was teaching our own people and the subcontractors how to adjust to data processing."

Computer routines aren't necessarily difficult, but they are different and they do require discipline. Be prepared to put time and effort into the training period, and expect a certain amount of resistance.

•Be ready to go on the computer before it arrives. Organizing accounting procedures is only the first step. You should also design the necessary forms and formats for your reports. "You can set up input forms for financial statements, vendor systems, payables, etc., before you even get the computer" says Mike Lucas.

•Don't expect the computer to solve all of your problems. "The greatest risk with computers," claims Paul Olson, "is expecting it to be a panacea. If anything, it can create problems people problems, for example."

A computer is a tool. As Lee Evans says: "People don't realize when they start out how valuable it can be for management and decision-making." But if you don't use its powers and capacities to serve the ends of your business, it will be of little value.

Concludes Paul Olson: "A lot of builders don't use the computer to make decisions. They constantly want another report, in a different way. The trick is to get a few reports and keep them simple. Then you can manage those reports and manage people with them." — STEPHEN LEVIN

These are the people Housing talked to about computers

Brian Becker is the controller for the Henry A. Knott Remodeling Co. Inc., Timonium, Md. The firm does nearly 2,500 remodeling, refinishing and restoration jobs a year, and has had an in-house computer for around three months.

Bobby Collins is president of Construction Concepts Corp., Raleigh, N.C., which expects to build 64 single-family houses this year. Before buying a computer four months ago, the firm used a service.

Sandy Cox is a property manager for Investment Property Management, Oakdale, Calif. The firm manages around 200 units, including apartments and offices. It has had a small in-house computer system for around seven months.

Lee Evans, president of Lee S. Evans & Assoc. Inc., Nederland, Colo., is a management and computer consultant. He has been giving seminars on general and financial management for the NAHB since 1952.

Jim Holladay is executive vice president of the D.C. Burns Realty & Trust Co., Denver, Colo. The firm, which manages about 1,000 apartment units, has had a computer service arrangement with a local company for three years.

Mike Lucas is controller for the Arnold Corp., Denver, Colo., which builds around 100 townhouse units a year. Before buying a computer seven months ago, the firm used a time-sharing service.

Paul Olson is systems administrator for Goodvalue Homes, Anoka, Minn. The firm expects to build around 400 units this year, including single-family homes and townhouses. It has used in-house computers since 1977.

Chuck Ricks is the financial officer for American Family Homes, Charlotte, N.C. The firm, which puts up 300-350 single-family houses a year, used a computer service for five years before buying a computer four months ago.

Seymour Salant is controller for Rosen-Michaels Inc., Clifton Park, N.Y. The firm builds over 200 units a year, including single-family homes and townhouses, manages an apartment complex and does land development. It started using a computer service twelve years ago and now has an in-house computer.

Scott Sloan is president of Contractor's Management Systems, Gaithersburg, Md. The firm builds ten custom homes a year and owns four small computers. Sloan has spoken at several NAHB seminars, and has written several publications on computers for the NAHB.

David Smith is president of the Four Oaks Group, Atlanta, Ga. The firm builds 100 single-family units a year and does land development. Before buying a computer ten months ago, the company used a timesharing service.

Larry White is executive vice president of the Harris Development Corp., Houston, Tex. The firm puts up around 600 units a year, including singlefamily, townhouses and apartments. It has been leasing a computer for over a year.

For a suburban builder's in-town debut... Colonial replicas that look like the real thing



Varied door/window treatments, like those shown above and on the facing page, set the project's colonial-village tone. Note also differing brick treatments, both on the building facades and walkways.

Partial site plan shows that a series of porticos links townhouse groups. These porticos are an aesthetic solution to city's requirement that "one" building sit on the entire site because land was zoned for apartments. But townhouses are sold fee simple, with individual lots.



Several years ago Clarence Kettler—best known as the developer of a large suburban Maryland PUD—began wandering around Washington, D.C., camera in hand. His object: to photograph detailing on some of the city's famous landmarks.

The end product of that photographic mission is Westover Place, an enclave of traditional townhouses—and Kettler Brothers' first housing project in the District.

Kettler's decision to build traditional rather than contemporary townhouses on the 8.2-acre site—which is only two miles from the D.C. business district—was based on marketing data supplied by brokers and appraisers who specialize in Washington, D.C. properties.

"They told us our site would draw twoincome professional couples, university people and empty nesters," says Charles V. Phillips, Jr., senior vice president. "And those are the people who are buying new and renovated Federal-style housing all around the district."

Shown here and on the following pages is the first section of Westover Place, which when built out will contain 149 townhouses.

If it looks more like a restoration than a new urban complex, that's because many of the details from Kettler's photos have been copied. Notice, for example, the arched porticos and brick walkways. Notice also the varied streetscapes—the result of differing treatments given to windows, steps, lintels, pediments and the like.

And, as you'll see on pages 100 and 101, varying the details enabled the developer to offer buyers the same plan with a choice of elevations—a common marketing benefit in single-family housing, but rare in townhouse developments.

In the first ten months, 32 units worth \$6.5 million, were sold. Opening prices of \$95 a sq. ft. have now increased to \$105. The project was planned by Lockman Associates Architects. Lee Miller is the landscape architect. —JUNE R. VOLLMAN







Differing facades give Westover Place the look of a small village. So do the varied approaches to entrances. Note center building in photo above with shingled mansard roof. Recessing it like this provides places to butt the roof, thus achieving an architectural change of pace in an inexpensive way, since mansard need not be turned as it would on an end unit.



Fireplace detailing and that of railing in photo at left is true to traditional design. Three-bedroom plan is one of nine layouts in the project's first section. Like most, this one has about 2,100 sq. ft. of finished space and an unfinished basement (not shown). It is in twin townhouses, right in photo above.

Detailing is authentic, outside and in



BALC BR BR D D SIT



SECOND LEVEL



Center-hall entry (left), a hallmark of traditional layouts, separates step-down living and dining rooms in this plan. Informal dining setup is no problem, the developer says, since empty-nester buyers tend to use their private clubs for formal entertaining. Top-floor master suite is a big draw. A portion of the dining area bay is seen in the exterior photo above.

Dentil molding and quoin corners-two more examples of detailing found on 18th and 19th century housing-are features of empty-nester favorite (above), which always is built as an end unit. As with all houses in the project, lintels, thresholds and steps are precast concrete. Brick, shingles and other materials are purchased from standard suppliers.



housing 11/79 99

COLONIAL REPLICAS CONTINUED

The big difference is in windows and doors



with four different entry and window treatments.

FRONT ELEVATION

FRONT ELEVATION



.



FRONT ELEVATION

FRONT ELEVATION

REAR ELEVATION

Expensive wood look. Hardboard

The practicality and price of Pinehurst[™] gives you a certain luxury. Resembling the fine grain and subtle texture of high grade natural lumber, this new Masonite[®] brand hardboard siding is priced well below what you'd expect to pay for top grade wood siding. And, it's just as easy to install by your regular carpenter crews using ordinary carpenter tools.

Yet there's nothing ordinary about 7/16" thick Pinehurst. It's denser than wood, providing greater durability as well as structural strength. It defies denting from misguided hammer blows and banging ladders. And because there are no knots or cracks to reject, installation waste is greatly reduced. Pinehurst planks can also be inverted to reduce the waste factor even more.

Available in unprimed lengths of 16' x 8", Pinehurst adds a special appeal to both traditional and contemporary designs.

So when you're looking for a way to make your new or remodeled homes more impressive and attractive, check out the luxury of Pinehurst lap siding. Masonite is a registered trademark of Masonite Corporation.



The rich, wood-grain texture is visible through the painted surface. *Circle 103 on reader service card*

Pinehurst™...natural wood beauty at a hardboard price. That's the beauty of Masonite® brand siding.



INSULATION

Something new...

The new insulation—Resinate 888—is sprayed into stud wall cavities before drywall is applied.

It's a low-density rigid urethane foam, intended for new residential construction, and is being sold regionally through applicators. (Until recently, urethane foam was used primarily in commercial and industrial construction.)

Resinate 888 has an R-value of 6.25 per inch. It can be used with $2'' \times 4''$ studs to achieve an R-19 wall, now required in most areas of the country.

Because it is sprayed, it seals every space, leaving no open cavities or voids. So it also reduces air infiltration.

Like other polyurethanes, the product is flammable. But according to the manufacturer, it conforms to major building codes.

Upjohn, CPR Division. Circle 200 on reader service card





Coatings/adhesives 112 Coatings/adhesives 114 Flooring 116 Kitchens 106 Kitchens 108 Plumbing/piping 111 Security 118 Security 120 Security 122





house has been framed and enclosed with exterior siding. Resinate 888 is foamed into stud wall cavities (1); stud faces are then scraped clean (2); and covered with 1/2'' gypsum wallboard (3) (or an equivalent 15-minute finishrated thermal barrier).







Attic installation: Below, builder Mark Shea positions Isophenol between joists.

Preparation: At left, builder/wife team uses a jig to cut an insulation bun to desired widths.



... and something borrowed

The borrowed insulation developed in Italy is Isophenol, a phenolic resin foam. Now being produced in the United States, it is nonflammable, doesn't emit toxic fumes and, according to the manufacturer, is waterproof and dimensionally stable.

Isophenol is offered in a dry or liquid form. In its dry form, it can be nailed, applied with mastic adhesive or forced in place. It comes in $2' \times 3' \times 4'$ buns that can be sliced to desired widths. (Buns cost \$.24 per sq. ft. but the manufacturer is presently offering the material precut for \$.26 per sq. ft. to meet builder's specifications.)

In its wet form, the substance is foamed in place for \$.72 a pound.

According to the manufacturer, Isophenol has an R-value of 5 per inch. It is an energy-efficient insulator suitable for new construction or retrofit.

There are other potential uses for Isophenol: Some companies are considering it for insulating pipes, solar heating panels and hot water heaters—and possibly for the manufacture of self-insulating stress-skin panels.

Phenolic resin foam has been used as an insulating material in Europe, Russia and Canada for many years. In America, it has not been approved by any official building regulatory agencies. But it is presently undergoing test by BOCA and ASHRAE.

Lisi America. Circle 201 on reader service card

KITCHENS



"Village Oak" cabinetry (above) has an acorn-leaf design on the doors. Drawer and door hardware is made of polished brass. Haas Cabinet. Circle 202 on reader service card

Drop-in pilotless gas range (*right*) has a digital clocktimer. A smoked-glass oven door lifts off for easy cleaning. Brown Stoveworks. *Circle 203 on reader* service card





Traditionally-styled cabinetry (above) features pine-veneer doors with a reverse bevel and decorative V-grooves. Cupboard can be ordered with optional diamond-design glass or wire-mesh inserts. Optional features include roll-out shelves and lazy Susans. AristO-Kraft. Circle 204 on reader service card



"Oakridge" cabinets (above) have recess-panelled doors. Available accessories include lazy Susans and pull-out trays. Diamond Industries. Circle 205 on reader service card

Built-in gas oven (right) is designed to fit 24'' cabinets. Unit, with pilotless ignition, is available in five colors. O'Keefe & Merritt. Circle 206 on reader service card

Plastic sink strainer (right) fits $3\frac{1}{2}$ '- to 4''-diameter openings in stainless-steel or enamel sinks. Unit catches food in a drop-post basket set in a corrosion-resistant body. Unit is reinforced with plastic. A precision fit is insured by threaded locknuts. Garvin. Circle 207 on reader service card







"Abbott Hall" cabinet line (above) features hand-stained oak doors crafted with an arch motif. Each unit, built with mortise-and-tenon joints, comes with self-closing doors and adjustable shelves. Optional hardware is available. Excel Wood Products. Circle 208 on reader service card

If manufactured housing is in your game plan...

Get on target... Stay on target... Aim at the inner circle

Get to know the leaders . . . the 1,400 most active producers of modular houses, panelized houses, pre-cut homes, mobile homes, and building systems and components in the nation.

That's right. THE RED BOOK OF HOUSING MANUFAC-TURERS will put you in touch with the right people. The thousands of them who are working in some sector of the housing manufacturing industry and are buying products or services like yours every day.

You'll look here for in-depth reports on all major:

Pre-cut Home Manufacturers Panelized Home Manufacturers Modular Home Manufacturers Mobile Home Manufacturers Major Production Home Builders Who Use Industrial Building Components And . . . Producers of Building Components and Systems

With the RED BOOK on your desk, you'll be able to uncover numerous, little-known facts about these companies including their:

key personnel • marketing areas gross revenues • construction methods production records • product line descriptions marketing methods • organization

And with knowledge like that you'll be able to prospect for new markets; sample a market; make selected mailings; research product lines, buying patterns; evaluate your position in the marketplace; analyze where you should be headed in the future.

It's all in the RED BOOK. Over 200 pages of facts and figures that everyone from building material manufacturers, builders realty firms, ad agencies to financial firms, housing manufacturers, business consultants, even government agencies will find it useful to get a handle on this vast, sprawling industry.

Another publication from CMR Associates: CMR Associates also publishes the BLUE BOOK of Major Homebuilders, the GOLD BOOK of Multi-Housing, the GREEN BOOK of Home Improvement Contractors and FAB-FACTS—A study of building products used by home manufacturers.



Eight Questions You'll Be Able to Answer With The Red Book

- · How fast is the manufactured
- housing industry growing?
 How are the ''housing products'' changing?
- Who are the major companies?
- Who are the key people?
- · How do companies market
- What is the outlook for the
- coming year?How large are the plants?
- How do they buy? Who do they buy from?

We've Got Your Market Covered

The RED BOOK is available in a national and four regional editions which break the homebuilding market into state and major metropolitan areas.

Fully indexed, all you need do is flip the pages to find the market and the information you need.

CMR Associates, Inc. 11-A Village Green Crofton, MD 21134	
Please send me:copie ING MANUFACTURERS \$	s of THE RED BOOK OF HOUS
copies of the South- ern Edition \$	copies of the West- ern Edition \$
copies of the North- eastern Edition \$	copies of the Mid- western Edition \$
National Edition-\$115.00	Regional Editions-\$45.00 each
Name	Title
Company	
Street	
City	StateZip
	H 11/79

housing 11/79 107

KITCHENS



Contemporary-styled kitchen appliances include (from left to right, above) a 30'' range with a self-cleaning oven, an undercounter dishwasher and a 24-cu.-ft. refrigerator. Frigidaire. Circle 209 on reader service card



"Formdoor" cabinets (above) have curved rather than straight edges. Plastic laminate finishes are available in a wide variety of colors and textures. Schmidt-Haus. Circle 213 on reader service card



Sink front cabinet is equipped with fold-out metal storage trays. Cabinet is part of "Integrity Oak" line. International Paper. *Circle 210 on reader service card*



Pilotless gas oven (above) has a roll-out broiler compartment. Unit, available in a variety of colors, has a porcelain interior. Tappan. Circle 211 on reader service card



"Energy Saver IV" dishwasher (above) boosts water temperature to 140°; thermostat can then be set at 120°. KitchenAid. Circle 214 on reader service card



Front-loading "Space-Mates" washer-dryer set (above) can be stacked, as shown, using only 27 cu. in. of floor space, or placed side-by-side. White-Westinghouse. Circle 212 on reader service card



Pilotless gas range (above) includes an eyelevel microwave oven, a four-burner cooktop and a bottom oven. A built-in exhaust system pulls smoke from the cooktop area. Modern Maid. Circle 215 on reader service card


Noncorrosive polybutylene and Celcon® plumbing system (above) has received approval from the International Association of Plumbing and Mechanical Officials and the Uniform Plumbing Code. Qest. Circle 236 on reader service card



Water filtration unit (above) is designed for installation on a central water main. The unit, which filters all incoming water, is suitable for new construction and remodeling applications. AMF Cuno. Circle 237 on reader service card



Oil-fired hot water boiler (*above*) is available in seven sizes with firing rates ranging from .80 to 1.80 gals. per hour. Coil and controls are located at the front for easy accessibility. Columbia. *Circle 238 on reader service card*



Submersible sewage ejector (above) can be used to control flooding. The pump, designed for non-clog operation, has a 2''solid-handling capability. A two-year warranty is offered. Expert. Circle 240 on reader service card



"Flue radiator" replaces section of boiler flue pipe, as shown above. According to the manufacturer, the unit recovers approximately 40% of the heat normally lost up a chimney. Stoneberg. Circle 241 on reader service card



Prefabricated plumbing wall (above), for multifamily construction, saves time and labor. The wall system is designed for wall-discharge fixtures. Pre-Plumb. Circle 239 on reader service card



"MasterMind" computer (above) can save 15% in home heating costs, according to the manufacturer. The electronic control senses outdoor temperature changes and automatically adjusts boiler water temperature accordingly. Unit is for use with gas- or oil-fired boilers. BGP Systems. Circle 242 on reader service card

LUMBING/PIPING

COATINGS/ADHESIVES





Trinatta® floor finish (above) is designed to be used with the manufacturer's resilient elastomeric flooring line. The protective finish needs to be reapplied annually. If desired, the adhesive can be stripped. 3M. *Circle 233 on reader service card*





"Weldwood" flooring adhesive (above) is designed to seal hardwood-parquet tiles to wood floors, subfloors, underlayments and concrete slabs. The nonflammable substance is water resistant. If necessary, parquet tiles can be repositioned for up to a half hour. Roberts Consolidated Industries. *Circle 230 on reader service card*



Contact adhesive, Lokweld[™] 600 (above), is suitable for bonding plastic laminates, wallboard, wood veneer and particle board. It has a flash point of above 20°F and meets the Consumer Products Safety Commission standards. One gallon will cover 70 to 80 sq. ft. Ralph Wilson. Circle 231 on reader service card



Polyurethane plastic coating, "Plexcote" (above), is available in a high-gloss or clearsatin finish. The scuff-resistant coating is suitable for heavy traffic areas. It dries dust free in 30 minutes, can be recoated in six hours and is completely dry after 24 hours. Magnet Paint & Shellac. Circle 234 on reader service card



Silicone building sealant is designed for use in concrete expansion joints, as illustrated above. The sealant is available in five colors: limestone, gray white, black and bronze. Dow Corning. Circle 232 on reader service card



"P.V.A. Bonder" (above) is a nonflammable resin emulsion suitable for the structural bonding of concrete toppings, patches and stucco or gypsum plaster mixes. Anti Hydro. Circle 235 on reader service card

WHAT MAKES US A CHAMPION



PART 3: OUR SALES SERVICE

We're Champion Building Products.[®]

And sales service is one way we live up to our name:

Behind every Champion product are scores of salespeople dedicated to making sure you get what you need when you need it.

For construction, industry, or home use.

We've got Champion people to take your calls. Or call on you in person. At Champion sales offices, strategically located across the country.

Yes, Champion Building Products has vast timberlands, efficient manufacturing facilities, a nationwide distribution system, fine technical service, and quality products.

But we're especially proud of this: our sales people aren't here to sell you a bill of goods; they're here to fulfill your needs. Knowledgeably, promptly and helpfully.

Champion Building Products. People, resources and ideas working to make your business more profitable.





from wind chill and moisture infiltration

A good vapor barrier is especially recommended on the warm side of outside walls by the leading manufacturers of foil backed insulated sheathing boards.

On the above ground levels, Tu-Tuf is run completely around the structure, from floor to ceiling. It is placed between the insulation and the interior wall board. And because it stops moisture and wind chill, the structure is warmer, drier and easier to heat with less energy.

Tu-Tuf is a superior product made from top quality, high-density resins. Its cross laminated construction process assures high tensile strength, puncture resistance and durability against biological breakdown and insect infestation. And it's pin hole free. It will not tear during normal installation and will hold up against weather and soil conditions.

These features, plus its low MVT rate of 0.00741 gm/100 sq. in/24 hrs., which is over 67 times more effective than FHA maximum standards, guarantees its barrier performance and makes Tu-Tuf the best product of its kind in the construction market.

Let Tu-Tuf vapor barrier help you "Upgrade Your Above Grade". Send for free literature that will help you build a better home.

See us in Sweets Catalog General Building File 7.17/St. Light Residential File 7.17/Sto, Thomas Register and ThomCat.



Two-step cleaning/coating process is designed to restore siding to a near-new condition. Shown above: White laps illustrate condition of siding after exposure to corrosive elements; gray laps illustrate material after cleaner is applied; black laps show siding treated with coating. Vita Shield. *Circle 223 on reader service card*



"Plio-nail" construction adhesive can be used to adhere floorboards to foundations, as shown above. Goodyear Chemicals. Circle 224 on reader service card

Circle 114 on reader service card



"Professional Tile" grout (above) can be used with ceramic and mosaic tiles. The acryliclatex white compound is waterand mildew-resistant. Elmer's. Circle 225 on reader service card

Transparent sealer (*right*) is suitable for interior as well as exterior use on wood, cement, brick and bluestone. Packard Paints. *Circle 226 on reader* service card



Pressure-sensitive foam tape (*left*) is suitable for insulation and acoustical applications. The tape is available with adhesive coating on one or both sides. It is offered in V_{16} ' and V_{6} '' thicknesses up to 52'' wide. Stik-11. Circle 227 on reader service card



"Global Guard" is a protective coating that is easily removed by solvents if marred with grafitti, as shown above. Laclede. *Circle 228 on reader service card*

"KK is 100% totally committed to the independent distributor system and will never own or operate a competing business."

Dwight Gahm/President





Tough, economical, beautiful... Plaza One.

Ask your distributor about KK custom kitchens. He's listed in the Yellow Pages or you may find him by calling the Sweet's BUYLINE® 800/447-1980.

Kitchen Kompact, Inc. KK Plaza Jeffersonville, Indiana 47130

We deliver full line selection.



Circle 115 on reader service card

FLOORING



"Lincoln II" hardwood floor (above) is available in red or white oak. Preassembled tongue-and-groove floor is $\frac{3}{4}$ " thick. Wood Mosaic. Circle 216 on reader service card



"Cygnet" area rug (above) has a sculptured look. Two sizes are available $-24'' \times 38''$ and $27'' \times 48''$ — in a choice of 37 colors. Regal. Circle 218 on reader service card



"Garden Gate" carpeting (above) is part of the "Formal Elegance" line. The floral-print floorcovering, for residential use, is offered in three pastel colorways. Nylon carpet has a cut pile and is treated with Scotchgard[®] protector. Milliken. Circle 217 on reader service card



Textured carpet, "Decapoint" (above), has a ¹/10'' level loop. Check design is available in seven color combinations. A five-year wear warranty is offered. Wellco. Circle 219 on reader service card



"Burbertex" (above) is a textured Wilton berber . The wool carpet, with a level-loop pile, is tufted with 3-ply yarn. "Burbertex" is offered in three colorways and comes in a 13'2'' width. Couristan. Circle 221 on reader service card



"Beau Mirage" (above), a multitoned carpet dyed with a resist-print technique, is offered in 23 colorways. Floorcovering is tufted of nylon and has a velvet-plush pile. Berven. Circle 220 on reader service card



"Graphic" (above) is a cut-andloop carpet for residential applications. Jute-backed carpet is made of 100% heat-set nylon and is offered in twelve solid colors. Floorcovering is FHA certified. Goldenweve. Circle 222 on reader service card

MONDAY'S CORN FLAKES, TUESDAY'S TUNA, WEDNESDAY'S MEAT LOAF...



you're waiting until the dishwasher's full. But that could mean dried-on food.

Introducing The Steam Machine.

Waste King introduces the first dishwasher with a steam cycle. Because steam goes places water can't. It moistens and loosens most dried-on food. So when the wash cycle comes on, the food's ready to go!

Introducing The Electronic Delay Start

Waste King introduces Steam Machine Model SS989, a dishwasher that also lets you wash your dishes while you're asleep. Or at work. Or when electrical demands are low. Pick the hour your dishwasher starts just by pushing a button and pre-setting the timer. Waste King has two special wash arms...one for the Upper Basket and one for the Lower Basket. The top basket can be adjusted. Waste King has a stainless steel tank. And it all gives you a nice secure feeling (the strongest warranty in the business).

> Get a dishwasher that can handle Friday's tomato sauce, Saturday's baked beans, Sunday's spinach.

THE STEAN MACHINE DISHWASHER by Thermador / Waste King

0.36

For Information, contact your distributor or write: Thermador, 5119 District Blvd., Los Angeles, CA 90040 Dept. # S

Circle 117 on reader service card

SECURITY



Wireless security system (above) is suitable for residential and light commercial applications. A telephone dialer which can be programmed to call up to five numbers is included. Tel-Sonics. Circle 252 on reader service card



Central control system, "Interrogator 790" (above), has the capability of keeping track of 2,500 card holders. The unit can monitor such things as burglar alarms and environmental conditions. In addition, it regulates door locks in up to eight time zones. Cardkey Systems. Circle 253 on reader service card



Radio-controlled security system (above) can be purchased as a basic unit and expanded to include various options. Among them: an emergency transmitter, a remote-signalling smoke detector, external alarms and an automatic telephone dialer. Chamberlain. Circle 254 on reader service card



"RKB" remote keyboard (above) is suitable for use in multifamily buildings. The keyboard, designed for use by a building resident, can be used to monitor such areas as swimming pools, tennis courts, laundry rooms and saunas. If the keyboard is incorrectly coded three times, it will sound an alarm. Marlee Electronics. Circle 256 on reader service card



Electronic sound detector, the "CTC Thief-Grief" (above), sets off a 90-second alarm when it senses an impact on glass, metal or wood. The unit has an adjustable sensitivity feature which prevents alarms from being triggered by normal background noise. Control Technology. Circle 257 on reader service card



"Minuteman II" security system, shown above right, is available with or without rechargeable batteries. The system can be expanded with a "Minuteman Sentinel," shown above left. Delta. *Circle 255 on reader service card*



Burglar alarm system (above) is suitable for use in single- or multifamily housing. The system comes equipped with magneticallyoperated switches that hook into door and window openings around the building's perimeter. An optional exit/entrance delay feature is available for installations where an externally mounted key-lock is undesirable. Rittenhouse. Circle 258 on reader service card

Come, **Get Sunstruck** with us!



REVERE SOLAR AND ARCHITECTURAL

PRODUCTS, INC. made a commitment to solar energy years ago. Now, as the pioneer and leader in the manufacture of solar energy systems, we want to help you get your share of bigger than ever sun dollars in America's fastest growing industry.

We offer you five systems to capture original and retrofit solar powered applications in a wide range of areas, including: residential, institutional and multiunit housing; swimming pools; and commercial and industrial buildings and processes.

CHECK THE AREA OF YOUR INTEREST

- □ SUN-PRIDE[™] Complete domestic hot water system... from solar collectors to hot water tank. All components warranted by Revere.
- □ SUN-CENTER[™] Prepiped, pre-wired power package for solar domestic hot water systems. No pipe cutting. No joint sweating.
- □ **SUN-AID**[™]Modular solar collectors for existing buildings. Include exclusive Revere Tube-In-Strip solar absorber plate, for trouble-free performance.
- □ SUN-ROOF[™] Structural roof and solar collectors, all in one. Collector panels mounted flush with roof line. Hardly noticeable from ground level.
- □ **SUN-SWIM**TMSpecially sized solar collectors with factory brazed tubes and joints. Easy installation...uses pool circulator to move the water through the collector loop.

Chances are you're thinking of quoting on jobs involving one or more of the above areas right now. Don't miss this golden opportunity to think Revere Solar and see how your sales and profit picture could be affected. But you need affects facts first. Call you	Name
facts first. Call your nearest Revere Solar rep- resentative. Or fill out your name and address, and Archite whole page and motive	Company
and Architectural Products, Inc., Dept. HS119 Box 151, Rome, New York 13440.	Address
A A A A A A A A A A A A A A A A A A A	City State Zip
SOLAR AND AR A subsidiary of D	
	CHITECTURAL PRODUCTS, INC. are Copper and Brass Incorporated
Circle 97 on reader s	



The waitress returned, bearing two immense buckets of ice cream.

I Ate My Way To Fame And Fortune.

e sat down, John Chisholm and I, at opposite ends of the table.

The waitress approached.

I glanced at John for any sign of hesitation. He answered my look with our order: "Two Nantucket Buckets."

"With everything," I quickly added, knowing full well that was the only way they came.

The waitress turned toward the counter, "I hope you boys know what you're doing."

I read the menu again, just to make sure:

- -Nantucket Bucket-
- 16 scoops ice cream
- 8 flavors
- 4 toppings
- 1 pint whipped cream
- 6 cherries

and a \$25 Savings Bond to the man, woman, or child who could consume one in a single sitting.

John was calmly polishing his spoon when the waitress returned, bearing two immense buckets of ice cream.

The place fell silent, and John's spoon fell, with much noise, to the floor.

Well, to make a tall order short, we finished our task in just under two hours. We were heartily congratulated by the owner, the waitress, and the small crowd that had gathered.

A public service of this publication and The Advertising Council.

118_B housing 11/79

But John, in a gesture that will go down in the annals of gastronomy, did not rest on his laurels.

"An order of fries," he calmly told the waitress. Fries, What class!

5

John ate those fries. Even looked like he was enjoying them. And then, together, we staggered into the warm afternoon sun, fame under our belts and a fortune in our pockets.

That was years ago.

Today John and I are still friends.

He's leading a quiet, normal life in a small town outside Boston. And I, predictably enough, have a couple of ice cream shops of my own, thanks to that first Savings Bond, and the many I added to it over the years. I even have a big bucket with a \$50 Bond Challenge.

And if I ever meet the brave soul who can eat a side of fries on top of that, I'll double it.

U.S. Savings Bonds are safe, steady and dependable. There's no easier way to fulfill your dreams. Whatever they are.



ACORN ENGINEERS ENERGY-SAVING SOLUTIONS



Series 2500 Acorn sliding windows feature a full thermal break, insulated glass for energy-savings and a rugged secure lock for extra safety.



Energy saving Acorn windows for example. Acorn can offer you a full line of double and triple glazed energy saving windows with Acorn's unique A-Therm Thermal Barrier." They seal in warm air in winter and air conditioned air in summer. And that's not all. They cut air infiltration, condensation, and even noise. That kind of insulation means savings on energy costs all year long.

Acorn thermalized aluminum windows give you the warmth of wood, and then some, and won't rot like wood or get brittle like vinyl in winter. They're enamel finished and built to last. And we make them in a variety of sizes for practically any building need. Sound good? There's more.

Acorn windows are available from a wide distribution network. Over 300 outlets in 44 states for fast, easy, on-time delivery. That means no waiting or worrying and no costly building delays.

For more information write Acorn at 12620 Westwood, Detroit, Michigan 48223. We've got an energy saving solution for you.



Circle 119 on reader service card



Acorn series 3500 singlehung windows feature the unique A-Therm Thermal Barrier and insulated glass for the ultimate in energy efficiency.





The ONLY Solar Glazing Panel That Is So Highly Insulated – With Solar Transmission of 77% – Light Transmission of 84% – Insulating "U" value of .46!

The Panels are: • Impact Resistant • Shatterproof • Easily Cut and Installed • Lightweight • Insulated • Equal to or Better than Glass in Solar Properties • Economical • Inert to Chemical Atmospheres • Easily Maintained • Diffused Light Transmitting • Superior in Heat and U.V. Resistance • Low Expansion Coefficient.

Factory prefabricated 1-1/2" thick stock sizes of 4' nominal width by 8', 10', 12', and 14' long. Wood, flexible polymer glazing, or our own aluminum Clamp-tite system can be used for rapid installation.

THE MOST efficient "solar window" for your passive – or active – system.

Call or write for complete information and full color literature that shows several lovely ways the Panels have been used.

SOLAR COMPONENTS DIVISION KALWALL CORP. P.O. Box 237, Manchester, NH 03105 Phone 603-668-8186





Mortise dead-bolt lock (*left*), part of the "K" series, is for heavy-duty use. Standard cylinders and handles are available for openings ranging from $1\frac{1}{16}$ " to $2\frac{1}{3}$ ". Unit has a "bright-brass" finish. Schlage Lock. Circle 243 on reader service card



Utility cylinder lock (above) is suitable for desks, file cabinets and security-alarm control panels. Lock fits $\frac{3}{4}$ ' openings. Best Lock. Circle 244 on reader service card

Electronic alarm (*left*) registers power failures. Unit plugs into a 110v receptacle and rings if electrical current is broken. Cable Electric. *Circle 245 on reader* service card



Safety harness (above), used to escape from emergency situations, is available in 30', 49' and 79' sizes. B-K. Circle 246 on reader service card

Circle 120 on reader service card

CHROMABOND CONVERT

"When you've fought discoloration due to mildew the way I have you sure welcome vinyl flooring with the new Congoleum" Chromabond" formula. Mildew won't touch it! Besides, it's stain resistant, tough and durable. Believe me, Chromabond helps me sell my homes."

Michael Rich, Pell Corporation, at Wellington, West Palm Beach, Fla.

We invented Chromabond to help builders like you and Michael Rich solve flooring problems. We're happy to say it has succeeded. *Villager*,™ our first vinyl flooring using the exclusive Chromabond formula, meets virtually all the requirements your new homes demand.

For starters, *Villager* is extremely durable. The crystal-clear wear surface surpasses F.H.A. minimum requirements by 20%.

Villager is far more stain-resistant than other resilient floors. And, as Michael Rich knows, you can install Villager on any surface, even those which have potential alkali and moisture problems because the Chromabond formula gives Villager extraordinary re-



sistance to discoloration caused by mildew.Our*Villager* line has designs and colors that are specially styled to meet home builders' needs.

When you think of the call backs it eliminates and the appeal it generates, we think you'll find *Villager* a sales-making addition to any home you build. Another step ahead from the innovative leader of no industry

the flooring industry.

Ask about our Residential Builder Flooring Program. Congoleum does more than make beautiful floors...we help you sell homes!

For further information, contact the Contract Sales Manager, Congoleum Corp., 195 Belgrove Dr., Kearny, NJ 07032.



CONGOGOORANY OF FIRSTS THE COMPANY OF FIRSTS First printed felt based flooring 1906 • First inlaid vinyl sheet flooring 1948 • First 12' rotogravure vinyl flooring 1957 • First chemical

Circle 121 on reader service card

First printed felt based flooring 1906 • First inlaid vinyl sheet floorin 1948 • First 12' rotogravure vinyl flooring 1957 • First chemical embossing 1963 • First family of no-wax floors 1968 • First 15' vinyl flooring 1974 • First Chromabond system 1978 •



1979 Builders' Cedar library. Free.

It's the new "Do it with shakes and shingles" kit. The most complete cedar library ever created for builders. Covers 10 basic "How to" subjects: Insulation. Ventilation. Roof Junctures. Valleys and Flashings. Product selection. Economy grades. How to specify. Care and treatment. Finishing. Literature catalog. All free. Send for the Cedar Library, Suite 275, 515-116th Avenue N.E., Bellevue, WA 98004.

Or use the reader service number _

Respond.

Red Cedar Shingle & Handsplit Shake Bureau







SECI

High-security mortise lock (right) features a dead-bolt, latch-bolt and a push-button device. All bolts are made of brass. Arrow Lock. Circle 249 on reader service card



"PF3" power-failure alarm (above) plugs into a 120v outlet. During failures, a top light comes on and an electronic alarm sounds for up to 90 minutes. A red night-light indicates that the unit is properly set. Nicholl. Circle 250 on reader service card

"Dallas" entrance handle (right), made of solid brass, is available with an antique-brass or satin chromium-plated finish. Upper dead bolt and lower bolt retract simultaneously. Dexter Lock. Circle 251 on reader service card Security system (above) includes a receiving console and a door intrusion transmitter. Optional items, including a remote siren, can be added. Pittway. Circle 247 on reader service card

Digital entry system (*left*) opens doors electronically. The latch part of the system fits most standard door jambs. ESP Systems. *Circle 248 on reader service card*





If you build or sell houses in any of these markets....

Chicago Miami Phoenix Washington, D.C. Los Angeles San Francisco San Diego

... then you can't afford not to own-

The Consumer Preference Guides

These 200-page guides will give you a comprehensive statistical picture of your market.

They'll show you how to give your buyers what they want-without wasting money on what they don't want.

They break down the markets two ways:

By income, and ... By household types, including Singles Couples under 35

Couples over 35

Families under 35

Families over 35 Single parents, and ... **Unrelated Individuals**

And they tell you what these groups prefer in their homes in such categories as...

Architectural styles Floor plans Number of bedrooms Extra amenities

Type and size of lot Interior features

Compiled by Walker & Lee, the country's leading realty firm in new home sales, the guides were the basis for Housing's Consumer Preference Study published late last year.

Only the highlights of the guides were covered in that issue: Now you can get all the data available in an organized, easy-to-read format.

The price: \$48 per market

Please fill out the coupon below and mail it to:

	Preference Guide Housing Magazine 1221 Avenue of Americas New York, N.Y. 10020		H 11/79
	Please send me the Consumer Preference Guide(s) for the market(s) checked below at a cost of \$48 each.	 □ Chicago □ Miami □ Phoenix □ Washington, D.C. □ Los Angeles □ San Francisco □ San Diego 	
	My check for is enclosed		
	Name		
	Title	14	
	Company		
	Address		
	CityState	Zip	
-			

Classified **Advertising**

The market-place of housing.

INFORMATION WANTED



Apartment builder seeking to exchange in-formation regarding lawsuit over alleged faulty gas fired air conditioning units. If you have desire to cooperate and share information please call collect:

> C. G. Harris (804) 340-3535

TO ANSWER BOX NUMBER ADS: Address separate envelopes (smaller than $11'' \times 5''$) for each reply to: Box Number (As indicated) Classified Advertising Department Housing Post Office Box 900, NY 10020

POSITIONS VACANT

Architect with 6 months experience; prefer some unit condominium experience, site planning and landscape architecture knowledge. Require B.A. Architecture. \$14,000 yearly; 40 hour week. Send resume to Employment Development Department, 297 W. Hedding, San Jose 95110, Calif. Refer to #893.652-001.061.

HOUSE TOURS

Guided House Development Tours Of San Diego County Calif. for builders, developers, ar-chitects See Award developments and chitects designs from detached product to planned communities and professional decorated model complexes. Contact: Arthur H. Krauer, Ph.D., President, Housing Consultants Group, Office U-306, 3913 Ingraham St., San Diego, CA 92109 (714) 270-9798.

FOR SALE

Rafter Length Computer: "Dial" desired roof pitch. Read lengths of common, hip, valley, jack rafters. Any span. Indicates plumb, level, side cuts info. Just \$8.95 postpaid. Satisfaction guaranteed. Free literature. Emmert, Box 221-H, Sycamore, IL 60178.

BUSINESS OPPORTUNITIES

Dome Homes - Energy Saver - Seeking qualified residential home builders, developers and representatives to handle regional sales of middle income Dome Homes. Great market appeal. Write or call Domes and Homes, Inc., P. O. Box 365, Brielle, N.J. 08730.

Innovative Product Lines/Marketing concept of manufactured housing, light steel framing, units, kits, components, etc. available to qualified party. Rymode, PO Box 2711, Ken-wood Sta., Toledo, Ohio 43606.

Small Home Plains; 2, 3, and 4 bedrooms. Wide range of design, from 5 to 9 different exteriors per plan. Blueprints available. Send \$2.00 to; Mike's Drafting Service, P.O. Box 614, Cape Gi-rardeau, MO 63701.

ITERATURE

A grab bag of product info

Here's a booklet-"Residential Wiring Design Guide"-on how to plan a wiring scheme rather than on how to install it. Recommendations are presented for outlet placement in various areas of the home and represented graphically. A section on circuit requirements is included. Price: \$1.00. Quantity discounts are available. Edison Electric Institute, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036.

The 1979 edition of "Where to Buy Hardwood Plywood & Veneer" is now available. Listed in the brochure are manufacturers and prefinishers of hardwood plywood, manufacturers of fine face and commercial veneer, and veneer sales agents. For each mill that is included, species manufactured and hardwood specialty items are charted. Hardwood Plywood Manufacturers Assn. Circle 301 on reader service card

Planning guide is designed to aid in the selection of elevators and escalators for everything from public housing to luxury apartments. The 16-page brochure includes a price estimator guide. Specifications are given as an aid to planning layouts. Haughton Elevator, Reliance Electric Co. Circle 302 on reader service card

Security hardware catalog illustrates and describes such items as laminated and brass padlocks, combination locks, deadbolts, and window and patio locks. Guard Security Hardware. Circle 303 on reader service card

Swatch guide for woven wood window shades is available. The folder depicts a wide range of patterns and trim colors. Kirsch. Circle 304 on reader service card

Instructions for installing siding on manufactured housing is the subject of a blackand-white pamphlet. Emphasis is placed on achieving tighter sidewall construction, thus preventing moisture condensation from collecting in stud wall cavities. Installation techniques are explained pictorially. Masonite. Circle 305 on reader service card

"Red Cedar Shingles & Shakes" is a fullcolor brochure which supplies product data-suggested applications, installation instructions and specifications-on the featured shakes and shingles. Red Cedar Shingle & Handsplit Shake Bureau. Circle 306 on reader service card

Playground equipment is described in a fullcolor 24-page catalog. Depicted are thematic play units, climbers and special equipment designed to help rehabilitate handicapped youngsters. Playground layouts and specifications are included. Playscape Products. Circle 307 on reader service card

Installation instructions for PVC gravity sewer pipe are contained in a 75-page guide. Pipe dimensions are given. Johns-Manville. Circle 308 on reader service card

"Transition from Developer Control" is a primer which outlines transfer of control from developer to owners in condominium and homeowner associations. The 16-page report 1) summarizes the most crucial aspects of the process; 2) examines the ideal transition route; and 3) looks into the legal framework of the process. Available from the Community Associations Institute. 1832 M Street, N.W., Washington, D.C. 20036. Cost: \$5 for CAI members, \$10 for nonmembers

	with everything	
	with every	
many	AAL	
the comp		
Be the Course INTRODUCING Boeckh's Computer Cost Est Computer Cost Est Docal, up-to-date building costs. Insura Insurance ACV, Replace	systems	
Boeckh helps you maintain proper insura local, up-to-date building costs. Insura ment Cost, Insurance ACV, Replaced ment water all your needs!	mating by providing	
Boeckh's Cost Est	ance-to-value Replated	
computer or oper insu	nce reports and Depress	
i maintain pior Insura	ment Cost	
Boeckh helps you maintain proper insura Boeckh helps you maintain proper insura local, up-to-date building costs. Insura local, up-to-date building costs. Insura ment Cost, Insurance ACV, Replace ment We meet all your needs!	tos for most rests are	
Boecking-to-date unsurance Aceeds!	ost estimates imate reportal and	
local, Cost, meet all your to building of	nted cost ecations term	
Boeckh heip date builde ACV, Hei local, up-to-date builde ACV, Hei local, up-to-date building of ment Cost, Insurance ACV, Hei ment Cost, Insurance ACV, Hei Cost, Cost, Cost, Insurance ACV, Hei Cost, Cost, Cost, Insurance ACV, Hei Cost, Cost,	a commuterized	
Completion properties and the properties of the	wh's new comptime and	
tial and commediately are lines.	hing! Boecking can save available	
Boeckh helps you needsl local, up-to-date building CCV, Replace Ment Cost, Insurance ACV, Replace Cost. We meet all your needsl You'll obtain fast, accurate building of You'll obtain fast, accurate building of you'll obtain you'll obtain fast, accurate	hing! Boeckh's new computerized hing! Boeckh's new computerized mercial System can save time and ryou. Cost estimates are available only minutes after input. The inex- only minutes after input. The super- only minutes after input. The inex- only minutes after input. The inex- investor input. The input. T	
standar the company will or Colli	nei o Cost estrier input torage, te r you. Cost estrier input torage, te only minutes after input torage, te only minutes information storage, te only minutes after input torage, te only minutes after input tor	
Be the Resident money to	ny winutes ar mation see pabilities only minutes information see pabilities pensive information see pabilities provide cost savings in your trieval and update capabilities trieval and update capabilities trieval and update capabilities provide cost savings in your provide cost savings in your	
I do not have a terminal. Please send	- I hioval allo at saving	
information for use of the Computer Cost Estimating Service. mation for use of the Interactive Com- puter Cost Estimating Service.	business. Let us introduce you to our Let us introduce Estimating	
Residential Commercial/Industrial Residential Commercial/Industrial	business. unduce you mating	
	Liet us introcost Estin	
Name & Title		
Company	Systems soon!	
Address	- OFUI	
City State Zip	P.O. Box 664 P.O. Box 664 P.O. Box 664 P.O. Box 664 Milwaukee, Wisconsin 53201 Milwaukee, Wisconsin 53201	
Telephone () H1179	Milwaukee. Wisconstr (414) 271-5544	



housing 11/79

ircle 124 on reader service card

Circle 86 on reader service card



USS Swedcast acrylic presents the oh's and ah's of spas!



Relaxing, invigorating, bubbling, swirling hydromassage. That's what the spa offers and why the spa is the in thing! Look for those made from USS SWEDCAST acrylic. USS SWEDCAST is one of the most durable, color stable and weather resistant plastics currently known to man. Its application as the surface for indoor and outdoor spas — and a wide variety of other bathing/bathroom products — is beautifully perfect.

Progressive manufacturers are now producing spas, luxury tubs, wall surrounds, modular units, whirlpools, showers, lavatories and vanity tops with beautiful USS SWEDCAST surfaces. They are the pacesetters. Shouldn't you be dealing with them for greater sales, profits and customer satisfaction? To receive product literature from this group of innovators, circle our Reader Service number. USS and SWEDCAST are registered trademarks of United States Steel Corporation. All manufacturers' products meet or exceed current building code standards.



Novamont, Inc.

a Subsidiary of United States Steel Corporation

7350 Empire Drive, Florence, Kentucky 41042 (606) 283-1501 202-A Oakdale Rd., Suite 10, Downsview, Ontario M3N 2S5 (416) 745-3747

Circle 125 on reader service card

DVERTISERS INDEX

Circle No.

A

- 119 Acorn Building Components119 Stone and Simons Advs. Inc.
- 86 American General Prod. Inc.124 Advertising Diversified Srvs.
- 87 American Olean Tile108A Lewis & Gilman
- 5 Andersen Corp.4, 5 Campbell-Mithun, Inc.
- 90 Asphalt Roofing Mfg. Assoc. 118A Hoefer Dieterich & Brown

В

10 Brick Institute of America10 Henry J. Kaufman & Assoc. Inc. Business Week51-53

С

- 113 Champion Building Products113 Grey Adv. Inc. Classified123
- J. Walter Thompson Co. Cost, Rent and Profit Computer:34 Edward N. Kelly

D

3	Distinctive	Appliance	Inc.	Cov.	п
	Gaskins	Creative C	omm.		

- Campbell-Mithun, Inc.

F

25	First	American	Title	Ins.	Co.	25
41		Glass				41
		ells, Rich,				

G

54	GAF
	Scali, McCabe, Sloves, Inc.
6	General Electric
43	General Electric
	Young & Rubicam Inc.
	Gold Book103
	CMR Associates, Inc.

Circle No.

н

33 Hotpoint Div.,/Gen. Electric Co. ..33 Adv. & Sales Promotion Operations **Housing Seminars**

Κ

- 17 KitchenAid Div./Hobart Corp.17 Griswold-Eshleman/Cleveland
- 115 Kitchen Kompact, Inc.115 Halbleib & Moll Assoc. Inc.

M

- Fahlgren & Ferriss, Inc.
- 91 Manufacturers Bank118B Grumpertz/Bentley/Fried

- Kubiack Carpenter & Assoc.
- Stewart Adv. Inc.
- 92 Muller Supply Co.118C M. S. Advertising

Ν

125 Novamount Corp.125 David W. Evans, Inc. Nutone, Div. of Scovill1, 2 Intermedia, Inc.

130 Olympic StainCov. IV Kraft Smith

P

- Ketchum, MacLeod & Grove, Inc.
- Liller Neal Weltin, Inc.
- Howard Swink Adv.
- 45 Pen Ply45 Soderberg Thompson MacEwan, Inc.
- Graphic Comm.

R

Ad Forces

For your convenience Reader Service Circle numbers precede advertisers names

e			
Red	Book		
C	MR As	sociates.	Inc.

122 Red Cedar Shingle & Handsplit Shake Bureau122 Cedarcrest Adv.

- 97 Revere Solar & Arch. Prod. 118A Conklin, Labs & Bebee, Inc.
- 88 Rolscreen Co.108B, 108C Kerker & Assoc.

Circl

No.

15	Scheirich Co., H. J
	Doe-Anderson Adv.
94	Schlegel Corp118E
36	Sears, Roebuck & Co
50	Sears, Roebuck & Co50
	Stern Walter/Earle Ludgin, Inc.
120	Solar Components Div.,
	Kalwall Corp
	Synerjenn Adv.
114	Sto-Cote Products, Inc
	Kennedy Adv. Inc.

19	Therma-Tru19
	Griswold-Eshlemen/Cleveland
96	Thomas Ind
	Doe-Anderson Adv.
	Ticor Title Insurers44
	Abert, Newhoff & Burr

U

85 United States Gypsum122 Marstrat, Inc.

W

93	Walker & Lee
	Dancer, Fitzgerald, Sample Inc.
17	Waste King
	Div. of Norris Ind
	Joel Goldstein Marketing
	Communications, Inc.
	NY 1 1 1 1000

- Weslock108D **Reeds and Farriss** 95 Western Wood Products Assoc. 118F
- McCann-Erickson, Inc.
- 129 Whirlpool Corp.Cov. III The Netedu Co.

PHILADELPHIA 19102 PITTSBURGH 15222

31 York Heating & Air Conditioning Aitkin Kynett Co., Inc.

ADVERTISING SALES STAFF

ATLANTA 30309

John Strong

Dresser Tower

(713)659-8381

Advertising Sales Mgr.: Edward C. Weil III Business Mgr. Vito DeStefano Marketing Services Mgr.:

Henry G. Hardwick Classified Advertising: Frank Eberle (212) 997-2556 Send advertisements and box

number replies to: Housing P.O. Box 900, New York, NY 10020 Terry Blackwood George Broskey 1175 Peachtree St. 300 Broad St., 7th Fl. (404) 892-2868 (203) 359-2860 HOUSTON 77002

LOS ANGELES 90010 Donald Hanson 3200 Wilshire Blvd. 601 Jefferson Street South Tower (213)487-1160

STAMFORD 06901

CHICAGO 60611 **Richard Hathaway** David R. Jern 645 N. Michigan Ave. (312) 751-3700

NEW YORK 10020

George Broskey

1221 Avenue of

the Americas

(212) 997-6909

CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square (216) 781-7000

George Broskey Three Parkway

(215) 568-6161

DENVER 80203 Shirley Klotz 123 Speer Blvd., #400 (303) 837-1010

Milton H. Hall, Jr.

2 Gateway Center

(412) 227-3640

DETROIT 48075 Milton H. Hall, Jr. 4000 Town Center Suite 770 (313)352-9760

SAN FRANCISCO 94111 Richard R. Butera 425 Battery Street (415) 362-4600



A BETTER BUILDER-BUY BECAUSE ...

when you're ready to install... we deliver!

Your profit depends on having the right product in the right place at the right time. Your Whirlpool distributor knows this. That's why he'll see that your Whirlpool appliances are delivered to your site when you need them.

And that's not the only way your Whirlpool distributor delivers. His builder salesman has been thoroughly trained in one of the best builder educational programs in the business. So he knows your financing, merchandising and management problems and can help you solve them.

Whirlpool products deliver after the sale, too, with dependable performance and a service organization to help relieve you of post-sale service problems.

Whirlpool - our people and products both deliver.



📘 Our business depends on understanding your business

Beauty that's more than skin deep.



Architect: Wendell Lovett, FAIA, Seattle, Washington

Enhance and protect the natural beauty of wood with Olympic Oil Stain. Olympic *penetrates* wood to protect from within. Rich linseed oil and micro-milled pigments soak down into the fibers, giving wood a deep, uniform finish that stays beautiful no matter how wet or how dry the weather gets.

that stays beautiful no maller now wer of now Penetrates to For additional information, consult your 1979 Sweet's Catalog. Or write Olympic: Dept. P, P.O. Box 1497, Bellevue, WA 98009. P, P.O. Box 1497, Bellevue, WA 98009.

