Scandals galore: Housing is now our most investigated activity
Romney tells the President he’s quitting—and more

From towers to townhouses: how to make it big in the multifamily market
Another fine floor from Azrock

Vera Cruz
Embosed Vinyl Asbestos Floor Tile

Patterned in the popular Mediterranean style, Vera Cruz by Azrock creates a charming floor design that looks like hand-set Spanish tiles. Continuous repeat of the tile pattern achieves a sweeping wall-to-wall look.

The classic design coordinates with many decorating schemes, from Spanish to colonial Mexican to upbeat modern. Perfect for your new homes and apartments. Use it for remodeling work, too.

Available in 1/16” gauge, 12” x 12” size in four striking colors. See your Azrock flooring contractor today.

America’s leading vinyl asbestos floor tile

For free samples, write Azrock Floor Products, 557 B Frost Bldg., San Antonio, Texas 78206
Nationally advertised in the special editions of Better Homes & Gardens, House Beautiful, House & Garden and others.

CIRCLE 2 ON READER SERVICE CARD
FEATURES

77 Rental apartment marketing doesn’t sell condominium apartments—an editorial
78 How to make it big in the wider-than-ever multifamily market
80 High-rise condominiums on a choice waterfront site
86 Pinwheel fourplexes that live like detached houses
90 A western-style rental project in an eastern state capital
94 A campus-like project focused on recreation
96 A wide variety of condominium apartments built out over a man-made cove
98 A townhouse complex that sells so fast it need no advertising
102 Carpentry: how to buy the type that best meets your needs

NEWS

4 Romney tells the President he’s quitting—and several other things
4 Washington hears that Preston Martin may be leaving
9 Scandals galore—or housing is now our most investigated activity
12 Mortgage rates holding steady through ’72—but ’73 may be leap year
16 Big brother gives S&Ls the green light on variable-rate mortgages
20 Angry homebuyers light a fuse under Kaufman & Broad
24 Consumers win some concessions from big builders
28 San Francisco rules out high-rise, hints other cities should do likewise
32 Two Levitt alumni take key posts with Larwin group
32 An assessor tries to tax mobiles like homes . . . and loses
40 Private group bets on inner city with an ambitious plan
44 Mortgage banker offers speedy analysis of apartment financing options
52 How to sell 86% of a high-rise condominium before it’s built

DEPARTMENTS

36 Housing stock prices
60 The apartment scene
62 The modular scene
80 Sound modular builders are doing the job well in spite of industry upheavals
86 The mortgage scene
88 The FHA, now reeling under attack, could enjoy the rebirth of a phoenix
90 The planning scene
72 Some developers aren’t cashing in on the full potential of view orientation
74 Job/land market
118 Products
141 Personal business
165 Readers’ service card
178 Literature
180 Advertisers’ index

Cover/Coronado Shores (left) in Coronado, Calif. Photo: John Waggaman.
(Story on page 80.) Islandia (right) in Alameda, Calif. Photo: Joshua Freiwald.
(Story on page 98.)
Romney tells the President he's quitting—and a good many other things

George Romney finally decided he had been pushed around too often by the President and his White House staff, particularly Presidential assistant John Erlichmann.

Romney pushed back. He said he wanted to quit the Cabinet—at a time of his own choosing—and he then warned that "it remains to be seen" whether he will carry out a political assignment that would have him campaigning for the President in 30 cities this fall.

Romney told it all to the President in a half-hour meeting that Romney insisted on—and then he told the press.

The last straw. Like other Cabinet officers Romney has resented being shunted to Erlichmann on matters he thought he should bring to the President's attention personally. The Housing Secretary, a team-player for President Nixon for 3 1/2 years, finally rebelled when he felt he had been handled in an insulting way with a Nixon-Erlichmann order sending him to Wilkes-Barre, Pa., on a moment's notice. A formal memorandum directed Romney to halt the "bureaucratic haggling" that reportedly was slowing delivery of temporary housing for 28,000 families left homeless by a flood from tropical storm Agnes.

The June flood was the country's worst natural disaster, and some cities, such as Wilkes-Barre, were devastated. The attempt to mesh federal, state and local relief aroused frustration and political tension, even though Washington poured money into the area and supplied 7,500 mobile and modular housing units in six weeks.

The trigger. The President's sharply worded order to Romney was the White House reaction to a front-page story in the Washington Star-News, larded with complaints of Wilkes-Barre citizens about red tape and delays in getting them housing. Romney wasn't consulted about the order, and it was handed to the White House press corps before he got it.

Romney was furious, but he carried out his orders. He defended federal officials during public confrontations with Democratic Governor Milton Shapp at Wilkes-Barre (see photo). Romney said the Governor argued long and loudly over whether HUD should pay off victims' old mortgages. Photo shows Governor Shapp at Romney's side, Mrs. Matheson at right.

The Secretary refused to deliver the report that the President had demanded except to the President himself. This he did, at a meeting attended by a number of HUD officials, by General George Lincoln, head of the Office of Emergency Preparedness, and by Erlichmann.

Showdown. After the meeting Romney saw the President privately for half an hour. He told Mr. Nixon of his desire to leave the Cabinet and devote himself to a specific but unidentified job in a private capacity (that is very much part of public service). Romney believed, as he told newsmen later, that HUD employees dealing with the relief program were to be "commended, not condemned."

The President quickly acceded to one Romney recommendation, resulting in the appointment of Frank Carlucci, deputy director of the Office of Management and Budget, as the official coordinating federal efforts in the disaster area. Carlucci's appointment makes it clear that the over-all responsibility lies at the White House, not with Romney's Department of Housing and Urban Development.

Romney reportedly made other demands on the President, particularly for additional employees for the Federal Housing Administration to process mortgages and to police the subsidized-housing programs that had produced scandals in so many cities.

Political risks. The threat of an embarrassing departure by Romney, the Administration's leading spokesman—and virtually its only spokesman—for the cities, might be a blow to the President's re-election campaign in an area where it needs all the help it can get.

Romney also has strong ties to the Jewish community through his close association with a top Republican fund-raiser, Max Fisher of Detroit. And Romney has close Republican links in Michigan, a state that may be closely contested. His plugging for stronger Presidential stands on discrimination in housing and on the problems of the cities won him the progressive Ripon Society's nomination last spring as "Republican of the year."

A month ago Romney acted at a critical time for the President and at a time when Romney had little to lose. Romney says that six months earlier he had told the President of his desire to leave but that the President asked him to stay on to "deal with the problems of housing and the cities."

When Romney finally blew his cool, it had long been clear that he had no intention of seeking to stay on at HUD if President Nixon were re-elected. Romney, who is 65, obviously had little to lose by forcing the showdown with the President.

What he gained was a chance to let the public—and the President—know directly how he felt and what was on his mind.

—DON LOOMIS

NORRIS INDUSTRIES, a new force in building products brings you ideas in kitchen products
Ideas in kitchen products from Thermador

Thermador Thermatronic
Microwave Ranges

Cook a whole meal or a snack in one-fourth the usual time—and have it browned with appetizing appeal. You can even cook in shallow metal trays. The entire stainless steel interior is so easy to clean. Just wipe it out. Cool cooking prevents bake-on.

Thermador offers the widest selection of microwave equipment available anywhere. Model MTR24 (shown) in combination with the self-cleaning oven, 240 Volts. Model MTR11 (120 Volts) for under-cabinet installation browns and cooks separately. Model MTR12 (240 Volts) mounts in a like manner and browns and cooks simultaneously. Model MC11 (120 Volts) for portable use also cooks and browns separately. Models will soon be available in conjunction with hot food servers and defrosting drawers.

CIRCLE 30 ON READER SERVICE CARD

Thermador
Cooktops

Thermador offers the widest variety of cooktops available. Two, four, five and seven element units and a Griddle 'n Grill with four elements come in four colors or stainless steel. All units (except ST2) lift up for easy cleaning of drip pans and rough-in pan. The rough-in pan is only 2 3/4" deep allowing room for extra drawer space. All models (except ST2 and TM34) have indicator "on" lights for each element. "A" Models have Therma-Matic surface element for maintaining heat at pre-selected level. Therma-Matic Units and ST2 come in stainless steel only. Other colors are Canyon Copper, Snow White, Toned Avocado and Golden Tone.

CIRCLE 31 ON READER SERVICE CARD
Thermador Stainless Steel
Dishwashers

Thermador’s Masterpiece Dishwasher has all the features that make dishwashers the most necessary appliance. The Masterpiece has an all stainless steel interior which is guaranteed for a lifetime. It holds 16 place settings and washes them sparkling clean and sanitary. The “Tower of Shower” double washing arm sprays water from 4 levels and actually provides a scrubbing action. A single, uncomplicated knob lets you select the cycle you want. You may stop and re-schedule at any time in any cycle. Changeable panels for a selection of door colors and steel trim strips give the finishing touch.

CIRCLE 32 ON READER SERVICE CARD

Thermador Bilt-In
Self-Cleaning Ovens

Cleans itself...ventilates too. The objectionable heat, smoke and odors, created by the self-cleaning process, are exhausted to the outside automatically. With a manual control, the same system provides ventilation for regular oven cooking. There is no door gasket to wear out and leak smoke into the kitchen. Thermador has an exclusive self-sealing door.

Thermador Self-Cleaning Ovens are available singly, side-by-side or bi-level with one or both ovens self-cleaning. Doors may be selected from enamel colors, or stainless steel, solid or with windows and handsome black glass.

CIRCLE 33 ON READER SERVICE CARD
More ideas from NORRIS INDUSTRIES, a new force in building products.

IDEAS IN LOCK STYLES

WEISER LOCKS
4100 ARDMORE AVENUE
SOUTH GATE, CALIF. 90280

CIRCLE 34 ON READER SERVICE CARD

IDEAS IN MAJOR APPLIANCES

WASTE KING-UNIVERSAL
3300 EAST 50th STREET
LOS ANGELES, CALIF. 90058

CIRCLE 35 ON READER SERVICE CARD

IDEAS IN DECORATIVE FAUCETS

ARTISTIC BRASS
3136-48 EAST 11th STREET
LOS ANGELES, CALIF. 90023

CIRCLE 36 ON READER SERVICE CARD

IDEAS IN PLUMBING BRASS

PRICE-PFISTER
13500 PAXTON STREET
PACOIMA, CALIF. 91331

CIRCLE 37 ON READER SERVICE CARD

IDEAS IN BATHROOM FIXTURES

PLUMBINGWARE
POST OFFICE BOX 157
WALNUT, CALIF. 91789

CIRCLE 38 ON READER SERVICE CARD

IDEAS FOR THE ELECTRICAL CONTRACTOR

BOWERS
6700 AVALON BOULEVARD
LOS ANGELES, CALIF. 90003

CIRCLE 39 ON READER SERVICE CARD
No biz like scandal biz: Housing becoming our most investigated activity

A team from the Federal Bureau of Investigation and the General Accounting Office went to work some weeks ago to find out for the House Appropriations Committee how HUD's land-acquisition programs work—why prices run so high and whether profitseekers are taking the taxpayer for a ride.

The investigation is one of many under way in Washington, for housing officials and the people they do business with are increasingly subject to the scrutiny of an army of private eyes working for policy makers and administrators.

Some inquiries are year-round operations. Some, for congressional committees, rise as chairmen see targets of opportunity that promise TV coverage and headlines.

**Motives.** The Appropriations Committee's new inquiry, for example, was triggered last April when The Washington Post sprang a series of articles on a District of Columbia housing scandal. The first scandal article appeared on the day Housing Secretary George Romney began testifying before the committee's own appropriations subcommittee, headed by Representative Edward P. Boland (D., Mass.).

Romney was asking to spend $4.7 billion in fiscal 1973, and The Post's headlines told of a public housing project of 54 townhouses costing $76,000 each.

**And explanations.** To several shocked—and not too well informed—committee members, Romney tried to explain:

Urban renewal authority allows local housing agencies to buy land at high prices, clear it and then sell it to housing developers at prices low enough to enable them to build the public housing within specified cost ceilings. Renewal grant money pays much of the land cost. The houses themselves didn't cost $76,000 each, but that's what the taxpayer paid for them, counting land.

The land cost in this case, indeed, was $755,000 for 1.2 acres in a ghetto that had been wasted in the riots of 1968. That was half the cost of the project.

Moreover, the land had been bought for $398,000 six years earlier, and at least one reputable real-estate operator was quoted as saying the land "might conceivably be worth $200,000 if an investor were interested."

**And raised eyebrows.** After hearing Romney's explanation of the writedown of land costs and how this creates "an officially high market for such land," Representative Charles Jonas of North Carolina, top Republican on the subcommittee, was still skeptical. "I'm not quite sure Congress told you to do this," he told Romney.

"It doesn't look very good when you see it in operation," Romney admitted, "But that is what it is."

Whether land should be acquired in that way is one question that Chairman Boland's investigative director, C.R. Anderson, an FBI man, is trying to answer. "It will be a very comprehensive study," Anderson says.

**Demand for data.** This latest inquiry is a sign of the continuing demand—from Congress and from Romney—for independent investigations into the way HUD's multibillion-dollar programs are being administered in real life.

The land report probably won't be ready for release, if it is made public at all, until the Appropriations Committee opens hearings spring next year on the fiscal 1974 budget.

But other reports will appear sooner. The General Accounting Office, for example, has two for release this fall—on the section 235 and 236 subsidy programs. These studies are almost certain to be another blow at those two widely criticized operations.

**Routine scrutiny.** In less troubled times the GAO provides the most consistent surveillance of government housing programs. It usually has 40 professionals working at HUD headquarters in Washington and about the same number in HUD field offices.

Most GAO reports are anything but blockbusters. They're generally packed with such information as, for example, last June's report on the failures in HUD's code enforcement grants to ten cities.

But now the GAO has other reports in the works: one on FHA and VA procedures in foreclosing on defaulted mortgages, another for Senator Philip Hart's antitrust subcommittee on mortgage lenders who are not supervised by any federal regulatory agency.

**Romney's own man.** A new and tougher investigative role is being played, meanwhile, by HUD's own inspector general's office. It has a staff of 300, headed by the onetime congressional investigator Charles G. Haynes. He now reports to Romney instead of to an assistant secretary, a change made after the secretary found that he had gotten bad information from FHA officials whom he asked about the truth of the findings in Representative Wright Patman's first investigation of the section 235 program.

Haynes has 200 auditors and investigators whose reports are normally kept under tight wraps. The HUD bureaucrats can no longer be sure, however, that what is discovered by Haynes' men will be kept strictly private, since Romney himself dramatically released to Congress and the press the reports on the section 235 and 236 programs that documented the sloppiness of FHA's administrators and procedures.

**The press.** Acting quietly, HUD has also reversed a longstanding policy by releasing to news media its audit reports on local housing authorities and urban renewal agencies. These were previously kept for official use only.

Several hundred of these audit reports are made each year, and all are available to any newspapermen who take the trouble to ask for them.

And so HUD, already under investigation from every direction by outsiders, is now investigating itself from within and publicizing the results—and the end seems nowhere in sight. The agency and its industry are well on the way to becoming the most thoroughly investigated of all American activities.

Castle or cottage—our fittings fit.


Heritage—Elegance in chrome or 24-karat gold plate with fluted acrylic handles. Centerset or spread for lavatory. Matching bath/shower fittings in chrome or gold plate.

Ultra Font—Unique, highly convenient non-splash trajectory spout. Wash hair without spray. Use for ready drinking fountain. Fluted smoke acrylic handles. Chrome or 24-karat gold plate.

A full family of handsome fittings from one source—American-Standard, where the best keeps getting better.
Washerless valves set the standard for wear-resistance.

**Ceramix Cartridge**—Strong heart of Aquarian. Jewel-hard polished ceramic discs control water flow and temperature. Impervious to sand, silt, grease.

**Aquaseal**—backbone of Heritage and Ultra Font. Moving parts are not in the waterway. No more seat washer wear. Stem thread lubrication effective for life of fitting.

For details write American-Standard, P.O. Box 2003
New Brunswick, N.J. 08903
Mortgage rates holding stable for '72—but '73 may be leap year of sorts

The mortgage market is normally resigned to being the residual outlet for the nation's savings—meaning that once a strong cyclical recovery in the economy takes hold, it chokes off the expansion of housing activity until the next business slump loosens the knot.

Now an economic boom has caught up with record growth in housing starts. That should provoke the familiar symptoms, with interest rates soaring, savings and loan institutions squeezed out of their deposits, and builders foraging for scarce financing.

But the consensus among money men is that—providing the markets do not take fright at next year's nebulous but still scary inflation problems—1972 should end with only a negligible rise from the present level of mortgage costs.

"So much money." The key to confidence for the rest of 1972 is the fact that S&L deposit inflows are not merely strong this year but super-strong. First-half inflows totaled $13.7 billion, versus $20.7 billion for all twelve months of the extraordinary record 1971 year and $5.3 billion for all of 1970.

"There is so much money around there has been some scratching of heads here about the fact that mortgage rates haven't actually gone down," says one Washington official working for the government's inflation-fighting Committee on Interest and Dividends.

Chairman Preston Martin of the Home Loan Bank Board doesn't go that far. But he does feel that "savings flows are so huge, I don't look for rates to go up more than 25 basis points" this year.

The same projection is made independently by Kenneth Thygerson, economist for the U.S. Savings & Loan League in Chicago. And some Federal Reserve officials are even more optimistic, predicting no more than a 5 to 10 basis point increase in rates by year's end. The fractions involved are mere hundredths of a single percentage point, the forecast for 1972 is tantamount to stability.

Political pressure. The outlook for the remainder of 1972 has more behind it than the flush conditions of S&L accounts. Washington has no desire in an election year to see interest rates, which are not controlled, rise to a degree that will anger citizens whose wages and prices are subject to mandatory federal controls. The Committee on Interest and Dividends, headed by Chairman Arthur Burns of the Fed, is stepping up its jawboning efforts to convince lenders that the money situation simply doesn't warrant their maneuvering toward higher rates.

The committee's officials see private lenders frequently in small groups, and Burns has recently resumed the practice of talking with somewhat larger groups of industry executives in well publicized meetings. The purpose of the visits is to calm fears, which might turn out to be self-fulfilling, that a rapid acceleration in demand for money is in prospect, out of which lenders might expect higher rates.

Abundant liquidity. The best news here is that both business and the government's own demands for credit are less onerous than it was expected earlier in the year that they would be at this time. Corporations are liquid with internal funds, and the Treasury’s debt managers have anything that approximates a pronounced rise in high-grade, long-term corporate bond yields.

"The need for further progress in curbing inflationary pressures remains great, particularly in view of potential developments in 1973. Next year collective bargaining agreements covering large numbers of workers will be reopened—against a backdrop of a substantial increase in consumer prices over the past several years."

"And in fiscal 1973 the federal budget deficit may be growing at a time when the economy is expanding briskly—and such a development would add explosive fuel to the fires of inflation."

So unchecked inflationary developments would be ominous for mortgage lenders most of all because they would portend moves by Burns' central bank to tighten money.

The U.S. League's Thygerson doesn't think that tightening by the Fed after the November election—should the Reserve follow the scenario often speculated on in the markets—would have much effect on mortgage rates this year. But he does see a clear hazard for the S&Ls in the tightening the Fed may institute next year in response to a widening deficit.

Bonds. Another threat to mortgage lenders' deposits that could materialize—and even yet in 1972—is a pronounced rise in high-grade, long-term corporate bond yields.

Charles Partee, research director at the Federal Reserve, explains: "If corporate bonds go up, marginal investors in the mortgage market, such as mutual savings banks, would switch over to corporates."

Klamann agrees: "If yields on high-grade corporates to go 8% [from their present 7% %], mortgage rates would just have to move up.

Hope ... and fear. Not all observers accept the inevitability of a march to higher rates next year. Digging in, Partee demurs:

"The only objection I have to the standard judgment that rates will rise is the fact that they are already pretty high, historically—especially long rates."

Klamann pins his hopes on Burns' committee: "If rates go up in the months ahead, the committee will not stand idly by and let it happen."

But a housing agency economist is not so sure. "Burns," he says, "has two hats. The question is which matters most."

Harry Schwartz, economist for the Federal National Mortgage Assn., feels pessimists should never overlook the fact that pressure on the credit markets has been light all year.

"Even if the worst happens," he asserts, "I don't think we will have anything that approximates the credit squeeze of 1969. The flow of savings, the new money creation and the investment by foreigners in Treasury debt have given us an advantage. I think most of it will endure."

—STAN WILSON
In Oronoque Village, a condominium community in Stratford, Connecticut that will stretch for over 300 acres, GAF Timberline® Asphalt Roof Shingles is the only roofing being used.

It's not hard to see why. Timberline combines the rugged good looks of wood shake shingles with the safety and maintenance-free convenience of modern asphalt shingles. That's a tall order for one roofing.

Moreover it won't rot, crack, warp or split. It's fire resistant. And it has a special self-sealing adhesive to keep it down in high winds.

Timberline's woodlike texture comes in 6 authentic shades. All with that rich, varied shadowing that really makes a home appealing to a potential buyer.

There was one final reason why Timberline was chosen for Oronoque Village. GAF. The company that warrants this great roofing for 25 years against manufacturing defects.

GAF Timberline. The reliable roofing.

Oronoque Village wouldn't put 1200 families under it if it weren't. For further details, call your GAF Building Products distributor, or write:

GAF Corporation
Building Products Division Dept. HH-92
140 West 51 Street
New York, New York 10020
Every time your apartments need painting, patching, or cleaning, you lose money and time. That's why you need Georgia-Pacific doors and walls. No painting or patching. And they can be cleaned quickly with a damp cloth. Easy to install, too.

**G-P Eternawall™**

This competitively priced vinyl surfaced gypsum wallboard is practically indestructible. It resists scuffs, stains, cracking, and chipping. And if Eternawall™ gets dirty, almost any stain can be removed with a damp cloth. Makes it perfect for hallways and other high traffic areas.

The vinyl is backed by gypsum. Which means Eternawall™ wallboard is perfect for fire and sound rated walls. Strong, Lightweight. And it has a Class A, U.L. labeled flame spread rating of 25. It goes up in one step. Needs no battens or exposed fasteners. And now Eternawall™ is available with either modified beveled edge or a new smooth surface system. Comes in twelve standard colors and three simulated woodgrains.
Valley Forge Paneling

G-P Paneling
Perfect for apartments because it's beautiful and tough. Georgia-Pacific paneling has a factory finish that resists scuffs. Stains. And wipes clean with a damp cloth. Georgia-Pacific's complete line includes paneling in every price range. Almost every style. In many real hardwood surface veneers and beautiful simulated woodgrain finishes that will give your apartments a private, homey feeling you simply can't get with paint or wallpaper.

G-P's Vinyl Shield Pre-Hung Door
This door and split jamb set has vinyl surfaces on both sides and all exposed edges. So you don't have to worry about scrapes or mars during or after installation. Dirt and stains wipe clean. Easily. And G-P's Vinyl Shield pre-hung door comes completely cartoned.
Installation takes only 15 minutes. Or less. Just slide the door into the opening, tack it in place, shim, assemble and install the facing jamb/casing, and nail. That's it. The door and jamb are completely finished. Units are available in authentic-looking uniform woodgrain patterns and colors.
So look over Georgia-Pacific doors and walls. Then see your G-P representative for the products that keep down upkeep.

Georgia-Pacific
Portland, Oregon 97204

CIRCLE 15 ON READER SERVICE CARD
NEWS/FINANCE

Big brother gives the S&Ls a green light on the variable-rate mortgage

The variable-rate home mortgage has been on the drawing boards for years, and some wondrous qualities have been attributed to it. It has been particularly recommended as a vehicle for helping the savings and loan associations adjust painlessly to periods of tight money.

But while the idea has won support from many quarters, including the 1969 Friend report on the S&L industry, the Hunt Commission and the Federal Reserve, only a very few S&Ls have actually experimented with such loans.

Last month the Federal Home Loan Bank Board, the S&L regulation agency, took the first steps in an ambitious program to bring the variable-rate loan out of the ivory tower and into everyday use as a mainstay of housing finance. The board formally endorsed variable-rate lending for S&Ls and issued guidelines.

**Directives.** The basics of the guidelines are these:

- The variable interest rate would move up and down according to some specified index of capital market conditions that could not be manipulated by the lender. The board suggested, but did not make mandatory, such indexes as the weighted average cost of funds to all FSLIC-insured S&Ls, the rates on three-to-five-year government securities or averages of the government securities rates with other rates, such as those on top grade public utility or corporate bond issues [see chart].

- Changes in the mortgage yield to lenders could be achieved either by varying the interest rate itself, by varying the term of the mortgage (to a maximum maturity of 35 years) or by manipulating both the interest rate and the maturity simultaneously.

- Borrowers could not be forced to take a variable-rate loan. If they did take the option, they would receive a minimum 30 days' notice of any changes in rate or maturity and have 60 days after the change to pay off the loan without any penalty.

**Waiting period.** While the S&Ls' immediate reaction to the board's move was highly favorable, it is clear that a few, if any, are going to jump right on the bandwagon.

While the board's pronouncements lend authoritative support to the notion of variable-rate lending, they were too general to be of much use to loan officers. These officials are awaiting for the Federal Home Loan Mortgage Corp. to spell out just what kind of variable-rate contract it will buy in its secondary market operations. It may be another month or so before the FHLMC gets down to specifics on which indexes it wants used and how the variable rate will be linked to the index.

**Market problems.** There is a host of questions about the marketability of variable-rate loans, and most can be answered only through a trial-and-error process. Aside from the difficulties of explaining how the mortgage scheme works to prospective borrowers and trying to forecast what might happen to their monthly payments, some experts question whether this is the right time to launch variable-rate plans. Expectations are that the bond-rate indexes suggested by the board will be moving up faster than prime mortgage rates as the economy picks up steam. Under these circumstances borrowers may be reluctant to enter into variable-rate contracts.

Preston Martin, the Home Loan Bank Board chairman, on the other hand, maintains that "the variable-rate mortgage is an idea whose time has come." He expects that lenders will offer sweeteners to entice the borrowers. For example, variable-rate loans will initially be made at anywhere from 25 to 50 basis points below the S&Ls' going rate on regular prime mortgage loans. In addition, the rate would not be changed often—perhaps no more frequently than every six months or a year. And while lenders would have to lower the rate when the index trends downward, they would not necessarily have to raise the rate just because the index turns up.

**Setback in Miami.** Timing is all important. Security Federal of South Miami, Fla., found that out in its pioneer effort to sell variables. The association marketed the idea heavily in the late 1960s and at one point had $48 million, or 25%, of its mortgage portfolio in variable-rate loans.

The initial interest rate was always set slightly below the prime rate on regular mortgages, but it was locked in step at a fixed spread above the highest rate the S&L paid on savings. All went well until late 1969 and early 1970 when, in a few months' time, the rate on savings jumped from around 5 1/2% to 7 1/2%. The resultant increase in the borrowers' rates caused a hullabaloo, and many exercised their option to pay off their loans.

Things then went from bad to worse from a public relations standpoint, according to Security Federal's executive vice president, Gerald L. Rose. Mortgage rates began to fall more rapidly than the savings index rate, and the S&L voluntarily let more borrowers out of their contracts.

"Now we've backed away from variable-rate mortgages," says Rose. "We still have perhaps 20% of our portfolio in them, but we're not going to seek any new loans until we're sure we've found a better rate to tie it to."

**Obstacles.** More importantly, perhaps, Rose sees long-run problems in keeping borrowers satisfied with the variable-rate idea. He explains:

"The customer has never taken time to understand it. When mortgage rates are rising faster than the index, he will be looking at the index and using it to try to prevent an increase in his mortgage rate. "

"But when mortgage rates are falling faster than the index, he'll want his mortgage rate lowered right away."

"You can't explain to him that his mortgage rate is tied to the index and not to mortgage rates generally."

The idea of pushing S&Ls into variables is itself controversial. A variable-rate loan behaves like a series of short-term investments that enable the lender to keep his rate of return in line with his costs of money. Presumably, when S&Ls have a significant proportion of their assets so invested, they can better compete for savings in times of rising rates. And they will not have to rely so much on borrowings from the Federal Home Loan Banks.

**And objections.** But the S&Ls will still have to contend with state usury laws. Furthermore, it may take many years before they can sell enough of the loans to reap any important benefits. The staff of the Federal Reserve, for example, calculated that if variable-rate loans comprised 25% of S&L portfolios, the increase in the mortgage interest rate from 6% in 1960 to 9% in 1970 would have raised their average return on earning assets by only about 75 basis points.

Further, widespread acceptance of variable-rate lending may come only with stronger government encouragement, such as adoption of the idea for FHA-VA loans. But this would take legislation, and key congressmen, such as Wright Patman (D., Tex.), chairman of the House Banking Committee, emphatically do not endorse the variable-rate concept. The Federal Reserve staff has suggested that the HLBB might, among other things, hold out a carrot to S&Ls by allowing part of their variable-rate holdings to be counted in meeting liquidity requirements. But the board has no such plans at present.

—Dexter Hutchins
115 new Virden lighting ideas to turn you on

a completely new 40 page catalog of Smart and Practical ideas

See what Virden has done to light. Star-spangled contemporaries. Elegant (and thrifty) Tiffanys. Outdoor posts and brackets, too. Virden is bigger and brighter.

The new Smart and Practical catalog has hundreds of lighting ideas all tucked between the pages of the latest in fixture design. Here's a catalog that is filled with ideas on decorating for your customers...your Virden man has your copy.

Inside your home or out Virden is the brightest name in lights.
Hotpoint Hustle:
It's an appliance salesman who thinks like a builder.

When we say your Hotpoint builder representative thinks like you do, we mean it.

You see, his experience in working with builders has taught him a lot about the building business: the ways to make a project more profitable and more saleable. And the ways to help prevent and solve the problems that can come up.

And his knowledge of building is just part of the story. It's also his training and the special builder services he can bring to every project. When he sees a way he can help you, he has the back-up support to get the job done.

He knows how important delivery is.

He'll work hard to see your appliances arrive when he says they will. And our factory-owned distribution and regional warehousing nationwide will help him with every delivery promise he makes.

He knows the value of good kitchen design.

He knows that a kitchen can be the best salesman a builder has. And, if you want, he can put your blueprints in front of our kitchen design staff. They'll search for ways to make your kitchens more attractive and functional.

He knows the benefits of strong merchandising.

To help you with sales and rentals you need strong, professional merchandising and advertising assistance. And that's exactly what he can offer.

Why is your Hotpoint builder representative doing all this? For a very selfish reason: he wants your business.

He can provide you with any appliance you need: refrigerators, ovens, dishwashers, air conditioners, ranges, hoods, disposers, compactors, washers and dryers. And a good way for him to do this is to do a lot more than sell you appliances.

One final word. If anything ever keeps one of our appliances from doing its job, you and your customers will be happy to know a phone call is all it takes to bring a Hotpoint factory-trained serviceman right to their doorstep.

Let your Hotpoint builder representative tell you more.

Call him. And watch him come running.

Hotpoint. The difference is hustle.
"MGIC’s 95% mortgage insurance has made a substantial contribution to our business."

Comments by George McKeon, President, McKeon Construction, Sacramento:

"Our firm began using MGIC-insured loans in 1970. Prior to that time, about 85% of our sales were financed through FHA loans. That dropped to 60% in 1971; we expect it to drop even further in the near future—probably to somewhere around 30%.

"We’ve had a strong demand for 95% mortgages from our customers. This form of high-ratio conventional financing is ideally suited for the price range of homes we build. Our apartment homes sell for $13,500 to $19,000; single-family homes sell for $21,000; town homes from $19,000 to $36,000. The apartment home, a concept developed by McKeon Construction, has proven to be the hottest sales success on the west coast.

"Naturally we prefer conventional financing over FHA. The financing for an entire condominium project can be processed and approved in 60 days with conventional loans—compared to ten or eleven months with FHA.

"Actually, the advantages attributed to FHA mortgages are more apparent than real. The effective interest rate is no less in many cases than a conventional mortgage, because the insurance premium must be included as part of the real cost to the buyer. And builders have to contend with fewer discount points when working with conventional loans.

"Plus, FHA loans present well-known problems for builders, such as restrictive covenants on density requirements. A builder can be much more imaginative, furnish the same shelter for less money, through the use of conventional financing.

"We’re looking forward to substantial growth over the next few years. The 95% conventional loan with private mortgage insurance has made a substantial contribution to our business. We expect imaginative financing programs like this to become even more important in helping meet the housing needs of the country."

McKeon Construction is recognized today as one of the giants in the housing industry; 1971 starts exceeded $100 million. George McKeon, president, was named Builder of the Year in 1971 by Professional Builder Magazine. His comments are included in MGIC’s new brochure, “Three Points of View,” an examination of 95% conventional mortgage financing. Send the coupon for your copy.

MGIC, 600 Marine Plaza, Milwaukee, WI 53201
Please send me a copy of "Three Points of View," your new brochure on 95% Conventional Mortgage Financing.

Name ____________________________
Company _________________________
Street ____________________________
City, State, Zip ____________________

MGIC Mortgage Guaranty Insurance Corporation

CIRCLE 19 ON READER SERVICE CARD

H&H SEPTEMBER 1972 19
And they're getting some action
For the nation's largest pri-
ately owned homebuilder has
been learning a tough lesson:
Never underestimate the power
of an unsatisfied customer.

Eleven owners in its Sugar-
brook subdivision near Chicago
posted large cardboard lemons as
a warning to prospective buyers
of the remaining homes.

Other Sugarbrook residents
were their complaints directly to
the Chicago Tribune.

Angry homebuyers from
K&B's Apple Tree and Forest
Heights subdivisions descended
on HUD Secretary George Rom-
ney, when he visited Chicago, to
to demand that he do something
about flaws in their houses.

An Apple Tree buyer was so
vocal in her complaints that the
Chicago Daily News gave them
front-page coverage in a general
story about poor construction in
Chicago. [For other companies
under fire, see page 24.]

And in the Detroit area
condominum buyers from the
Lakewood fourplex develop-
ment pickedet the company's
sales offices, urged that the city
council lift K&B's building li-
cense and threatened fraud and
misrepresentation lawsuits if 14
demands went unmet.

Indictment. To add to the
company's woes Royal Faubion,
former president of its Chicago
division, and Controller Maurice
Sanderman were indicted by a
federal grand jury on charges of
bribing an FHA official with
money in this area rather than
ended self-interest to spend
utility room, repairmen simply
routed out the sewer. After three
routings failed to dispel the
odors, the crew poured in acid.
Finally, on a fifth attempt, they
dismantled the plumbing. Leslie
believes they should have done
this when they first found that
routing did no good.

Leslie also points to a founda-
tion crack that was patched only
with tar and pliable plastic
sheeting. He says that despite
two patchings, it still leaks.

Kenneth Leslie, chairman of
the homeowners' association,
says that even after two meet-
ings with K&B officials, no
repairmen came—until the
boardroom lemons went up.

Then, he says, only slippad
repairs were made.

For example, says Leslie, when
sewer smells kept escaping into
the homeowners' association,
problems which he traces to in-
accurate surveying.

Forest Heights. Kaufman &
Broad's most visible problem in
metropolitan Chicago is Forest
Heights, an ill-fated HUD exper-
iment in section 235 subsidy
housing. Today 40 of the 270
homes that cost from $18,000
to $22,000 stand empty.

The subdivision was built
when new HUD regulations per-
mitted welfare families and
ADC mothers to qualify for sec-
ction 235 home ownership. Many
found it impossible to meet the
payments and simply abandoned
the houses to vandals.

Forest Heights, says a K&B
spokesman, is a "sociological
problem." The company had
tried to achieve a racial balance,
but when white buyers learned
that there might be a large per-
centage of blacks, most of them
cancelled sales.

With a population composed
primarily of poor families who
never had owned homes, con-
struction faults deteriorated into
serious problems, and flaws
caused by poor maintenance,
were blamed on the builder.

Defects. Some of the com-
plaints have a familiar ring.
Phyllis Osborn says that the
yard behind her $26,900 house
is mostly clay rather than topsoil,
hers furnace produced cold air
the first winter and still is not prop-
ertly adjusted, and bathtub
plumbing is so deepy inset that
valves or gaskets cannot be re-
placed without tearing out the
wall.

The furnace in Hazel Argue's
$20,900 house also produced
cold air. When it was fixed she
still had to turn the thermostat
up to 80 degrees to activate the
burner, and then the house got
too hot. She complains of tiles
buckling or separating, a leaky
bedroom window and a leaky
basement. After two years, sev-
eral back-porch steps show signs
of rot, and workmen have had to
drive steel shanks into the porch
itself lest it separate from the
house.

HUD's Chicago office has in-
vestigated the Forest Heights
complaints. Deputy Director
Martin Rogan says they have
uncovered cases of "shoddy
workmanship" but they have

Militant buyers light a fuse under Kaufman & Broad's Midwest operation

Eli Broad: 'We've learned our lesson...'

"...we got burned; it's a new
day, and we hope the con-
sumer and our whole industry
will benefit.

"The industry has to in-
crease its quality and learn to
treat consumers differently.
We think it's in our enlight-
ened self-interest to spend
money in this area rather than
be forced to do what we did
in Chicago, because even
after you correct the problem
you don't create any good
will."

"Chicago. "Our basic prob-
lem in Chicago was manage-
ment. The first five years we
were there we were very
proud of our product and had
fewer problems than else-
where. But when we pro-
moted Lou Berkowitz out of
Chicago, we made several bad
decisions in appointing gen-
eral managers. In some cases
customer-service complaints
could just as well have been
thrown in the waste basket—
we just didn't respond
quickly.

Sour feelings in Sugarbrook led owners to put up lemons to discourage future buyers.

To PAGE 24

CHAIRMAN BROAD

'Problem was management'

"The quality of our product
also hasn't been as good in the
last two years. I don't think
we're worse than average, but
we're not any better than
average now."

Stock. "Our stock dropped
at that particular time be-
cause a number of institu-
tions were concerned that
1973 housing starts would be
down, and they were con-
cerned about owning a stock
at such a high price-earnings
multiple. I don't think Chi-
ago had any effect on the
stock. People who know our
company know that Chicago
contributes only about 10%
of sales and earnings.'
Traditional Elegance.
New DURASOTE® Lap Siding.

1. Back-Sealed with Acrylic
2. Concealed Nailing
3. 7/16” Thick Structasote Substrate, Extra Rigid, Termite, Rot & Fungi Protected, Moisture Resistant Insulation Board
4. Korad™ 100% Acrylic Film 3 Mil Thick, U/V Stable, Guaranteed 10 Years

Substrate Tech Data

Structasote 460 Made from Recycled All-Wood Fibre Material
R-1.10, U-0.54, K-0.50
Expansion: 0.25% @ 50-90 Rel. Humidity
Apparent M.O.E., Bending: 140,000 Lb./Sq. In.
Weight: 1.2 Lb./Sq. In.
Clapboard Size: 11” Wide, 12’ Long, 7/16” Thick

More than 63 years of technology for building and ecology.

homasote
homasote company, west trenton, n.j. 08628
Closet openings costing you too much because of service call-backs?

Leigh's balanced suspension system - with patented hardware - makes the difference

You want to fill those openings at lowest possible cost — for the doors and for the installation.

You want doors that stay in adjustment, eliminating costly service call-backs.

You want doors to look right, sound right, open right, close right so they help — not hinder — your sales.

You want doors when you want them. We've got them.

After 17 years of manufacturing and marketing doors, through a nationwide sales force, we ought to know what you want. Let us prove that we do. Write, phone or send reader response card.

FULL-VU DOORS: largest variety of styles from the largest inventory

- Leigh's exclusive, patented Balanced Suspension System, with locked-in guides, allows doors to open and close easily, smoothly . . . can't jump the track.
- Easily installed in only minutes.
- Doors stay in alignment eliminating call-backs.
- Nine attractive styles provide the architect, decorator and builder with unlimited possibilities in decor — from one source.
- Available in 6' 8", 7' 6" and 8' 0" heights . . . in standard widths from 1' 6" to 8' 0".
- Generous use of sound-deadening materials make Leigh Full-Vu metal doors QUIET.

CIRCLE 400 ON READER SERVICE CARD

SLIMDOR: doors for any decor—manufactured regionally

- Custom-Built Doors to fit any size opening . . . from one manufacturer (located in your region).
- Solid Construction — the strength of steel that allows you to choose your own panels: wood, wood-grained vinyl-clad, hardboard, etc. Choose your own decor: paint, wallpaper, decals, mod . . . you name it.
- Install in only minutes. Adjust easily, permanently. You avoid call-backs.
- Two Types —
  - Bi-fold Doors . . . featuring Leigh's exclusive Balanced Suspension System. Doors operate easily, won't bind or stick, install in just minutes. Lock in . . . can't jump the track.
  - By-passing Doors . . . secured in top and bottom tracks. Roll easily, quietly — won't disengage.

CIRCLE 401 ON READER SERVICE CARD

Quality You Can See...from Leigh
Angry buyers light a fuse under Kaufman & Broad operation... continued

Michael S. Shaw

FROM PAGE 20

not found any structural faults.

The company says it was un-

aware of the many complaints

until it saw the Daily News ar-

ticle. [There were only six out-

standing complaints in K&B's

files at that time.] However, when

they talked with commu-

nity leaders, K&B's men found

that many residents did not

know how to file a service re-

quest and could not afford to

make a toll call to the main office

in another part of Chicago.

Correctives. K&B is now

working hand-in-glove with

HUD and the homeowners, first

to solicit complaints and then to

correct them. The company

promises to handle every legiti-

mate complaint, even if the

house is out of warranty, and to

be liberal in assessing what is

legitimate.

In addition, K&B is replacing

gavel driveways with asphalt,

offering to restore boarded-up

houses [which now belong to

HUD] and sell them at cost and

donating seeds and fertilizer for

homeowners to put in lawns.

Finally, K&B has contributed
$5,000 to furnishings for a day-
care center and another $5,000 to

the city of Chicago Heights to

clean the sewers.

Apple Tree. After the home-

owners' confrontation with Sec-

retary Romney, 13 of HUD's

Chicago staffers went to Apple

Tree, but only 15 homeowners

came forward with complaints. Most of these proved to be minor.

The company attributes much of

dissatisfaction to one unhappy member of the homeowners' association who refused to be mollified no matter what K&B did. It also blames a residue of racial tensions that existed two years ago, when fears that blacks would use the section 235

program to move into the area were translated into complaints about the houses.

At that time K&B bought back

two houses from owners who

had complained vociferously. It

also paid $625 each to about 30

homeowners because of a discrep-

ancy between specifications

filed with the FHA and the actual

layout of the homes. HUD's

Martin Rogan termed this discrep-

ancy "an honest mistake."

Lakewood. Only 144 of 550

units have been completed in

Lakewood, a condominium

community K&B is building in the

Detroit suburb of Northville.

And according to rules that

buyers accepted at purchase, no

homeowners' association was to

be formed until 80% of the

proposed units were sold.

But buyers formed an ad hoc

association because they felt the

company was not living up to its advertised claims.

Specifically: No air conditioning units had been installed, the refrigerators

were not frost free, large seg-

ments of the yard had no sod,

some streets were not paved,

some units lacked storage

lockers and no work was done

on the pool and playground.

The ad hoc group talked with

K&B officials in May, and after

that some work was done. But

not enough.

So the committee organized

picket lines, threatened legal ac-

tion and exerted pressure on the

Northville council to suspend

the issue of occupancy permits.

The committee credits these

tactics with forcing the company

to hold a "bargaining session" at

which the problems were

thrashed out. Says one resident:

"Kaufman & Broad seems to be

making a sincere effort in some

regards. But they had to get

pushed. They had to be kicked."

Response. The company has

responded to being "kicked" by

hiring Robert W. Grace, a former

department store executive, as a

national director of customer

relations. Grace's innovations

include:

• A professional inspection
crew to patrol houses being built

and a national inspector to

make surprise visits.

• Customer representatives to

call on each new owner to
discuss the problems to expect

and the owner's responsibilities.

• A training director to orga-

nize and direct customer sensi-

tivity classes.

• A new standardized home-

owner manual.

"The consumer movement is

here," says Grace. "It will not go

away. We must respond to it. Our
tools are responsibility, sensi-
tivity and good communications. I intend to provide Kauf-

man & Broad with these."

New president. And in Chi-

gaco where all the trouble

started, a new president is at the

helm of K&B's Illinois division.

He is David M. Brown, a former

professional city manager in sev-

eral California cities and, mos-

test recently, vice president of

the Ervin Company in Atlanta, Ga.

Jane Shaw

McGraw-Hill News, Chicago

K&B is not alone: Other big builders also under fire in the Chicago area

Larwin, Centex and Tekton are all being made to toe the line.

Larwin. Buyers at Larwin's

Greenbrook Country Develop-

ment managed to get newspaper

coverage when they complained

of faulty construction, poor

grading and a nearby dump.

Wyn Pope, former president of

Larwin's Illinois division (he has

since joined Miller Builders to

head its Florida operation) ad-

mits there is some poor con-

struction and blames "apathy in

the trades and not enough

supervision to counteract the

apathy."

The company is trying to im-

prove supervision with a new

supervisor training program, and

it is making an effort to weed out

poor subcontractors.

Centex. At the time the Vil-

lage of Bolingbrook suspended

issuing occupancy permits to

Kaufman & Broad, it also

stopped issuing permits to Cent-

ex Homes Corp. to force it to

eliminate a drainage ditch that

had been a hazard since the

spring of 1971.

Construction at Centex's

Winston Oaks subdivision was

halted for about a week.

Village manager Robert

Reyes says that continued per-

mission to build depends on the

company's progress in eliminat-

ing the ditch.

Tekton. Friction between

Tekton, of Hinsdale, Ill., and the

mayor of Westhaven, a Chicago

suburb where the company is

building its Sherwood Hills

development, has reached the

point where what homeowners

term the big political mess is

ludicrously out of proportion to

the size of the town.

Tekton is Westhaven's only

builder, and so far it has built

about 300 homes starting at

$21,200. However the town,

with a population of 1,200, al-

ready has three community

associations. Two have lined up

behind Mayor Curtis Whitaker

against Tekton, and one has

backed several village trustees

who have favored the builder.

The mayor claims the com-

pany was slow to correct flaws

in the homes. The company, on

the other hand, says there was

only one homeowner complaint

on file with the FHA until the

mayor established a complaint

committee which collected and

filed 40 complaints.

Tekton accuses Whitaker,

who at one time was acting po-

lice chief, fire commissioner and

building inspector simulta-

neously, of harassment.

To compound the problem, a

recent newspaper investigation

revealed that the mayor sold

Tekton a parcel of land for

$200,000 that he had originally

bought for $20,000.

Friction between the mayor

and the company became so pro-

nounced that a group of home-

owners feared Tekton would be

driven out of town. They circu-

lated a petition asking it to con-

inue building. About 60 signed.

In the meantime, according to

Robert Rousseau, the company's

marketing vice president, Tek-

ton has begun a crash program to

correct problems at Westhaven.
VESTA
wins the women's vote with most-wanted features!

AND...VESTA WILL WIN YOUR VOTE WITH A COMPLETE MODULAR CONCEPT!
Whatever modular size you need, 21", 24", 30", 36"...VESTA has a winning candidate!
VESTA is available in gas or electric models...and vote-getting decorator colors.
VESTA presents a complete family of modular sizes all with the 16 most-wanted features
and unsurpassed quality. Get on the bandwagon with VESTA...the unbeatable one!

CUSTOM BUILDER SERIES
Our front-running campaigner for real economy in a quality range...designed especially
for budget-conscious builders! Same Custom features available in 21", 24", 30" and
36" modular sizes...choice of decorator colors!
Low 4" backguard aligns with counter top...enhances coordinated appearance! Plus our 16
most-wanted features, of course!

CREST SERIES
A "sure winner"...in any modular size you need...21", 24", 30" and 36", all with
same Crest features. Your vote for this model is a vote for the 16 most-wanted features plus...9"
high chrome-trimmed lighted backguard, clock, black glass window.

DELUXE SERIES
A candidate worthy of your support...and we paid attention to your modular needs...in 21", 24", 30"
and 36" sizes. This Deluxe series boasts our popular 16 most-wanted features plus...6½"
high chrome-trimmed backguard with clock.

VESTA Platform
We Promise Cool Sides and Door! We designed the side panels and door with an air space to permit fresh air to wash up and out for a cooler exterior.

Every Range Looks Built-In! The Floating Trim Kit...a VESTA exclusive, fastens to range and adjusts to any type counter top...eliminates gaps. Order separately for a built-in appearance.

We Guarantee Extra Large Ovens! VESTA gives you maximum capacity in generous 17½
high ovens! These features are standard—two chrome non-tilt, locking oven racks, contoured easy-clean interior...recessed oven light!

Another Winning Feature! Our Lift-Up Cook Top promises easy cleaning of spills and easy access for servicing. Autolift support rod automatically follows top up, locks in place, frees both hands.

ECONOMICAL 20" CUSTOM GAS RANGE FOR CRITICAL SPACE REQUIREMENTS
VESTA presents a heavier, sturdier economy model to fit your smallest space needs! It features drop-door, slide-out, smokeless broiler pan and grill; two chrome, non-tilt oven racks; porcelain-finished, cast iron burner grates; porcelain enameled burner box; four 12,000 BTU top burners. In colors at slight additional charge.

VESTA offers you more
ATHENS STOVE WORKS, INC. P.O. BOX 10, ATHENS, TENN. 37303
CIRCLE 25 ON READER SERVICE CARD
Here's help in meeting homebuyers' demands for maintenance freedom.

Siding that resists denting...

And now, vertical siding...

...or wood-grain siding, of Geen vinyl.

Windows that glide freely, need no painting.

Vinyl clad gliding doors, up to 6 feet, 8 inches high.

Beautiful entrance systems of rigid vinyl.

Shutters that won't rot, won't peel.

Soffit panels that resist warping. They're strong but light, easy to handle and cut.

Two and Three Rail Vinyl Fencing.
Geon vinyl is working for you and your customers more and more.

- Tough corner bead that cannot rust, even in salt air.
- Moldings that look traditional, but conceal nicks or cuts.
- CPVC water supply pipe and PVC DWV resist build-up of hard water deposits and reduce heat loss.

To help you promise reduced maintenance in your houses, consider what PVC building products of Geon vinyl can do.

The sun can't peel and moisture can't blister them. Dent resistant, high insulation properties, no rust or corrosion.

We know more about vinyl in building products because we're the people who started it all. Our Geon vinyl makes most of the superior products possible. If you want to know about vinyl in building products, ask us.

B.F. Goodrich Chemical Company, Department H-27, 6100 Oak Tree Boulevard, Cleveland, Ohio 44131.
San Francisco rules out high-rises, hints other cities should do likewise

Developers who want to build high-rise apartments in San Francisco are going to have a tough time finding locations.

The board of supervisors has unanimously approved the city's first overall height and bulk limits, setting maximum building heights of 40 ft. in almost all residential areas, including many that never have been subject to height controls. Bulk limits vary slightly according to zoning.

Tall buildings will be allowed only downtown, where height limits are graduated from 700 ft. on downward. Downtown heights have their peaks near the transit stations that will serve the new Bay Area Rapid Transit (BART) system.

'**Model for every city.**' The far-reaching ordinance, which is an element of the urban design plan of the city, was adopted exactly as proposed by the city planning commission. Nine supervisors present at the meeting voted for the plan, with two members absent. Several supervisors favored bowing to neighborhood pressures to amend the plan to achieve even lower height limits at seven locations. Supervisor Roger Boas had planned to introduce the amendments, but he backed away when he learned from the city attorney that he would need eight votes for the amended plan. He said he did not want to gamble on losing or delaying the whole ordinance.

Boas called it an excellent ordinance, and supervisor Robert Mendelsohn said: "This is a model for every city in the country that is still clinging to life."

Board President Ronald Pelosi, who initiated the height and bulk limits two years ago, pointed out that as recently as 1965 San Francisco zoning was as permissive as any in the country, and he predicted that efforts to control growth won't stop with the new rules.

**Russian Hill's curb.** While varying heights are permitted in some areas, a flat limit of 40 ft. was imposed on Russian Hill, where apartment towers have proliferated in the past couple of decades.

Under the new rules such landmarks as the 29-story Eichler Summit could not have been built. But the new limits will not stop two large projects slated for Lombard Street on the hill—the twin towers of 300 ft. and 235 ft. planned by Kansas City developer William C. Haas, or the 300 ft. tower proposed by San Francisco financier Louis Petri. These projects stirred stormy protests by neighbors, but both were approved by the planning commission this year.

In general greater heights are allowed around BART stations than elsewhere to allow growth when the trains start rolling in mid-'73. The Mission Street corridor has limits of 105 ft. at the 16th and 24th Street transit stations and limits of 50 ft. or 65 ft. or 80 ft. elsewhere. But in one station area, Glen Park, a single-family neighborhood, it was decided that the residential characteristics could be preserved only by adoption of the 40 ft. limit.

**Few exceptions.** An exception to specific requirements of the new limits is provided for sites for which a redeveloper was formally selected by the redevelopment agency prior to Aug. 26, 1971.

Jacobs said that bulk limits will be applied strictly to most developments, although in exceptional cases the planning commission can permit flexibility through its conditional-use authority when a proper case is made. But with the height limits, no change can be made without new legislation, just as in any other rezoning case requiring action by the commission and the board of supervisors.

**Reasoning.** The goals of the height and bulk districts are:

- Relating the height of buildings to important attributes of the city pattern and the height and character of existing development.
- Relating the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.
- Promoting building forms that will respect and improve the integrity of open spaces and other public areas.
- Promoting harmony in visual relationships and transitions between new and older buildings.
- Protecting and improving important city resources and neighborhood environments.
- Conserving natural areas and other open spaces.
- Directing new development to locations where land use and transportation are appropriate.

**Civic campaigns.** The regulations are expected to quiet the clamor about too many high-rises and the loss of bay views in San Francisco, which resulted in height limit measures on ballots this year and last. Both measures, put on the ballot through initiative petitions, were backed by groups headed by dress manufacturer Alvin Duskin and were defeated.

Last June voters were asked to limit building heights in downtown areas to 160 ft. and to 40 ft. in residential areas. Variances could not have been granted except by referendum. An even stiffer proposal on last year's ballot would have limited all construction in the city to a height of 72 ft.

—JENNIS KEENE
McGraw-Hill World News, San Francisco
Whether you build Apartments, Mobile Homes, Condominiums or Single Family Residences . . .

**KEEP OUT INTRUDERS!**

For maximum security, a Weiser Dead Bolt mounted with a Key-In-Knob lock provides the following:

**FULL 1" PROJECTION DEAD BOLT** — a free turning hardened steel insert makes it impossible to saw through the bolt.

**FULL 1/2" PROJECTION LATCH BOLT** — deadlocked against pressure and manipulation by a credit card or other object.

**2 RUGGED LOCKSETS** made from finest quality materials precision manufactured to combine security and outstanding styling.

**WEISER LOCKS**
WEISER COMPANY • SOUTH GATE, CALIFORNIA
DIVISION OF NORRIS INDUSTRIES

**ANOTHER NORRIS INDUSTRIES BUILDING PRODUCT**
Whether you're building apartments, condominiums or single family homes, don't make a decision until you've checked out Sears Contract lines.

These are appliances, designed with the Builder in mind—but the brand names are the ones many, many of your prospects buy at retail, with their own dollars. You know they've got quality.

And you can get them all from one single source, delivered to your schedule. Take a look:

Certified N.K.C.A. kitchen cabinets, an elegant example at the right prices from the long line offered by Sears.

Under-the-counter 1972 Kenmore Compactor. It compresses a week's worth of trash and waste (for an average family of four) into 1/4th of its original volume and packs it in a poly-lined pick-up bag.

Kenmore Disposer makes quick, quiet work of food waste.

Kenmore Dishwasher has a porcelain finish liner for long wear.

Kenmore gas or electric ranges feature generous-sized ovens, no-drip cook tops, plus handy outlets for coffee maker, toaster, etc.

Vented or ventless hoods fit every Kenmore range.

Coldspot Refrigerator-Freezer is another 1972 Builder's line. Your choice of manual, automatic defrost or all-frostless operation. And you won't believe the value!

While you're at it, check our Contract Carpet Division for exciting new
cabinets to compactors, Sears.

lines of Contract Carpet and Hard Surface Floor Coverings. One more way Sears stands ready to help you.

There are 10 good reasons why you should consider Sears.

OK I'll consider Sears Contract Sales

Name
Position
Firm
Address
City
circle 77 on reader service card

Sears, Roebuck and Co., Dept. 733D
363 East Ohio St., Chicago, Illinois 60611 (13-HH-972 Kitchens)
Levitt alumni Lou Fischer, Dick Weiss named to key posts with Larwin

Louis E. Fischer, who stepped down as president of ITT Levitt & Sons last March, will fill the new post of vice chairman of the Larwin Group's board of directors.

And Richard Weiss, who was senior vice president of Levitt until it merged with ITT in 1968, will become president of Larwin. He had been executive vice president.

Weiss succeeds Lawrence Weinberg, who retains his posts as chairman and chief executive of Larwin, was recently named a vice president in charge of all real-estate operations for Larwin's parent, CNA Financial of Chicago. Larwin's headquarters remain in Beverly Hills, Calif.

This assessor tried to say mobile homes aren't mobile—they're just homes

So he went ahead and taxed them as real property.

Philip E. Watson, tax assessor for Los Angeles County, sent bills ranging from $15 to $500 to 30,000 mobile-home owners.

The county's share of the revenue would have come to $1.5 million.

Challenge. But to the mobile-home owners, a home is not a house. They asked the state supreme court for a writ of mandate to bar collection of the tax, and they brought two class-action suits.

One said that mobile homes situated on rented grounds in trailer parks are "personal property and not subject to assessment as an improvement to real property."

The other said coach owners in Los Angeles County would be subjected to double taxation because they had already paid one levy, a vehicle license tax.

The state court turned down the home owners' request for a writ but left the way open for them to seek relief in Los Angeles Superior Court. They did.

Answer. Watson argued in the lower court that mobiles have become real property: They are in a place and intended to stay there.

He was represented by the deputy county counsel, DeWitt Clinton, who said:

"Intention is one determining test. Older mobile homes may have moved at the rate of about once every 5½ years, but new ones don't move that often."

Clinton pointed out that there is a certain degree of attachment—the mobile home is often effectively held in place by weight, and it can contain skirting, carports and patios.

There is also adaptation of the property—the money spent to tailor mobile-home parks for the units.

As for double taxation, he argued that state and federal constitutions allow collection of both a property tax and a license or excise fee.

Michigan to get standard building code

Governor William Milliken has just signed a law setting up a nine-member technical commission to draw up a statewide code by 1974.

Twelve other states have codes covering conventionally built housing, 16 have codes for factory-built housing and eight have codes for mobile homes.

However, only Maryland, Minnesota, North Carolina, and now Michigan, have codes covering all categories [News, Jan.].

Twelve other states have code legislation pending.

Opposition. Local communities had opposed the Michigan enabling bill on the ground that it impinged on home rule. The version that finally cleared the legislature in Lansing allows localities to adopt any nationally recognized model building code or the state ordinance, which will be drafted so that it is consistent with other codes.

The law makes specific recommendations for the construction and inspection of mobile and modular homes and requires that they meet the same standards as conventionally built houses.

The legislation received strong support from the manufactured-housing industry, which must now comply with 1,100 different local building codes in the state.

"You wind up having to tear things off or add things on," said Stan Arnold, secretary-treasurer of the Michigan Construction Trade Council.

Inspection. Manufacturers must provide detailed plans and specifications. Then the commission will inspect the units and issue a certificate of acceptability as they are manufactured. It may also require test results on a unit or any of its components.

An alternative to state inspection is inspection and certification by an independent, nationally recognized code body that provides a follow-up inspection of units after installation. —GEORGE STOFER

McGraw-Hill News, Los Angeles
You build a more desirable home when you open it to natural light through single or multiple skylights of Plexiglas acrylic sheet.

Standard skylights of Plexiglas are available in a range of shapes and sizes to conform with any house design and permit the daylighting of all types of rooms, or even a completely enclosed atrium. In addition to crystal-clear colorless Plexiglas, you can choose from a range of grey and bronze tints that control solar heat and glare.

The light weight of Plexiglas makes installation of skylights economical. The toughness of Plexiglas insures safety and ease of maintenance. The time-proved weatherability of Plexiglas makes certain that your customers will be happy over the years with their windows to the sky.

Write for our brochure, "New Ideas in Home Daylighting with Plexiglas" and the names of skylight manufacturers.

PLEXIGLAS is a trademark Reg. U.S. Pat. Off.

FOR MORE DESIRABLE HOMES:

DAYLIGHT WITH PLEXIGLAS

FOR MORE
H&H SEPTEMBER 1972 33
BARK TILE
SHAKES

when your design calls for a flat shingle with a bold texture.

Bark Tile Shakes reproduce the look of deeply ridged tree-bark, the mellow color of aged cedar . . . and they are permanently fire-proof. Their heavy, irregular butt-line emphasizes the rough-hewn appearance and texture. Interlocking Bark Tile Shakes are weather-proof and decay-proof . . . assuring long years of roof-beauty for all types of structures: homes, churches, schools, institutions, commercial and public buildings.

Ludowici has two outstanding NEW Tiles for permanent roof-beauty.

CASA RANCHO
One-Piece-Mission
when your design demands a massive roll-pattern tile.

The beauty of Casa Rancho Tile, in natural red or fireflashed Granada Red, is time-defying... impervious to fire, weather and decay. The large size of Casa Rancho Tiles assures substantial savings on labor costs. Only 93* pieces per square means less installation man-hours. When a building requires a Spanish or Mission type of roof, and cost is a factor, Casa Rancho is the answer.

*West Coast Standard—69 pieces per square
CIRCLE 79 ON READER SERVICE CARD

Consult your local distributor or mail coupon.

LUDOWICI-CELADON COMPANY
111 EAST WACKER DRIVE, CHICAGO, ILL. 60601 • Phone: (312) 329-0630

New Products/New Ideas in Tile

Please send me names of your distributors and more information on

☐ Bark Tile Shakes ☐ Casa Rancho Tile ☐ Have salesman call

NAME

FIRM

ADDRESS

CITY

PHONE

COUNTRY

STATE & ZIP

Ludowici Roofing Tiles almost always outlast the buildings they beautify.

For additional information about Ludowici Roofing Tiles, see the 1972 Sweet's Catalog #7.6/Lu.
No wonder you’re paying through the nose for your long-term money.

The way to deal in the permanent mortgage market on your terms is with a finished, operating, income-producing product with a solid cashflow history behind it.

And the way to do that is with a Median Mortgage investors 3- to 10-year intermediate loan.

MMI specializes in these lever-age-expanding loans (as well as wraparounds, junior mortgages, standing-land loans, gap commitments and land purchase/lease-backs).

In fact, we’re the first mortgage investment trust in the business that does.

Amortized on a 20- to 30-year basis, an MMI intermediate loan not only gives you time to get into business. It also helps you get a higher post-completion valuation.

So when you do go long-term mortgage shopping, you’ll be dealing from strength instead of weakness.

And you won’t have to pay through the nose anymore.

Before you sign another thing, have your broker write Median Mortgage Investors, 801 Forty-First Street, Miami Beach, Florida 33140. Phone 305/534-2123.

MediHton Mortgage Investors
We move the mortgage market.

EASTERN DIVISION: Robert O. Cahill, Senior Vice President
801 Forty-First Street
Miami Beach, Fla. 33140
Phone: 305/534-2123

WESTERN DIVISION: T. W. Owens, Senior Vice President
National Foundation Life Building
3535 N.W. 58th Street, Suite 700
Oklahoma City, Oklahoma 73112
Phone: 405/947-5695

SOUTHERN FLA/CARIBBEAN REGIONAL OFFICE: Owen N. Fikes
Vice President
2233 Law Road, Suite 217
Orlando, Florida 32809
Phone: 305/644-7200

SOUTHEASTERN REGIONAL OFFICE: Owen N. Fikes
Vice President
2233 Law Road, Suite 217
Orlando, Florida 32809
Phone: 305/644-7200

NORTHEASTERN REGIONAL OFFICE: James L. Osmond
Vice President
30 Evergreen Place
East Orange, New Jersey 07018
Phone: 201/274-2290

MIDWESTERN REGIONAL OFFICE: George R. Callantine
Vice President
1001 East Jefferson Boulevard
South Bend, Indiana 46617
Phone: 219/234-6096

SOUTHERN REGIONAL OFFICE: Robert H. Jenkins, Vice President
4539 I-10 Service Road
Metairie, Louisiana 70002
Phone: 504/885-8696

SOUTHERN TEXAS REGIONAL OFFICE: Roy S. Simpson, Vice President
1106 Cullen Center Bank Building
600 Jefferson Street
Houston, Texas 77002
Phone: 713/228-6500

CENTRAL REGIONAL OFFICE: T. W. Imes, Vice President
National Foundation Life Building
3535 N.W. 58th Street, Suite 700
Oklahoma City, Oklahoma 73112
Phone: 405/947-5695

MID-ATLANTIC REGIONAL OFFICE: John S. Frisby, Vice President
7910 Woodmont Avenue
Suite 1118
Bethesda, Maryland 20014
Phone: 301/494-9140
It's a landslide in housing stocks—and mobile homes hit the skids, too

The land developers have just led housing stocks into their sharpest break since May.
And the mobile home companies joined the front rank of the retreat.

HOUSE & HOME's composite index of 25 housing industry stocks plunged to 530.53, from 588.50, in the month ended August 9.
And no wonder.
The five land-development issues on the index plummeted to 445.49 from 600.93, the five mobile-home stocks dipped to 1,751.63 from 2,142.72.

The index equates share values of January 1965 with 100. Issues on the index are overprinted in color in the lists that follow.

Here's the composite trace.

Aug. 9 Chng. Bid/Prev. Close Month
Company

Mobile Home

Aug. 9 Bid/Prev. Close Month
Company

NEWS/FINANCE

It's a landslide in housing stocks—and mobile homes hit the skids, too

The land developers have just led housing stocks into their sharpest break since May.
And the mobile home companies joined the front rank of the retreat.

HOUSE & HOME's composite index of 25 housing industry stocks plunged to 530.53, from 588.50, in the month ended August 9.
And no wonder.
The five land-development issues on the index plummeted to 445.49 from 600.93, the five mobile-home stocks dipped to 1,751.63 from 2,142.72.

The index equates share values of January 1965 with 100. Issues on the index are overprinted in color in the lists that follow.

Here's the composite trace.

Aug. 71 July 24 Aug. 72
Builders 477 470 470
Land develop. 492 601 445
Mortgage cos. 776 1,213 1,216
Mobile homes 991 2,143 1,752
S&Ls 156 196 181

Here's how the five companies in each group performed.

Aug. 9 Chng. Bid/Prev. Close Month
Company

BUILDING

Aug. 9 Bid/Prev. Close Month
Company

MOBILE HOMES & MODULES

Aug. 9 Bid/Prev. Close Month
Company

MORTGAGE INVEST. TRUSTS

Aug. 9 Bid/Prev. Close Month
Company

DIVERSIFIED COMPANIES

Aug. 9 Bid/Prev. Close Month
Company

SOURCES

It's a landslide in housing stocks—and mobile homes hit the skids, too

The land developers have just led housing stocks into their sharpest break since May.
And the mobile home companies joined the front rank of the retreat.

HOUSE & HOME's composite index of 25 housing industry stocks plunged to 530.53, from 588.50, in the month ended August 9.
And no wonder.
The five land-development issues on the index plummeted to 445.49 from 600.93, the five mobile-home stocks dipped to 1,751.63 from 2,142.72.

The index equates share values of January 1965 with 100. Issues on the index are overprinted in color in the lists that follow.

Here's the composite trace.

Aug. 71 July 24 Aug. 72
Builders 477 470 470
Land develop. 492 601 445
Mortgage cos. 776 1,213 1,216
Mobile homes 991 2,143 1,752
S&Ls 156 196 181

Here's how the five companies in each group performed.

Aug. 9 Chng. Bid/Prev. Close Month
Company

BUILDING

Aug. 9 Bid/Prev. Close Month
Company

MOBILE HOMES & MODULES

Aug. 9 Bid/Prev. Close Month
Company

MORTGAGE INVEST. TRUSTS

Aug. 9 Bid/Prev. Close Month
Company

DIVERSIFIED COMPANIES

Aug. 9 Bid/Prev. Close Month
Company

SOURCES
Introducing Barnwall.

A new exterior siding from U.S. Plywood that looks and feels like planks of real weathered barnsiding. And gives low-rise residential and commercial buildings that “best-selling” edge.

Barnwall is every bit as rugged as its name. The handy 4' x 8', 9' or 10' panels provide natural insulation, as well as great dimensional stability and rigidity. So they can be nailed directly to studs. No sheathing, building paper or corner bracing is necessary. Saving you barnloads of time and money.

Barnwall comes in two different grades. Clear (as pictured above) and rustic, with solid and filled knots. Both grades are 3⁄8” thick. With classic 8" o.c. grooving in a “plank” pattern carefully textured by U.S. Plywood. Whenever you specify textured siding, remember: we make the most complete line in the business—vertical panels (both grooved and ungrooved), lap and board-and-batten. A total of 16 different styles, including Barnwall.

For more information, contact your local U.S. Plywood Branch Office.

U.S. Plywood
A Division of Champion International
777 Third Avenue, New York, N.Y. 10017
Design depth.

You're looking at the floor designs that sell houses!

Congoleum designers know what women want. They want Congoleum cushioned floors... Shiny Vinyl no-wax floors... and exciting design.

Congoleum has 'em all! In depth. For any style. Any theme. Any price range. Nationally advertised on network TV and in magazines.

Look 'em over. Those on the left are only part of our design depth. See some you like? Circle them and send us the page. We'll have a Congoleum man to see you pronto with those and more. And we can add Carpets by Congoleum to the package.

If you're in a hurry, call collect (201-991-1000), or write Bill Schletzer, home builder sales manager, Congoleum Industries, Inc., 195 Belgrove Drive, Kearny, N.J. 07032.
Private group bets on the inner city with an ambitious plan

Can a rundown neighborhood in the shadow of Philadelphia's City Hall be transformed into a 50-acre, $400-million new city—without government financing of any sort?

Four local industries, plus a bank, an insurance company and an investment broker, are betting it can. If they are right, they stand to set a major precedent in inner-city renewal under private—and profit-making—auspices.

Scheduled for completion in 1982, Franklin Town, as the project is called, will comprise 4,000 low-income to luxury residential units, 4 million sq. ft. of commercial space, several hotels and 5,000 underground parking spaces.

It will also include a town square and a diagonally running boulevard lined with shops and theaters. Nearly 25% of the area will be open space.

Good deal. And an answer to those claiming that "Urban renewal is urban removal" is that the project will involve very few relocations, and those who are forced to move will be compensated as well or better than the Federal Urban Relocation Act calls for, according to Jason R. Nathan, president of Franklin Town Corp.

Affected are 32 homeowners, 32 renters, 64 commercial enterprises—and 100 rooming-house tenants. The plan works this way:

- Homeowners forced to relocate will be given replacement homes of equivalent value either near the project or elsewhere in the city, according to their wishes. They will be compensated for any increase in the mortgage rate that the relocation causes.

- Renters will be given up to $4,000 over four years as relocation assistance.

- Businessmen in the area encompassed by the project will not only be compensated up to $10,000 for lost business, but they will have the first crack at relocating within the project, with every effort made to design a new structure in accordance with their needs.

In addition, a sort of ombudsman, Msgr. James T. Dolan, will be on hand to arbitrate any disputes that may arise between the residents and the re-developers.

Teamwork. The idea for Franklin Town began in 1969 when the four companies—Korman Corp., a large builder, Smith Kline & French Laboratories, I-T-E Imperial Corp. and Philadelphia Electric Corp., realized that among them they owned 25 acres in downtown Philadelphia that were being put to no better use than parking lots and sites for obsolete factories.

That observation led to this plan: Pool the 25 acres and get the city not only to donate some 15 acres of streets but also to buy—subject to reimbursement by Franklin Town Corp.—the remaining ten acres needed via the city's power of eminent domain.

Tax bounty. It took some time, but the city government last year did agree to the proposal—helped, no doubt, by Nathan's estimate that the complete project would increase tax revenues 28-fold and account for nearly 5% of the city's present tax base.

Meanwhile, the developers brought a major bank, Girard Trust Co., and the Prudential Insurance Co. of America into the act as investors. And a major part of the seed money was obtained from Butcher & Sherrerd, an investment banking firm.

Through an exchange of land for stock, Franklin Town Corp. was forced to control the property and manage the joint venture.

Jumpoff. Adhering closely to schedule, demolition for the first phase of Franklin Town is to begin this fall with construction due to start by July, 1973. Phase I will comprise two major office buildings, a 400-room luxury hotel and 1,000 enclosed parking spaces.

The eventual housing mix will span a wide gamut of types: It will include both townhouses and high-rise apartments for rent and sale. Altogether, 20% of the units will be in the low-to-moderate-income category.

Day and night. The 4 million sq. ft. of commercial office space will provide space for 20,000 workers; it is for this reason that architect Philip Johnson designed the site for around-the-clock habitability.

The plan also calls for a campus for the Philadelphia Community College and extensive use of walkways to link the buildings. The site plan is designed not to eliminate, but to control, automobile traffic: "to make it not a torrent but a trickle," says Nathan.

Presently underused. Since the site gets little of Philadelphia's traffic, no major rerouting of automobile flow will be needed. Even the main boulevard is intended to serve only Franklin Town, not to be a through artery. And the underground garages will keep cars out of the site, while making them easily accessible to tenants and workers.

Nathan sums up the idea behind Franklin Town this way: "In this age of doubt about the future of all cities, it is a statement that rejects the idea of giving up on the city. We believe that the agony of America's cities is not the end of the story, but rather only a chapter."
AMF Solid Waste Compactors

Your waste space could be costing you more than an AMF Compactor—here's how to find out.

Call the AMF "Space Men" at 203-767-0111. They have the broadest line of quality compactors in the industry, backed by nationwide service and the reputation of AMF—the company that stands behind the products it sells.

AMF—the only name you really have to know in compactors. AMF Food Service Division, Plains Road, Essex, Conn. 06426.
Lightweight, balanced Senco equipment reduces operator fatigue.
Roof decks and finished roofing jobs are a snap.
Senco automatic fastening system means better productivity, increased profit.
Siding and sheathing—insulation is applied trigger fast.


Whatever the application, a Senco automatic nailer or stapler will do the job fast. One large builder reports an 80% reduction in man hours for shingle application is common. Exterior siding is applied 25% faster than by conventional methods. Builders are increasing their profits with similar savings in fascia and soffit attachment, interior trim, framing, application of insulation—to name just a few of the time-saving uses for Senco equipment.

Senco offers the lightest, best balanced and most efficient nailers and staplers in the industry. And, the fasteners they drive — Sencote® nails and staples—provide phenomenal holding power, equal to or better than most more expensive deformed shank fasteners. Sencote fasteners are easy to drive, minimize wood splitting and result in better craftsmanship.

Our interest in the builder goes beyond the sale, too. The unique Senco Construction Specialist Program means our sales representatives are trained and eager to help you keep Senco equipment in good operating condition through regular, on-site calls; help train your workers in the most proficient use of the equipment; and, assist you in setting up an economical, under-roof component operation.

Contact us for complete details, and for the name of the Senco Construction Specialist nearest you.

Visit us in Booth W-1033 at the INBEX SHOW, Louisville, Oct. 30-Nov. 2
Sketch your favorite model home into this space...

and we'll nestle this Physical-Chemical Sewage Treatment and Disposal System into it.

The day you begin sales in your next development, condominium or apartment complex, put a "Not for Sale or Rent" sign on this Sewage Treatment and Disposal Plant.

It's so innocent, you can locate it on the most desirable and prestigious property. You can build a small playground or park around it. It can be part of your service area. You may gain enough space for 3 to 4 additional home sites when compared with a conventional plant.

Cost? Add the cost of a building moratorium, intercepting sewer mains, easements, laying pipe cross-country, interest on construction loans, and of community relations: an AWT Systems plant will competitively meet all of the waste treatment and disposal performance standards.


So put up your "Not for Sale or Rent" sign. The quietest, cleanest neighbor in town has taken up residence there... an AWT Systems Waste Treatment and Disposal Plant.

AHT SYSTEMS, INC.
A jointly owned subsidiary of Hercules Incorporated and Procedyne Corporation
910 Market Street, Wilmington, Delaware 19899
Phone (302) 654-7588

AHT72-3
Mortgage banker offers speedy analysis of apartment financing options

And it's free — although restricted to most parts of the southeast and Puerto Rico.

A service of The Berens Companies, the computerized program compares in seconds the cost of building a rental project under FHA 221 D-4 (non-subsidized middle-income apartment housing) vs. conventional mortgage vs. sale-leaseback with leasehold mortgage.

Moreover, if the first projection doesn't come out to the liking of the planners, they have only to revise any one or more of the input figures — the construction term, unit mix, rental figure or whatever, and new cash flow figures will tumble out.

It means that investors, architects and developers can get together while a project is in the concept stage, and in a half-day or less choose the best among scores of different alternatives and combinations of alternatives — saving months of traditional figuring. The program can also provide an instant analysis of the investment return that any proposed amenity will provide.

Called TAP: 10 (the letters stand for Total Advance Planning), the program works like this: The planners meet with a representative of The Berens Companies who brings with him a portable computer terminal which he hooks to a central computer via a telephone handset. The computer digests all of the figures of the planners' first proposal, including: estimated mix, unit size, commercial income, construction term, taxes and insurance during construction, mortgage term, land cost, discount, cost of off-site construction, efficiency, rental rates and conventional interest rates.

The additional data that the computer needs are those which pertain to the part of the country in which the project is to be located; when this is typed in, the computer is set up to process the remaining information.

These data comprise the expense ratio as a percentage of the projected gross income, the interest rate during construction and the capitalization rate based on the interest rate of the permanent loan. They can be changed if desired, say, if a developer's superior credit rating will get him points off the interest rate during construction.

The computer digests all this information for a few seconds, then projects the total financing, total soft costs and total amount available for brick and mortar per square foot for all three financing options.

The program then asks how much the project is actually expected to cost under D-4 for brick and mortar. When this figure is cranked in, the program revises and reprints the previous figures and also projects the cash flow, depreciation available in the first operating year and, for conventional and leaseback mortgages, the projected net out-of-pocket. (The last figure is obtained by subtracting the land appreciation from gross out-of-pocket.)

TAP: 10 is presently available for projects in Maryland, the District of Columbia, North Carolina, Alabama, Georgia, Florida, Puerto Rico and part of Virginia. The service is free simply because the company can maintain it out of its mortgage fees.

The program began operating last fall; it was the brainchild of Don DeFranceaux, president of the company, which is a subsidiary of Associated Mortgage Companies, which is itself a subsidiary of First Pennsylvania Corp.

Here's a simple example of how the system works, taken from a hypothetical project used to demonstrate the system at a recent meeting of industry executives in Jacksonville, Fla.

**Location:** North Florida

**Unit mix:** 24 one-bedroom, 61 two-bedroom, 11 three-bedroom apartments

**Unit size:** 700, 900, 1,100 sq. ft., respectively

**Commercial income:** $100/mo. Construction term: 12 mo.

**Taxes during construction:** $1,100/yr. Insurance during construction: $1,500/yr.

**Land value:** $102,000 Term: 28 yr.

**Land cost:** $102,000 Discount: 4% Off-site construction: $8,000 Efficiency: 93%

**Rents:** $165 one bedroom, $195 two bedroom, $250 three bedroom

**Conventional interest rate:** 8.5%

In this case the conventional mortgage route came out best under the major parameters, and would presumably be selected by the planners.

---

<table>
<thead>
<tr>
<th>FHA-D-4</th>
<th>Conventional mortgage</th>
<th>Sale leaseback with leasehold mortgage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total financing</td>
<td>$1,570,000</td>
<td>$1,095,900</td>
</tr>
<tr>
<td>Total soft costs</td>
<td>154,322</td>
<td>79,313</td>
</tr>
<tr>
<td>Total available for brick &amp; mortar per sq. ft.</td>
<td>14.86</td>
<td>10.15</td>
</tr>
<tr>
<td>Cash flow</td>
<td>29,020</td>
<td>52,789</td>
</tr>
<tr>
<td>Depreciation available in first operating year</td>
<td>74,112</td>
<td>45,729</td>
</tr>
<tr>
<td>Estimated out-of-pocket conventional</td>
<td>374,852</td>
<td>358,670</td>
</tr>
<tr>
<td>Less land appreciation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Expected net out-of-pocket</td>
<td>374,852</td>
<td>358,670</td>
</tr>
</tbody>
</table>

In this case the conventional mortgage route came out best under the major parameters, and would presumably be selected by the planners.

Here's how it calculates the return on a swimming pool for a one- to three-bedroom apartment project:

| Rents without pool | $175 | $200 | $230 |
| Rents with pool    | 180  | 205  | 235  |
| Cost of pool       | 40,000 |  |  |

**Conventional without pool**

| Total financing   | $1,153,600 |
| Total soft costs  | 116,654    |
| Total available for brick & mortar per sq. ft. | 8.93 |
| Cash flow         | 56,798     |
| Estimated Net out of pocket | 354,027 | 365,327 |

Additional cash investment = 11,300
Additional cash flow = 2,615
Return on extra investment = 23%

*Adjusted back to allow for pool
Andersen Windows and Doors...
Opening in apartments across the country.
Every picture tells a story—the story of how Andersen Windows and Doors adapt themselves beautifully to so many styles and kinds of apartment design. From low-cost to no-expense-spared, from garden court to high-rise, from Down East to Big Sky Country, Andersen has a window that complements the concept.

There are, of course, other reasons besides good looks and design freedom for using Andersen Windows: low-maintenance, weather-resistance, fuel-savings, and so on. Because what's the good of beauty without good engineering? Andersen Windows have always married the two.

Every picture tells a story, so we'll let these pictures do just that, and put all the details on the next page...
Perma-Shield. Could this be the perfect apartment window?

No outside maintenance.
Rigid vinyl sheath does not need painting, will not rust or corrode.
(Perma-Shield Narroline® sash has a patented 4-step polyurea factory finish.)

Easy to clean.
Welded insulating glass eliminates storm windows, means only 2 surfaces (not 4) to clean, cuts heat loss.

Perma-Shield Windows are available as double-hung, casement, awning, gliding or fixed in single or multiple units. Gliding doors in 6, 8, 9 and 12 foot widths. This wide and versatile range helps the architect and builder avoid routine solutions and bring distinctive, efficient, beautiful windows and doors to apartments of every kind.

New Xi™ glass
Andersen operating windows are now being glazed with the new Xi welded, double-pane insulating glass for even better insulation.

The appeal of wood.
Inside wood trim can be finished naturally or painted to fit any decor.

Weatherproof stability.
Andersen Perma-Shield design seals out drafts, will not warp or bind.

Low heat loss.
Perma-Shield's combination of vinyl, wood and Xi™ insulating glass plus Andersen's traditional weathertightness cuts heat loss 15 to 35%.

Want more information? All the types and technical data are in Sweet's File (Sections 8.16 An and 8.6 An) but if we can do anything else to help you make beautiful buildings, mail the coupon to: Andersen Corporation, Bayport, Minnesota 55003.

☐ Send me literature on Andersen Windows and Doors.
☐ Have a representative call on me.

Name ____________________________
Address __________________________
City ____________________________ State ______ Zip ______

Andersen Windowwalls
ANDERSEN CORPORATION
BAYPORT, MINNESOTA 55003

Apartments shown on preceding pages are:

1 & 2—Cheesman Garden Apartment, Denver, Colorado. Architects: Slater, Small, & Spence, Denver, Colorado
3—Carrington House Condominium, Salt Lake City, Utah. Designers: Linsar Coop., Provo, Utah
8—North 40 Apartments, Great Falls, Montana. Architect: Korell & Iversen, Great Falls
9 & 10—The Chaumont Apartments, Wichita, Kansas. Architects: Calvin, Perkins & Jones, p. a., Wichita

CIRCLE 48 ON READER SERVICE CARD
insist on a genuine Genie® AUTOMATIC GARAGE DOOR OPENER SYSTEM

BY ALLIANCE

Genie—"the garage door picker-upper!"

Opens the door...turns on the light...closes the door...locks up tight!

Genie! The extra touch that closes home sales faster.
Genie! Pre-sold through national advertising and local promotion.
Genie! Backed by a nation-wide network of reliable dealer service outlets.
Genie! Performance-proved by satisfied users everywhere.

Call your local dealer or mail coupon today. You'll find out how the merchandising program for Genie Automatic Garage Door Opener Systems by Alliance can help you sell more homes.

The ALLIANCE Manufacturing Co., Inc., Alliance, Ohio 44601

A NORTH AMERICAN PHILIPS COMPANY

The Alliance Tenna-Rotor®... "TV's Better Color-Getter!"

Send booklet about Genie and names of nearest dealers.

Name ____________________________
Address __________________________
City ____________________________ State ______ Zip ______

©1971 The Alliance Mfg. Co., Inc.
This is Paslode's SGN-35. It drives 6d to 16d (2" to 3½") nails, including 6d and 8d ring shanks. It reloads in seconds, with the same or different nails, without adjustment. Its versatility encourages use of the right nail in the right place, and can reduce your power nailer investment.

The SGN-35 weighs only 8 pounds 12 ounces, is compact and well balanced for fast, accurate nailing, and has the all-weather dependability of the famous Paslode Gun-Nailer®. Safety bottom trip is standard.

If you nail for money, look to Paslode for the tools and nails to do it right. There's a Paslode man near you to demonstrate. Call him, or write us.

Paslode Company (Division of Signode), 8080 McCormick Blvd., Dept. HH, Skokie, Ill. 60076

In Canada, Paslode Canada Reg’d.
The big boys go with the leader!

Wood Bros. find U/R fiberglass bath rates A-1 in "public acceptance" test.

From a house-at-a-time start in 1950, brothers Bob and John Wood, Jr. of Denver have become housing giants in Colorado and the Southwest. The Woods attribute this outstanding growth to craftsmanship coupled with sound market research.

That's why they thoroughly pre-tested U/R's fiberglass one-piece tub-shower unit for prospective home-buyer reaction in a new development in Houston before making it a standard feature of their other communities. Report?

"We found the U/R fiberglass bath was very well received and maintenance advantages in particular were readily recognized by our customers."

Since then, Wood Bros. Homes, Inc. is installing U/R fiberglass units in its new communities in Denver, Phoenix, Houston, Dallas, Oklahoma City, Tulsa and Albuquerque, and notes sizeable savings in installation time over tubs with tile surrounds.

Time saved cuts costs. So go with the leader and save. Look us up in Sweet's File 15.20 UN. And check the Yellow Pages for your nearest U/R dealer or write Universal-Rundle Corp. New Castle, Pa. 16103.
How to sell 86% of a high-rise condominium before it's built

Bradley House won't be completed until September, 1973. Yet 249 of its 289 units had been sold by the end of July.

How was it done? Through an off-site merchandising center designed to solve a special marketing problem—the fact that the 16-story, Chevy Chase, Md. condominium represents a relatively new kind of life-style for the area. A look at how the center works [plan, above] explains how the problem was resolved.

First stop is a mini-theatre where comfortably seated prospects view low-key presentations on the financial benefits of condominium ownership and a travelog-like tour of the building's amenities. Next, there's a walk-through area featuring miniature amenity exhibits and displays of the 19 available floor plans. This is followed by a tour of two full-sized furnished models that open onto a passageway designed to simulate a typical high-rise corridor.

Finally there's a stop at the computer station where each prospect is given complete financial details about the unit he's interested in. Along with basics like downpayment, mortgage and tax payments, the computer prepares a statement comparing condominium ownership savings—such as projected tax credits—with outlays for renting a comparable unit. Thus, by the time he approaches a salesman, the prospect is armed with

Merchandising center is located just two blocks from site of Bradley House.
"I put KitchenAid dishwashers in my houses because they help me sleep better."

We admit, it sounded wild to us, too. But as Charles R. Fortino, President of Fortino Building Corporation explained: "An important part of selling a Fortino home is keeping the customer happy. If I furnish the appliances in a house and they don't work right, the homeowner blames me, not the appliance manufacturer.

"With KitchenAid I don't have to worry. I can't remember the last time we had a service call. I'm sure that KitchenAid quality in my kitchens has helped establish my reputation as a quality builder."

We're flattered. But we're proud, too. We're proud that Charles Fortino, one of the most prestigious builders in Elkhart, Indiana, has chosen KitchenAid practically from the day he started his own business. We're proud to be the dishwasher used in the overwhelming majority of his more than 400 homes. And we're proud of the years of trouble-free service we've given him and his homeowners.

We'd be proud to supply KitchenAid dishwashers to you, too. Check our catalog in Sweet's Light Construction File or call your KitchenAid distributor about his Builder Plan. KitchenAid Division, Dept. 2DS-9, The Hobart Manufacturing Company, Troy, Ohio 45373.
The savings on this convince you to use our

But the savings on

We don’t expect to make a believer out of you by telling you about one building where our steel framing was used.

But when we tell you that builders all over the country are starting to use it, and are saving money, you’ll probably wonder why.

And why not?

After all, our steel framing system is a great way to keep ahead of all kinds of rising building costs. Labor costs. Money costs. Lumber costs. And masonry costs. And what’s more, our steel framing system is readily available. So there’s no expensive waiting around for materials to arrive.

Furthermore, our steel framing system is the most complete lightweight structural system there is. And pound for pound it carries more load than any other framing system.

But there’s more. Our steel framing system will take any interior or exterior material—brick, wood, stucco, gypsum. You name it. And any of these materials can be easily attached to it.

It’s also easy and quick to install (that’s where the savings in labor costs come in). Also, there’s less scrap on the ground. And that cuts down on clean up time. And there’s less of a pilferage problem, too.

Because of its lightweight, you also save on materials and foundation.

All joists and studs are pre-punched. So electrical and me-

1. Marbridge Foundation Dormitory, Austin, Tex.
   Architect: Barnes, Landis, Goodman, Youngblood, A.I.A., Austin, Tex.
   Contractor: Star-Field Constructors, Austin, Tex.

one building shouldn’t steel framing system.

these others should.

chanical service lines can be installed easily.
It’s rigid. So it protects against nail “pops” or plaster cracks. That means less call-backs.
Joists and studs are easy to cut on site or in the fabrication shop. If you’re into prefab, no problem. It can be prefabricated into panels on or off the site.
Our steel framing system will not shrink, swell, rot or warp. It is also non-combustible. And in certain areas of the country that might mean lower insurance costs.
All these are pretty convincing reasons why you should look into our steel framing system for your next building. Whether it’s a townhouse, condominium, apartment, school or what have you.
Want to know more? Send for our complete brochure WC 487. You’ll get all the information and load tables you want. Or if you need the information very quickly, contact the Wheeling district office in your area.
Either way, you’ll get all the information you want. Because remember, we never know which advantage is going to convince you.

Wheeling Corrugating Company

96% of what we make builds highways, buildings and reputations.

3- Crestview Manor Apartments Unit C, Lees Summit, Mo.
   Installer: John Rice Wurling and Erection Service, Béton, Mo.
4- Villa Maria Maternity Home, Houston, Tex.
   Installer: Jim Doyle Co., Houston, Tex.
all the information he needs to determine whether or not he'll buy.

The success of this marketing technique has convinced the developers it's worth doing again for similar projects. Aside from the obvious financial advantages of having the building presold, says marketing manager Houston Park, a high-volume sales operation of this kind reduces the need for a large sales staff. There are only two salesmen, each working a five-day week. So each enjoys greater commissions. Also, because commissions will not be paid until buyers move in, it is necessary to pay draws to only two people.

And, adds Park, while it had been figured that the entire marketing budget would not exceed 4% of the anticipated gross volume, the final figure will be well below that amount because of the rapid sales pace.

Another benefit: Even though the developers were new to the area, the center established them as a credible company in the eyes of prospects.

Scale model of Bradley House which was designed by Cohen, Haft & Associates AIA. The developer is Chevy Chase Associates, a joint-venture of Mortgage Guaranty Insurance Co. and R.M. Bradley & Co. Inc. Units are priced from $27,500 to $91,500.
Carrier changes apartment cooling inside and out.

Carrier's new split system equipment is tailored neatly to apartments. In both size and cooling capacity.

Outside, Carrier's new 38GS Compact condensing unit completes the system. 16" low on the roof. Or behind the bushes on the ground.

Its upflow air exhaust cuts down the sound. So does its unique computer-designed fan.

Like its inside companion, the 38GS comes in the sizes you need to handle tons of cooling in any apartment complex. Simply.

Know, too, that since the 38GS-40VU system carries our name, you'll get the kind of tenant recognition and dealer service that's made our name.

Have a Carrier Dealer quote your next garden apartment. Inside and out. He's in the Yellow Pages. Or write us. Carrier Air Conditioning Company, Syracuse, N.Y. 13201.

Inside, our 40VU fan coil unit stands out of the way in a closet. And quietly cools an apartment.

Comes in six sizes to match your apartment sizes. And now or later, you can slip in an electric heating coil. We made room for it. Upflow. Or downflow.

On larger models, a solid state circuit even controls the fan speed. Set it. And forget it.
It's the only roof truss joint with rivet-like strength.

Even with the racking weight of a full-grown man on each side, this Fink truss joint won't give. It's fastened with Bostitch Clinch Nails — the heart of a unique truss system that combines the proven strength and durability of nail-on truss plates with the speed and low cost of simple, compact air guns.

With the Bostitch Clinch Nail System, there's no more flipping of trusses during assembly. All joints are nailed from one side only. So now you can make trusses in half the floor space normally needed.

Each Clinch Nail goes completely through both sides of each joint. "Clinching" action locks joints together, rivets the wood between two steel plates.

Two-ply Bostitch clinch plates insure precisely controlled clinching grip.

With the Clinch Nail System, you can handle almost any style truss up to 40-foot span and 7-in-12 pitch.

Everything you'll need including coil-fed nailers, compressor and hoses, truss plates, jigs, clamps and Clinch Nails come with this new Bostitch truss package.

For all the money and time-saving details, send for our new construction capabilities brochure. Write Bostitch, 503 Briggs Drive, E. Greenwich, Rhode Island 02818.

Bostitch fasteners hold fast!

BOSTITCH
FASTENING SYSTEMS
A textron COMPANY
There will be a lot more where this Peachtree Door came from...

If you’re worried about where your next order of closet doors is going to come from, you can relax. Peachtree Door is building another closet door facility that will be in full production early this spring. We expect to quadruple our bi-fold closet door output.

**Royal Ambassador**

To go with our new plant, we’ve added a new door to our full line of bi-fold closet doors. The Royal Ambassador. The louvers are tastefully framed in our exclusive one-piece molded trim. No unsightly spot weld marks or open miters. The Winter White trim complements or accents our six standard colors of baked-on enamel.

We could talk about our new panel heights and their more realistic range of adjustment. How easy it is to install a Peachtree Door. How economical they are. But, we’ve got a 12-page brochure that covers all that. Why don’t you write for it or give us a call. Then get your order in as our second plant swings into production.
Government agencies have tried many ways to produce low-income housing. They've tried building it themselves to their own specifications. They've tried contracting it to private developers. They've tried encouraging developers to build it themselves by offering financial inducements. They've also tried to manage low-income rental housing and to encourage private companies to try. And now there's talk of just giving cash to low-income people and letting them seek housing in the general market.

None of the past approaches has been a bangup success. They've proved overwhelmingly expensive. And the problems of housing management they've created are more than either governmental agencies or private developers can readily cope with. As a result, low-income housing still is being underproduced, and people who need it are increasingly impatient.

So now townspeople are taking matters into their own hands. They're proposing a more direct route to low-income housing. Instead of relying on government inducements to encourage private developers, communities are proposing laws that would force developers to build some low-income shelter in every new project.

The quota system. In Montgomery County, Md., for example, an ordinance is being pushed that would require all new for-sale and rental housing projects to include 15% low-income units. What's more, the developer would have to hand over one-third of that 15% to the county's public-housing agency.

In Los Angeles a similar proposal would require low-income housing units in 15% of every new multifamily development. Low-rent apartments would have to be built to the same design standards as other units and be scattered throughout the project. And the developer would have to guarantee that low-income households would always occupy the units.

At least proponents of this ordinance recognize that some sites aren't feasible for low-income housing because they lack certain essentials; for example, convenient public transportation. So, a developer would be permitted to build on such a site without including low-income units, provided he built them on another site available to him. In other words, Los Angeles developers would be given a low-income-unit quota for each new project and would have to meet it one way or another.

So the townspeople's new strategy to get more low-income housing built is to simply lay it on the line to each and every developer: If you're going to build at all, you've got to build housing for the poor.

Developers have learned to cope with the demands of other interests. They've worked out siting and grading compromises to satisfy conservationists who forbid new housing unless the environment is undisturbed. They've adopted affirmative marketing programs to help racial and national minorities acquire housing. They've worked out open-space compromises to persuade low-density exclusions to accept townhouses and apartments.

In other words, they've found ways to meet the demands of these groups and still do business. But finding a way to produce housing for customers who can't afford it and still keep operating at a profit is another proposition—even with government subsidies. Building it is easy enough; all that takes is money. But managing apartment buildings full of low-income households takes an ability that few developers, or the government, have yet mastered.

The social realities. Aside from the poor economics and the management headaches, laws forcing developers to mix in low-income housing with housing for all other income groups would create a difficult marketing problem. How many white-collar renters, to say nothing of homebuyers, are broad-minded enough to move in next door to a hard-luck family subsisting on a welfare check? Even if a silver-tongued rental agent could talk them into it, how long would it last?

Scatter-site public housing is an issue that communities across the country have voted down. How easily can developers force such housing on a community by offering for sale nothing but the equivalent scatter-site low-income housing developments? Indeed, does any developer have the financial staying power and the marketing expertise to persuade renters and buyers to put this kind of egalitarianism into practice?

The new tack of forcing low-income housing on developers also is being applied in a more subtle way to existing housing. Most local rent-control boards are actually designed to force apartment owners to accommodate low-income residents.

In Berkeley, to cite an extreme example, a municipal rent-control board of apartment residents was voted in this year with power that goes way beyond the mere imposition of ceilings on rents. This board dictates tenant-screening policies, and overrides eviction notices. Virtually any decision made by a landlord regarding his renters can be appealed to the board and reversed.

Free enterprise vs. community needs. Housing must be the only business in the country in which people feel the producer must be told to whom he can sell his product. Laws dictating how the product is engineered are common to all industries. But what manufacturer, after conforming to such requirements, has to meet regulations specifying to whom he may sell? This is the housing developer's unique fate.

The reason, of course, is that housing is not like other products. Mobile homes excluded, housing becomes a permanent fixture on the landscape and a major influence on the social and economic character of a community. So the developer, even though he's an entrepreneur like the auto manufacturer and the food processor, arouses everyone's special concern.

In addition to the growing number of communities that want a total ban on further housing, people now want the developer's product tailored not just to meet their own needs, but to solve community problems. Unfortunately, when it comes to building for poor people, the developer's business breaks down. To sell or rent his product to someone who can't really afford it means giving it away for something less than what's required to produce a profit.

There is a limit to how many times a businessman can do this and remain a businessman. The only answer to cities and counties that insist on developers either building low-income housing or not building at all is to explain the economics of building and managing low-income housing.

Developers can go part way. They can design and build scatter-site low-income housing. They can try to market scatter-site low-income housing. They can even learn how to manage low-income housing. But producing low-income housing without public assistance is something developers cannot do. As long as we don't let our communities lose sight of that, we can work with them on the low-income problem. The housing business will never be like the old days again. But then, neither will the economic and social orders in the communities we serve.
use all-new

**GSR**

Above/Floor Plastic Fittings

For maximum profits, install modern above/floor plumbing with GSR® Above/Floor fittings. It means extra profits — extra convenience — for builders of conventional residences, high-rise apartments, and modular, prefabricated units. Available in ABS and PVC, these fittings accommodate floor-mounted, wall-discharge water closets and raised bottom tubs and showers.

Use them along with standard GSR fittings for the full economy of all-plastic DWV systems.

- Eliminates costly plumbing below the slab.
- Pour slabs before plumbing is roughed in.
- Fewer floor penetrations are needed.
- No dropped ceilings in multi-story buildings.
- No need for expensive pipe hanger assemblies.
- Fewer fittings are required.
- Complete DWV plumbing cores easily preassembled.
- Fewer trips to the job site.

To make more profits from plumbing, go above/floor with GSR fittings. See your GSR fittings distributor or write for details.

R & G Sloane Manufacturing Company, Inc.

7606 N. Clybourn Ave., Sun Valley, Calif. 91352 • (213) 875-0160

Plant, Warehouse and Sales Office:

6100 Hillcrest Dr., Cleveland, Ohio 44125 • (216) 924-8600

Warehouse and Sales Offices:

981 Industrial Blvd., Lenexa, Kansas 66215 • (913) 898-8200

1669 Lilton Dr., Stone Mountain, Ga. 30083 • (404) 939-6644

8041 S. 198th Street, Kent, Washington 98032 • (206) 854-2334

**UPC APPROVED**

CIRCLE 61 ON READER SERVICE CARD
"Recent upheavals in the modular industry shouldn’t blind us to basic realities... A lot of sound companies are getting the job done—and well"

A few years ago it was fashionable for established companies from many diverse fields to announce their entry into modular housing. This development brought a multitude of inexperienced and incompetent “experts” into the design, production and management areas of this new industry.

As was predicted by most knowledgeable observers, the inevitable shake-out has arrived, and it is now fashionable for these same companies to announce their departures using various excuses to cover up their own inadequacies.

We also note that Wall Street is crying the blues over the demise of certain companies and the lack of success in the industry generally. What is left unsaid is that many of the public modular companies were creations of certain Wall Street opportunists in order to capitalize on the glamour of the modular image for their own short-range profits. Long term success was hardly to be expected from those companies where the main product appeared to be publicity releases. And predictably, it was those companies that were more concerned with publicity than tangible accomplishment that suffered the greatest losses.

As a result, a cloud of doubt is unfairly cast upon the validity of the total industry, and even the sound, efficient companies suffer by the association. Fortunately, however, the industry is not only made up of the few highly publicized failures. There are scores of modular housing companies, big and small, quietly getting the job done, going through the learning process and proving the validity of the concept.

Why the failures? One major repetitive deficiency appears most often, though certainly not in all cases:

The basic design concept of the housing unit did not adequately consider the necessary factors inherent in the production process to achieve satisfactory economic feasibility.

There were, of course, other important factors involved which I will cover. But in a majority of the failures, the ultimate collapse was predetermined by a product design which created extremely expensive and complicated production problems.

The initial design hurdle is basic and elementary, and it is surprising how many allegedly astute companies were caught in this trap. Also, in an effort to force the production line toward efficiency, these companies sometimes spent huge sums of money on unproven equipment whose faulty performance complicated the existing problems. However, no amount of production machinery or expertise can adequately compensate for an ill-considered design concept.

Additional requisites. Beyond the foregoing, it is also extremely important that the modular operation not only be concerned with the manufacturing of modules. It must be a fully integrated company with total and complete ability and control over design, engineering, project development and marketing. Such control is essential to production line efficiency and economic feasibility.

It is not that module sales to other builders and developers are not profitable, but it is illogical to expect that with such an uncertain market, one can maintain the required consistency and volume of design and production.

Another trap is the excessive dependence upon public housing and other various subsidized programs. While on the one hand, HUD publicly supports industrialized housing through Operation Breakthrough, the intolerable unnecessary delays, the petty red tape and the general bureaucratic nonsense make a factory operation geared to such programs an impossible task. Any modular marketing program must have balance and flexibility to guarantee continuity of the production line and site development.

It is also no secret that the political pressures of Operation Breakthrough forced certain operations prematurely into production before reasonable prototype development. Such pressures certainly contributed to hasty, erroneous decisions concerning design and plant equipment. Normal good business procedures were bypassed not only because of Breakthrough schedules, but also because the companies involved were anxious for the associated favorable publicity.

For the public company the excessive pressures from Wall Street for rapid growth and continually improved performance on a quarterly basis sometimes help create illogical decisions, which, under normal conditions, would not be good business. These extraordinary demands to serve the investment community in this fashion can ultimately work to a company’s disadvantage and to the eventual eroding of its stock price. However, it frequently appears that Wall Street is primarily interested in short-term movement in either direction rather than in long-range growth.

It is therefore apparent that a public company, publicity oriented, heavily involved in public housing and an Operation Breakthrough participant, has some very big handicaps to overcome in order to survive. Some companies are doing the job and making progress. Others are obviously not.

A successful formula is no simple process. The industry is extremely complicated and requires a high degree of expertise in all the various disciplines.

It further must have an extraordinary management able to make decisions which adequately take all the complicated factors into proper consideration and balance. If one phase dominates, e.g. design, marketing or production, the unique balance required can be destroyed.

Sufficient capital is also an essential ingredient to success. Money is the major raw material of the housing business and even more so in modular operations where investments must be made in front to pay future dividends. This capital-investment concept is foreign to the conventional housing industry and the banking community that serves housing. While money itself is no guaranty of success, the lack of sufficient capitalization and borrowing ability can be fatal even to the well-conceived efficient operation.

Modular housing is not some magic revolutionary process to create overnight low-cost shelter. It is not the answer to America’s slum housing question where the problems are more social and political than physical. Modular housing is a more efficient way of building in what has been an evolutionary process toward greater factory finishing of housing components.

A promising future. Like sand castles being washed away by the incoming tide, poorly conceived modular housing companies will continue to disappear. The industry as a whole, however, will benefit by these experiences and will grow and flourish.

If allowed to progress on a normal course without artificial pressures and factors created by fast-buck artists, governmental policies and Wall Street shenanigans, in a few years modular housing can move into a very prominent position in the American housing industry.
Johns-Manville would like to rent your next apartment.

Rentability.
Every really successful apartment building has it. Of course, there are many factors which combine to make a building rentable, but one of the most important is appearance.

If the roof is the dominant visual element of your next apartment building, you ought to take a good look at Johns-Manville’s line of Colorbestos® mineral fiber shingles. Their enduring beauty will give your building maximum rentability right from the start—and maximum salability when it’s time to sell.

Shown here: J-M’s Colorbestos® Slates. They look and act like natural slates, but with less cost, less weight, and much less difficulty of application.

If you’re looking for the look of wooden shakes without all the limitations, take a look at J-M’s Western Shakes™.

Another J-M shingle that could help you rent an apartment building in a hurry: American Colonial™. It has an interesting deep, grooved texture.

J-M mineral fiber shingles are extremely durable (not one Colorbestos roof has ever worn out) and immediately available in a broad price range. They’ve all got UL’s Class A fire resistance rating, too.

For complete information about these unusual—and unusually beautiful—shingles, circle the reader response card or drop us a line:

Johns-Manville, Box 5705-RP, Denver, Colorado 80217.

Think of it as more than just a pretty box!

Consider, instead, all the advantages unique to the Kitchen Kompact line. The natural beauty of fine wood priced to give maximum value. Built for rugged use with "family-proof," super finishes which resist most every daily abuse. Specifically designed for easy installation which means you'll save time and money.

Like fine furniture, KK cabinets enhance every decor. Decorating and accessories can change its mood from Early American to Mediterranean; Contemporary to Provincial. Seldom can a simple box give you so much flexibility.

You can be certain the product arrives as scheduled, too. Kitchen Kompact's dependability means prompt shipment to stocking distributors. Look in the Yellow Pages for the name of your nearest distributor. Or, write to Kitchen Kompact, KK Plaza, Jeffersonville, Indiana, 47130.

The Versatile Box
This simple system has expanded.

A new and much greater selection of luminaires is now available for use with Weyerhaeuser Lighting Standards. Gardco, General Electric, Holophane, McGraw Edison and mcPhilben—all have combined their exciting selection of fixtures with Weyerhaeuser Laminated Standards.

New advantage. You can now choose from more than a thousand design possibilities.

Old advantage. This is an environmental lighting system. It blends with the environment as naturally as a tree.

The wood part of the system consists of laminated wood standards in three shapes: straight, single or double curved. Plus one- and two-way crossarms.

Weyerhaeuser Lighting Standards are treated for long life with penta in light solvent. You can stain the standards or leave them natural. And local inventories are available in many markets.

For the full story on Weyerhaeuser Lighting Standards for residential areas, commercial areas, parks, urban renewal projects—write Weyerhaeuser, Box B-9522, Tacoma, WA 98401.
"If you get one contract a year through your Yellow Pages ad, it'll be worth the money you spent."

"That's what my Yellow Pages salesman told me in the very beginning," says Mr. Louis Stile of Louis Stile Construction, Inc., Akron, Ohio, "and he's absolutely right. Of course, in my line of business I think people use the Yellow Pages a lot and we probably get more than one contract a year through our ad. Our salesman was right on target with a lot of the advice he gave us. He helped us design our ad after we told him what information we wanted to get across. I think he is as much a part of our successful Yellow Pages program as our ad.

The Yellow Pages is such a good deal for us, we use it as part of our other forms of advertising. For example, in our newspaper ad, we tell people to look up our number in the Yellow Pages. And I believe they do."

Let the Yellow Pages do your talking. People will listen.

3 out of 4 prospects let their fingers do the walking.
KORAD ENDS PAINTING & REPAINTING!

Weatherable prefinishing for all exterior building products.
Builders avoid the cost and scheduling of painters.
Owners avoid repainting and repainting and repainting . . .

Call our special number (215) 592-6719 or write for the names of the many building products now available prefinished with Korad acrylic film.

SOFFIT AND TRIM SYSTEMS
BOARD AND BATTEN
SHUTTERS
LAP SIDING
ENTRANCE AND DOOR SYSTEMS
There is a crisis at FHA—a crisis serious enough to jeopardize the agency's unsubsidized mortgage programs.

But it is too soon to give up. There is hope for FHA's regeneration in a little-known experiment launched in July.

Much of the crisis is highly visible. Applications for both house and multifamily mortgages have declined 40% in recent months. Processing in some of the busiest offices takes twice as long as it did last spring.

External pressures are equally visible. The 95% conventional loan and the conventional secondary markets cut into the agency's unsubsidized market. Criticism and publicity, much of it unfair, are forcing HUD to add stricter controls.

But the severest aspect of the crisis is largely out of sight. The highly trained people who had become masters of FHA's intricate regulations are now retiring. Too big a load is being thrown on inexperienced staffs.

These problems will remain as long as FHA continues in its present form.

But isn't a new form possible? The model for a new form has been developed, and it is already on trial.

A stronger agency. If the new model succeeds, it will enable FHA to be at once a consumer protection agency and again the most effective tool the housing market has known. It will narrow the potential for abuses and scandals. It should largely eliminate the annual spring bottleneck in FHA processing. And it should cut routine processing time in half.

That's a large order. Let's see what we're talking about:

A new accelerated processing program (APP) is on trial in six HUD offices—Greensburg, N.C., Tampa, Cleveland, Fort Worth, Denver and Sacramento. The program is as yet limited to section 203b house mortgages, which are unsubsidized. The six-month test run has begun in most of these offices.

This trial procedure allows the FHA-approved lender to take over many functions formerly performed by the local insuring office. The mortgagee takes responsibility for underwriting the applicant's credit—within, of course, HUD's guidelines and with the use of HUD-approved credit-reporting agencies. The mortgagee also obtains the appraisal, although HUD will assign the appraiser.

An applicant who is clearly qualified will be processed by the mortgagee up to the point of firm commitment. No lender may directly reject an applicant, nor will the lender issue the firm commitment. This is done by HUD after review of the mortgage credit submission.

The mortgagees' staffs must take special training to participate in the program. At first, HUD will screen all cases. This will diminish gradually until no more than 25% of the cases are monitored, depending on how well each lender is performing.

Lenders will be held accountable for decisions. Recurring errors will be grounds for withdrawing eligibility for participation. And there will be the standard penalty of loss of FHA-approved status for deliberate falsification.

Program's advantages. There are a number of built-in efficiencies in this new program. It consolidates in one place functions that used to be divided between mortgagee and insuring office. It puts the incentives of private enterprise behind fast, efficient processing. It eliminates the federal budget's constraint on hiring enough staff for FHA loads. FHA's dilemma has been that its fees go into the Treasury's general fund while its budgets are appropriated by Congress, so that there is no direct relation between its budget and its workload.

Once rid of its mass of clerical detail, the FHA will be free to become a consumer protection agency, a role now strongly urged upon it. Such an agency can guard against consumer abuses and execute its social-purpose mandates with better effect.

Mortgage bankers' role. There is an interesting history behind the APP effort. In the late 1950s when housing credit was scarce in rural areas and small-town banks were reluctant to make FHA loans, there was a certified agency program (CAP). It let lenders do most FHA processing.

In 1971 when FHA Commissioner Eugene Guellege was becoming aware of his nationwide personnel drain, he talked with a committee of the Mortgage Bankers Assn. Harking back to the CAP procedure, he suggested that something similar be devised for standard FHA operations. A study committee from the MBA worked with HUD on the proposals that eventually became the program now under trial.

If the trial in the six offices is a success, and I'm convinced it will be, APP should eventually be extended to the other HUD offices. But reform need not stop there.

HUD's officials and mortgage bankers have also been discussing a similar trial program for the unsubsidized multifamily sector, and that will probably be initiated soon. There is no reason why APP procedures should not eventually be extended into the subsidized programs, given proper guidelines and adequate monitoring. Freed of the processing load, HUD could concentrate on the counseling and protection of low-income buyers.

This whole approach is, really, a close approximation of the way casualty insurance is written. The agent underwrites the risk, subject to the insurer's approval.

The program is a reminder that FHA is, before all else, an insurer, the largest insurance company of all. The approved mortgagee, in addition to his lending responsibilities, is FHA's authorized agent.

That agent ought to have full underwriting responsibility. He should be responsible for all of the FHA loan's processing. That would include issuance of the commitment (or the rejection for flatly unqualified buyers) and, ultimately, the insurance certificate. This, of course, would require that HUD develop appropriate controls.

And all this is assuming the Administration wants to preserve the FHA.

Pitfalls. Are there no problems in the new approach?

Of course there are. Some temptations are built in. The mortgage lender will sit in judgment on the customers of his customers. There will be pressures to be liberal in evaluating one marginal applicant for the sake of the nine good applicants a particular builder or broker generates. But there will also be strong counterpressures. A mortgage banker, for example, risks his livelihood if he loses his FHA approval.

Indeed, the temptations are not really as great nor the potentials for conflict of interest as numerous as in the securities business. Yet, since the establishment of the Securities and Exchange Commission, there has been a high level of consumer protection in that business in which there is such enormous room for discretion.

In the last analysis then, the type of program we are talking about, in which underwriting responsibilities will be delegated to lenders, can be just as successful as HUD wishes it to be. If the department will be as vigilant in monitoring its industry as the SEC, as firm-willed in enforcing penalties, it can have both an efficient and trouble-free FHA.
Cost control...
The way the Kingsberry Man does it,
you save.

You probably know our fine quality. And the ready availability of our single family, multi-family and leisure home models, designed to meet FHA, VA and conventional financing requirements. But there's more. A cost control system only a top manufacturer could offer in such detail...a calculated method that guarantees you savings!

All the help you can get. Here's how:
• The Kingsberry Man sits down and shows you predetermined pricing...exact costs...on whatever package you choose.
• He gives you options, also price listed, to suit your market situation...like full frame or brick, or half brick.
• Add it all up to the penny. The entire cost, including options, is predetermined—you know just what you'll spend.
• You don't waste time getting quotes...on lumber, concrete, etc...and prices won't vary like those of local sources.
• Save approximately 50% reduction of on-site labor. You're dealing with fewer subcontractors, and saving on their high costs for labor.

Cost control. It keeps expenses down...and predetermined...while you build quality Kingsberry homes and apartments. All the help you can get...just mail the coupon and find out, fast.

Boise Cascade Manufactured Housing Group
61 Perimeter Park, Atlanta, Georgia 30341

Yes, I would like all the help I can get.

Name:
Firm:

No. lots I now have ready to build on:
None, 1-10, 11-25, 26-50

No. living units I have built in past 12 months:
None, 1-10, 11-25, 26-50

Address:

City State Zip Phone

Kingsberry Homes are distributed throughout a 46 state area and the West, MidAtlantic, Southeast and New England states from plants located in Atlanta, New, Ohio, California and Virginia.
When you're a builder-minded company like Whirlpool, you take better care, starting at the drawing board.

You make it your business to care — through every stage of engineering, manufacturing and distribution, up to and long after the builder turns over the keys.

At Whirlpool, we try to build the kind of appliances you'd want in your own home. That doesn't just mean top of the line. The same, hard nosed quality control inspectors keep a watchful eye on our budget models, too.

Not just the way they're built but the way they're packaged — for secure shipment through a nationwide system of distribution points, to your building site.

And what happens after your buyer or tenant moves in, has always mattered to us. That's why we installed the Cool Line — a toll-free, day-or-night customer information number. So she'll call us, instead of you.

That's why Whirlpool Warranty Central Service pays the costs to honor our warranty obligations. (It's our responsibility, not yours.) And that's why we maintain a network of authorized Tech-Care Service centers in all 50 states — to make sure quality service is always available.

All things considered, there are lots of good reasons besides consumer acceptance of our brand name to plan Whirlpool appliances into your next project. So give your Whirlpool Distributor a call. You'll be doing business with someone who knows the builder business, who speaks your language, who does a lot more than write orders.

Whirlpool
CORPORATION

...BUILDERS FOR BUILDERS
The time is right for new Redi-Set System 310.

In less than an hour, you can have installed over almost any backup surface a tub surround in beautiful glazed ceramic tile—just what your prospect wants. It's American Olean's new Redi-Set® pre-gROUTed System 310 tub surround.

This eight-sheet system has been designed to fit most standard tub recesses. Most cuts are eliminated. The only grouting necessary is between the ceramic tile sheets, around the corner strips and around the bathtub.

The flexible, waterproof grout is a prospect pleaser, too. It resists mildew and stains, stays white, can be cleaned easily with a damp cloth. And it won't crack when the building settles.

What's more, the price is right. Since working time is money, figure on $69 to $95 for an installed tub surround.

The ceramic tile meets FHA requirements, of course.

Redi-Set pregrouted ceramic tile. It's the natural thing to use.
View orientation can enhance the value of a subdivision ... But many developers aren’t cashing in on the full potential of their surroundings

Millions of dollars are spent every year on such man-made amenities as golf courses, lakes, ski slopes and yacht harbors. Yet in many cases the developer is not taking full advantage of views of these costly amenities that he could provide from his homes. In addition, many sites already have features such as city sights, natural lakes, valleys, oak-studded hillsides or an ocean beach, all of which should be considered for view exploitation.

The number of houses and number of rooms that look out on such views will make a great difference not only in the value of the individual homes but in that of the overall development as well.

What then can be done to maximize view potential? There are two very simple means by which this can be achieved. One, increase the number of houses that front on a view and two, multiply the number of rooms that overlook this view. Obviously there may be times when view is not wanted from certain rooms—a cozy den, for example. But apart from such instances, the view potential usually is not exploited to the degree it could be.

One obvious way to maximize view is to build two-story houses rather than single-story detached houses. If the minimum width of the house is about 24', five rooms can get view exposure [Figure A].

Another way to maximize the wall area on the view side without widening the house appreciably is to use the L-shaped plan. In this plan using an open kitchen, six rooms are exposed to the view with the end master bedroom having views from two sides of the room [Figure C].

When land is extremely expensive and the views are exceptionally important, conditions may warrant going to a narrow tri-level house. Obviously this allows most major rooms to overlook the view. But more importantly, about eight houses can be oriented to the view, whereas with the typical two-story plan only five houses could be so-oriented on the same amount of land. If this idea is combined with the drop-level living area in Figure B, we can see how various concepts can be combined to achieve maximum views [Figure E]. Thus we were able to aim two bedrooms, kitchen, dining and family room toward the view.

The architect or marketing consultant may not always feel it is necessary to get as many houses and rooms as possible oriented to a view. But one should realize what the potential is. We are fully aware of how much a lot facing a golf course is worth as compared to a lot at the back of a subdivision. So view potential and view actually realized by residents of a house must mean substantially greater values to everyone concerned.

Robert W. Hayes, AIA, Planning Consultant, San Francisco, Calif.
New PPG Twindow Xi™ insulates like an 8-inch-thick brick wall.*

This mark on quality windows ensures it.

The glass you see here is a beautiful new piece of insulation less than a half inch thick. It’s called Twindow Xi insulating glass.

In Twindow Xi, two pieces of glass are permanently welded together enclosing a 0.16-inch space. The space is filled with a special gas with higher insulating efficiency than the dry air used in older-type units. And the patented, welded glass edge construction ensures a true, airtight seal for long life and trouble-free performance.

Insulating qualities of Twindow Xi are superb... better than any unit with equivalent air space.

PPG and leading sash manufacturers are now advertising and promoting the Xi mark (in combination with their own trademarks and emblems). Your customers will look for the mark on your windows (it’s etched in the corner of every window). Write now for PPG’s free booklet, “A Better Insulating Glass is Really Worth the Money.” PPG Glass, Dept. HHT-292, One Gateway Center, Pittsburgh, Pa. 15222.

*Comparison based on U-values (heat loss) from Handbook of Fundamentals—1967—American Society of Heating, Refrigerating and Air Conditioning Engineers.

PPG: a Concern for the Future
JOB MARKET

Construction management: One of the nation's largest publicly owned (NYSE) housing and development companies is seeking individuals with the education, background, and desire to expand a large eastern company into a national giant. Applicants must have a degree in Construction Management, and, if possible, an MBA. Proven executive and administrative ability in housing is a necessity. Individuals must be able to recruit and organize people including engineers, superintendents, architects and subcontractors. Keen decision-making ability required in all phases of construction. Must be able to control quality and costs. Freedom to relocate a must. To those seeking an unmatched management and growth situation, send resume, including salary history, in confidence to I. Yeagle, U.S. HOME COMMUNITIES CORPORATION, 48 South Main Street, Pleasantville, New Jersey 08232.

Architectural Illustrators: A normal organization needs full or part-time artists in your area. Send resume and approximately seven 8x10 color and/or black and white prints. Prompt reply and return of photos. P.O. Box 217 Belleville, Michigan 48111.

Executive Vice President: Major land development and construction. $40-60,000. GENERAL MANAGERS: MH/RV P&L responsibility. To $30,000. SALES MANAGER: Major land developer. $20-40,000. PROJECT MANAGERS: Many needed. $20-30,000. Many Shelter Executive Positions Nationwide. All fees paid by company. VANCE EMPLOYMENT SERVICE, 917 Barfield Building, Amarillo, Texas. 806/372-3456.

Resort condominium managing partner: Hawaii condominium development and management corporation seeking partners to co-venture resort developments in Western Hemisphere. Locations available at resort sites in Oregon, Washington, California, Mexico and Caribbean. $30,000 to $90,000 investment required. Write Box 901 JOB MARKET HOUSE & HOME, 1221 Avenue of the Americas, New York, N.Y. 10020.

Director/Developer/Manager: to develop subsidized housing and start industrialized housing plant and company, must have development and production experience and unique combination of public/private, profit/social motivated goals. Send resume to Box 902 JOB MARKET House & Home, 1221 Avenue of the Americas, New York, N.Y. 10020.

Seeking community development work: Over six years in project administration/planning, government programs, urban renewal, code enforcement, zoning, building codes. Write Box 903 JOB MARKET House & Home, 1221 Avenue of the Americas, New York, N.Y. 10020.

Executive officer: Major publicly held builder/developer seeking an aggressive individual with FHA, legal and construction background to supervise investments in FHA subsidized housing via administration of limited partnerships. Salary open. Unlimited growth potential. Send resume to Box 904 JOB MARKET House & Home, 1221 Avenue of the Americas, New York, N.Y. 10020.

Management supervisor income properties: Public company (assets over $100,000,000) seeks strong man with solid record of experience in apartment management, to direct field managers from executive headquarters in New York suburbs. If you're our man, we'll bet we can offer you a better job, and future, than you now have. Send resume in confidence, including salary history. Send resume to: Box 905 JOB MARKET House & Home, 1221 Avenue of the Americas, New York, N.Y. 10020.

Architectural designer: Experienced architectural designer needed to do design and production coordination for Denver residential builder. Must have good experience working with single and multiple family units and be detail oriented. A basic knowledge of merchandising would be preferred. Because we are a growing company, advancement possibilities are good. Please send resume and salary requirements to: Box 906 JOB MARKET House & Home, 1221 Avenue of the Americas, New York, N.Y. 10020.

LAND MARKET

Montana: 40 valley acres six miles from town about one mile to intersection I-90 and Route 89. Mountain vistas. Price $28,000. H. P. Jockers, Box 988, Livingston, Montana 59047.

New York: Builders Dream—For sale 100 acres 100 lots, approved New York Subdivision. Wooded setting. Three minutes from Village requiring housing. Frank Casier, 135 Park Avenue, Saranac Lake, New York. 518-891-1931.

What Job Market Can Do For You

This new service from House & Home may be the answer to your problem if you are looking for a marketing VP, construction superintendent, estimator, president, project manager, designer, purchasing agent, architect, sales manager or even a new job for yourself.

With over 400,000 readers active in every phase of housing and light construction, JOB MARKET offers employers low cost access to a unique pool of management, supervisory and creative talent to fill job openings.

For the man looking for a new position himself, JOB MARKET offers low cost access to those builder firms accounting for over 90% of the single-family and apartment starts as well as access to thousands of architectural, engineering, commercial, financial, realty, subcontracting and distributing firms with an important stake in housing.

The cost is $2.00 per word with a minimum of 25 words. Your complete address or use of a private box number counts as 5 words. Typewritten text is needed the eighth of the month preceding the date of the desired issue. Payment in full must accompany your order. Send to JOB MARKET, House & Home, 1221 Avenue of the Americas, New York, N.Y. 10020.
Chef Boy-ar-dee® added the Italian touch to J&J's carpet of Herculon®...

...but it was touch and go.

J&J's Commercialon 1800 carpet made with pile of HERCULON® olefin fiber normally doesn't touch the sauce. But this time it got an extra helping of delicious Chef Boy-ar-dee® Spaghetti Sauce. Heaped on a mound of piping hot spaghetti. But, in a matter of minutes it was all cleaned up and ready for dessert.

The stain resistance of HERCULON, coupled with uncommon resistance to abrasion and fading, gives you the perfect carpet for any commercial installation. Chef Boy-ar-dee didn't hang around J&J's carpet of HERCULON long enough to appreciate it. But your customers will.

For detailed information on HERCULON olefin fiber see Sweet's® Light Construction, Architectural and Interior Design files. Or, write Fibers Merchandising, Dept. 222. Hercules Incorporated, Wilmington, Delaware 19899 for free 24 page booklet.

Specify carpet of Herculon® by J&J

†Registered trademark of American Home Foods.
A splash of summer sunshine

That's Eljer's Sunnygreen—the irrepressible new decorator color that's right in tune with today's decorating trends.

Eljer offers Sunnygreen in a wide selection of lavatories, toilets and tubs to brighten any bath or powder room.

Bring a splash of summer sunshine into the baths of the homes or apartments you build. Ask your plumbing contractor to show you Sunnygreen. Or write for our "Splash of Summer Sunshine" brochure: Eljer, Dept. HH, 3 Gateway Center, Pittsburgh, Pa. 15222.

ELJER®
Eljer Plumbingware Division/Wallace-Murray Corporation
Editorial

Formula for failure:
Stick with the same old marketing strategy
when you switch from rental apartments
to condominium apartments

If there was a magic word on the housing scene this year, it was condominium. But now some of the magic is vanishing. The bloom is off the rose for a number of reasons.

First of all, the housing industry has always tended to oversell itself on new ideas.

Second, there are signs of overbuilding in some areas—on the Florida Gold Coast, for example.

Third, the SEC has tossed a minor monkey wrench into the works by requiring a full-disclosure prospectus on every condominium that’s sold as a second-home investment [News, July].

Fourth, and perhaps foremost, many builders who have decided to go the condominium route—either by developing new condominium projects or by converting sick rental projects to condominiums—haven’t made it. And in many cases it’s because they failed to make changes in their marketing strategy.

Because of the basic physical similarity between rental and condominium apartments, there’s an alarming tendency to overlook the vast difference between the two markets. It’s one thing to sign a six-month lease and put down a $150 deposit; it’s quite another to make the long-range commitment that goes with buying a new home—even one that’s as modestly priced as some condominium apartments.

So if you’re a rental-apartment builder switching to condominiums, you’ll be wise to review your whole marketing approach—meaning not just your merchandising but also the basic ingredients of your product. Items:

Consider your location. You can rent apartments in some pretty scruffy neighborhoods if you shut out the surroundings and orient a project inward to its own environment. But as homebuilders learned long ago, the first consideration of someone actually buying a house is the quality of the neighborhood. And the same is true of apartment buyers.

Consider your project’s amenities—recreational facilities, for example, and landscaping of common areas. Like the apartment renter, the condominium buyer appreciates—and even demands—such amenities. But he’s also concerned about how easy they are to maintain because he knows he will share that responsibility as a member of a homeowners’ association. In fact, property management may soon be more of a problem in condominiums than in rental housing because buyers, unlike renters, have a vested interest in the project.

Consider the apartments themselves. Floor plans of rental and condominium units may not differ. But your condominium buyers are more apt to look for quality in materials and equipment. They’ll want better sound deadening between units, better kitchen appliances and better carpeting, for example. And while it makes sense to paint all walls a standard off-white in rental apartments, you’ll probably have to give condominium buyers a choice of colors and wallpaper.

Comes the final problem: selling the units. And that’s one you can’t palm off on a few extra hands from your rental division. A good project manager can rent out an apartment project. But selling out a condominium project requires salesmen—men and women who know how to show a model, how to qualify prospects, how to arrange financing and how to explain the workings of condominium ownership.

In a word, then, if you’re marketing condominium apartments, you have a lot more in common with builders who sell houses than with those who rent apartments.

John F. Goldsmith
From towers to townhouses: how to make it big in the wider-than-ever multifamily market
Maybe you don’t appreciate just how wide this market has become. What’s loosely called multifamily housing now includes everything from towers to townhouses, from rental efficiencies to four-bedroom condominiums, from in-city apartments to resort homes. And buyers and/or renters range all the way from young, single swingers to mature couples with children.

So the successful multifamily developer is the developer who, first of all, can identify his market and, second, knows how to create exactly what this market wants.

That formula may sound elementary. But ignoring it is the main reason why a lot of develop- ers go bust. Conversely, following the formula to the letter is the first step toward creating suc- cessful multifamily projects like the six shown on the following 22 pages.
For well-heeled empty nesters:
high-rise condominiums
on a choice waterfront site

does high-rise construction necessarily play havoc with a waterfront site? Not necessarily, as this project in Coronado, Calif., shows.

By building 15-story towers instead of medium-rise apartments, the developer, Loews/Snyder, saved 75% of the 35-acre site for recreation and landscaping and also provided a waterfront view for each of the 1,440 condominium units.

So it's not surprising that Coronado Shores—designed for affluent retirees and second-home buyers—is a sales success. Just two years after groundbreaking, the first two towers are built, sold out and occupied; occupancy of a third is to start this month; and a fourth is under way. In all, the master plan (page 82), by architect Krisel/Shapiro & Associates, calls for ten towers, each to
Historic site of Coronado Shores (below) was the locale of Tent City, a popular summer resort for California vacationers from 1902 to 1940. In the background is the landmark Hotel del Coronado which still stands and can be seen from the apartment living room at right. At left: view of Coronado Shores from Glorietta Bay marina on the mainland.

contain 135 to 150 studio, one-, two- and three-bedroom units. Prices range from $33,000 to $98,900.

What is surprising is that the site had not been destined for such aesthetically compatible development when a pair of joint-venturers—builder Jerome Snyder and Loews Corp.—took it on in 1969. Its history tells why.

Coronado is an island, just a few minutes by bridge from San Diego. The project itself is at Silver Strand, a quarter-mile-wide sliver of land between the Pacific Ocean and San Diego Bay. It includes a half-mile of prime ocean frontage—one of only two private beaches on the Strand. From 1902 to 1940 the site was a summer resort of gaily striped tents and cabanas (photo, above). Following World War II, it fell into disuse and, after many ownership changes, was rezoned R-6 to permit a major apartment project that never got off the ground. R-6 zoning allowed a low- and mid-rise complex with roughly 3,000 units. But the buildings would have covered 87% of the land. And that kind of development didn't sit well with Loews/Snyder because, says Jerry Snyder, it would have created "a walled-in city with few waterfront views and a minimum of open space." Hence the decision, obviously pleasing to city officials, to go high-rise at less than half the allowable density.

Marketing has been concentrated in relatively low-key advertising in California newspapers and regional magazines. But for deeper penetration of the affluent market, Loews/Snyder added the Wall Street Journal, Fortune, Phoenix magazine and two airline publications (PSA Flightime and American Way). The bulk of the buyers have come from the Los Angeles-San Diego area, the others from 25 states, Mexico, Germany and the Philippines. Included are wealthy senior citizens, professionals, business and industrial executives and retired naval officers.

One effective aid to marketing has been a leasing program that provides financial leverage for the second-home buyer. The plan lets buyers rent out their apartments, with all details being handled by the developer's staff. Although the program is relatively new, over 50 rentals were negotiated this summer. Rentals: from $800 to $1,800 per month for one to three months.
Two tower types (master plan, left)—one rectangular, the other square—are sited to give each apartment an ocean or bay view and to provide a continuing pattern of vistas throughout the project. Each tower has its own homeowners association, which hires the building manager. But an affiliate of the developer provides basic management services. The corridor plan at right shows the ten available floor plans on a typical floor in a rectangular tower.

Broad tower bases, shown in both photos below, are garages, which provide two levels of parking and direct access to apartments. Planters around garage perimeters are a visual extension of the ground landscaping designed by two landscape architects—Anthony Cuzzardo & Associates and Wimmer, Yamada, Iwimaga. Building in center of photo at right is project’s first adult clubhouse.

PHOTOS: JOHN WAGGAMAN
Model-apartment interiors are decorated in a bright, but subdued manner to reflect the relaxed, yet elegant, lifestyle of the market. (For more Coronado Shores interiors—all by Carole Eichen—see HOUSE & HOME, July.)
Children's recreation center (below), located on the first floor of the third tower built, serves both resident and visiting youngsters. Equipment includes pool tables, monkey ladders and a juke box.

Adult clubhouse (below), first of two planned for Coronado Shores, is equipped with a kitchen, showers and a bar. The 3,500-sq.-ft. building is big enough to handle private parties of up to 500 persons.
Stone seawall (above), a $500,000-construction job, forms and shapes the beach, which was showing signs of erosion. Some 10,000 stones, weighing up to ten tons, were brought in from a nearby quarry.

Monolith sculptures (above) offer sand-free places for sunbathing. Nearby clubhouse, at top of stairs, was designed to echo the Victorian architecture of the Hotel del Coronado (page 81).

Freeform swimming pool (right), on oceanfront, is one of two already open (aerial view, page 82). Other amenities include eight tennis courts shown in master plan on page 82.
For buyers who want the best of two worlds: pinwheel fourplexes that live like detached houses

suburban lifestyle without suburban hassles." That, says builder Don Bahl, is what a lot of young, childless couples want in Sunnyvale, Calif. And that, he adds, is what they get at Bahl Cluster Homes.

Bahl's architect, Jones & Horn, designed the fourplex project to provide the following:

- Privacy on small lots (density is 12 units per acre). The fourplexes are arranged in a pinwheel pattern (site plan, opposite page) so that no windows look directly into neighbors' yards. Windows and doors are partly screened from neighbors by fin walls (photo, opposite page). And gardens are enclosed by high walls or fences. The pinwheel arrangement also makes it easier to enter driveways from the one-way loop streets.

- Variety. Buyers have a choice of three elevations and four floor plans ranging from 1,163 to 1,529 sq. ft. Prices average $31,000.

- Minimal gardening. The walled patios are large enough for comfortable outdoor living—some buyers have put in swimming pools—but small enough for easy upkeep.

Bahl started selling last March, has sold 63 units and eventually plans to build more than 200. His financing—conventional mortgages at 5% down—is a strong sales point with his buyers, most of whom are former tenants of high-rent apartments.

Although the buyers are young (average age: 27), their incomes are high (average $27,180) because both husbands and wives work. But their savings are slim because they haven't worked long enough to amass much capital. For the most part they are leisure oriented couples, who want to avoid time-consuming home maintenance but realize economic advantages of home ownership.

Oddly enough, however, Bahl's buyers are not a homogeneous group. Both their occupations and their leisure interests vary widely, and most of their friends come from outside the project. So, Bahl notes, there's no need for community recreational facilities that promote social mixing.

Shortly after he opened, Bahl got a clue to zeroing in on prospective buyers. He noticed that shoppers were driving up in sports cars and imported compacts—"but not new ones," he says. "They didn't seem to want to tie up that much cash."

So he got a copy of the county motor vehicle registry, which also tells whether a car owner rents or owns a home, and pitched a direct-mail campaign at apartment dwellers who owned two- and three-year-old Volkswagens, Mustangs, etc.
Pinwheel fourplex arrangement (below) simplifies access to garages by putting driveways at shallow angle to one-way loop streets.

Variety of elevations and roof lines makes for visual interest in the typical streetscapes shown above and on the facing page.

Outdoor privacy (below) was assured with high patio walls and fin walls to keep windows from looking down into neighboring patio.
Fourplex plan (below) shows how entries, as well as patios, of units in the same building are isolated from each other.
Partly-trellised patio (above) opens off living area (above right).

Swimming pools (below and right) are installed in patios by many buyers through arrangements with an outside contractor. Average installed cost: $4,200.
ood architecture, no matter what its style, will go anywhere in the country."

With that philosophy, Colburn A. Jones decided to develop a California-style project in Albany, N.Y. Now he says he can't build fast enough to meet the demand for his rental apartments. Scheduled for completion next February, the project, called Woodlake, will have 568 units at rentals ranging from $175 to $290. So far, Jones has built 310 and has rented 380.

"The key to our success is not necessarily California design," says Jones, who is president of Heritage State Ltd. "I think we could have gotten the same result with authentic Early American or authentic Spanish Colonial."

His reasoning: "In today's mobile society, our tenants come from all over the country. They've been exposed to all kinds of architecture, and they can tell the good from the bad, no matter what its label."

But, Jones adds, any would-be emulator of Woodlake should note three important qualifications.

The first qualification is that apartment renters, unlike homebuyers, face no potential resale problem. Says Jones: "Our people are attracted by Woodlake's novelty. But a lot of them would think twice about buying a contemporary house in an area where most homes are traditional."

The second qualification concerns Albany itself. As the seat of possibly the most centralized state government in the country—"a junior Washington, D.C.," Jones calls it—Albany has large numbers of highly paid state functionaries, including many physicians employed at a state medical center.

"They're a rather special breed," says Jones. "They are always expecting better job offers from other state governments, so they don't want to put down roots. They consider themselves mobile although, in actual fact, most of them are not."

The third qualification is Woodlake's location—within a few miles of a state university, the state office building and a General Electric plant in Schenectady. So there's a vast reservoir of well-paid prospects. Woodlake's tenants have incomes averaging close to $20,000. They are young—75% under 45 and 50% under 30—and few of them have children.

While Woodlake's location is a marketing asset, the raw site—46 acres of swamp and dumping ground—was a problem. The solution: a land plan designed around a meandering, man-made lake that not only transforms the character of the site but also serves as a catch basin for drainage.

Apartments are clustered around parking courts served by a perimeter road. Paths leading from the apartments to a swimming pool and recreational facilities are isolated from traffic.

The problem-solving plan was a joint effort by a trio of San Franciscans—architects Donald Sandy Jr. and James A. Babcock and land planner/landscape architect Anthony M. Guzzardo.

For couples who don't aim to stay put:

a western-style rental project

in an eastern state capital
Man-made lake is first feature to catch the visitor's eye at project entrance (lower right on site plan). A perimeter road and adjacent car courts keep autos away from the lake and greenbelt areas.
Pedestrian walks link all buildings, including recreation hall, without crossing roads or parking areas.

Car courts provide a total of 1,070 parking spaces, or nearly two for each of the dwelling units.

Floor-plans (below) range from studio to two-bedroom units and from 440 to 1,165 sq. ft. One-bedroom unit at top left accounts for 244 of the 572 apartments in project.
Balconies, on opposite sides of apartments from the car courts, look out on either lake or greenbelts.

Vertical cedar siding throughout project gives a natural look. Black composition shingles were used for contrast.

Recreation area (below) has pool and tennis courts. Several small pools are scattered throughout site.
For the mostly singles market:
a campus-like project focused on recreation
Typical floor plans provide 613 to 1,448 sq. ft. of living area. Three different one-bedroom units make up 70% of the apartment mix.

Site plan (right) shows how two-level garage buffers apartments from neighboring railroad tracks. Clubhouse is under apartments in shaded building.

Landscaped courtyards, shady walks and bridges between buildings—shown in all photos—soften the stark brick facades. False mansard roofs hide air-conditioning equipment, plumbing vents and other mechanicals.

Despite its drab surroundings—a railroad track on one side and a semi-industrial complex on another—there's a waiting list for this 15.5-acre rental project (Towne Plaza) in Houston. The reasons:

- An inward-oriented design that turns the project's back on the surrounding area.
- Heavy concentration on recreational facilities—five swimming pools, a volleyball court and a private club (in one of the apartment buildings) with a billiard room.
- Good value against the competitive market—monthly rents for the 613 one-, two- and three-bedroom apartments range from $138 to $299.
- A service-oriented management program that stresses prompt attention to complaints and strict enforcement of project rules.
- A strategic location—within a 1½-mile radius of some 50,000 jobs, many of them in several new office towers. So even though Houston's downtown business district is just 12 minutes away by car, most tenants work nearby.

The architect, Langwith, Wilson, King & House, created a campus-like feeling by designing two- and three-story buildings with balconies, arched openings and bay windows and arranging the buildings in clusters around landscaped courtyards. Main tenant parking is in a garage built the length of the project. This two-level building serves as both a sound and visual barrier to the parallel railroad track. Additional tenant and guest parking is conveniently scattered throughout the project.

Most tenants are young single people. And nearly all of them are white-collar workers—teachers, salesmen, junior executives, airline stewardesses and the like.

Towne Plaza was built in two stages, the first two years ago, the second last year. And it was rented out before the final units were completed. As apartments turn over, most are occupied by friends referred by other tenants. So the owner/builder partnership—J.M. Hill, P.W. White, J.R. Brodnax and the Chase Manhattan Bank—need only run small weekly ads in order to keep the project's name in the public eye.
not everyone who lives on the Florida coast wants an oceanfront home—especially if his bent is boating and fishing. Case-in-point: the buyers at Angler's Cove, several of whom moved from oceanside condominiums built by the same developer. In fact, these buyers provided the initial impetus for the 64-unit project—the first of its kind in the area, which is about 25 miles north of Palm Beach.

The Stuart, Fla., project sold out seven months after its completion in August 1971. It provides primary housing for 20 owners, second homes for the balance. Marketing was low-key, but ads in media such as The Wall Street Journal, Southern Living magazine and local newspapers attracted buyers from 18 states and the District of Columbia.

Besides its location—six acres in an area known as the sailfish capital of the world—there were two other strong reasons for the project's success, says Lloyd Dutcher, president of Stuart Land Development Inc.

Reason No. 1: architect Peter Jefferson's fishing-village design. It includes four building styles and six apartment layouts. Each of the two- and three-bedroom units faces the winding man-made cove that leads to Indian River, and most of the first-floor units are cantilevered over the cove to provide dockage for small boats.

Reason No. 2: the low-maintenance aspect of the poured-concrete construction. For example, 7"-thick side walls, stained to simulate rough wood, need no repainting.

A similar project is on the planning board. This time Dutcher says he will eliminate three-bedroom units and substitute a greater variety of two-bedroom plans: "This market definitely opts for two bedrooms."

For fishing and boating buffs:

a wide variety of condominium apartments

built out over a man-made cove
Entrance elevations are curtain-walls fabricated of timbers and low-maintenance asbestos-cement panels with factory-applied, long-life finish (Permatone).

Recreation area (below) includes swimming pool (shaded rectangle on site plan), shuffleboard courts and pavilion with showers and cooking facilities.

Docking facilities (below) for small boats were achieved by cutting a cove into the narrow site and cantilevering first-floor apartments over the water. Varied building types are staggered around the winding cove (above).

Floor plans (right) show three of six available layouts priced from $30,000 to $68,000. Apartments range from a one-level 1,092-sq.-ft. unit (bottom) to a two-level 1,964-sq.-ft. unit (top) with a deck overlooking the water.
For the community-minded family market:

a townhouse complex

that sells so fast

it needs no advertising

Visual variety (above and right) is achieved by slightly offsetting each townhouse from its neighbors. In addition, the apparent size of the townhouse clusters (site plan) is reduced and given proportion by restricting the end units to one story. All two-level floor plans include a balcony off one of the bedrooms.
good track record is still the best salesman I know of.”

So says James Bell, marketing director for Braddock & Logan, whose Islandia townhouse project in Alameda, Calif., is selling out as fast as it can be built.

What established the builders’ reputation was Casa Alameda [H&H, Dec. ‘67], a similar project in the same city that generated so many referrals from satisfied buyers that virtually no advertising was needed for the new project.

Islandia occupies 40 acres of a 900-acre island linked by a bridge to Alameda, which is itself on an island. The location is convenient—25 minutes from San Francisco and 10 from Oakland. Plans call for a total of 400 townhouses. So far, 248 have been built—69 two-bedroom, 106 three-bedroom and 73 four-bedroom units.

Fisher-Friedman Associates designed Islandia with three goals in mind: to create a luxury atmosphere, to avoid visual monotony and to preserve plenty of green space.

Roof lines and facades vary but are tied together by a uniform exterior material, in this case stained resawn plywood. The townhouses are clustered around—and oriented to—courtyards. In addition, there’s a four-acre central park with a striking recreational building (page 101), a swimming pool, tennis and volleyball courts and a children’s play yard.

Aimed at the upper-middle-income family market, Islandia offers seven floor plans within a relatively narrow price bracket—$26,000 to $32,000. This diversity of plans has attracted a diversity of buyers, who range from professional people to a local fire chief.

Financing is conventional, with downpayments averaging about 20%.

Buyers include fewer large families than the developers originally expected (the average number of children is only 0.4 per unit). Nevertheless, demand has been particularly strong for the four-bedroom units. Marketing Director Bell sees three possible reasons for this apparent paradox:

• A desire for a private adult retreat. Some buyers of four-bedroom units have had the master bedroom expanded by eliminating the wall that would otherwise separate it from an adjoining bedroom.
• An increasing demand for office space by executives and professional people who bring work home or use their homes as offices.
• A desire for space for leisure activities—a hobby room, for example, a study or reading room.
Large private patios (see plans)—up to 400 sq. ft.—are set between houses and two-car garages. Floor plans range from 1,350 to 1,750 sq. ft. One-story plan of end unit (left in photo above) is shown at left below.
Focal point of project is clubhouse and outdoor recreation area (photos this page). Although the clubhouse design differs from that of the townhouses, there are similarities, such as the shed roofs and the stained plywood siding. Indoor facilities include a kitchen and community room that can be rented to residents for large parties. Outdoor facilities include not only tennis and volleyball courts and a children’s playground but also a quiet sitting area for adults.
Carpeting

How to Buy the Type That Best Meets Your Needs

Man-made fibers have made mass carpeting a standard feature instead of the luxury it once was. The growth and development of nylon, acrylic, modacrylic, polyester and Olefin (polypropylene) have enabled mills to offer a wide selection of fabrics in every price range.

The single most important question you should ask when choosing carpet is: How long will it last and look good? In order to answer this you must consider six basic fiber characteristics: strength, soil-hiding qualities, moisture absorbency or resistance, resilience, density and heat resistance.

The ability of a fiber to withstand abrasion and wear is referred to as strength. All man-made fibers are strong, and nylon is the strongest. It is said that you will tire of looking at a nylon carpet long before you can wear it out.

Polyesters and Olefins are nearly as strong as nylon, making them both well suited for heavy traffic areas.

The strength of a carpet determines how long it will last but not how long it will look good. To judge which carpet will continue to look good, you must consider the five other fiber properties.

Carpet good looks are destroyed by soiling more often than any other single factor. Certain fibers have a greater tendency to attract soil than others. Nylon is the most soil prone, hence it can take on an overall dull appearance early in the carpet's life.

Pilling, the tendency for a fiber to ball up or fuzz, and static conductivity, the ability of a fiber to conduct electric charges, are both major soiling factors.

Pills easily and because of its unusual strength holds onto these pills. The pills themselves pick up dirt giving a soiled appearance to the carpet. Improvements in fiber forms have produced continuous-filament, second- and third-generation nylon which seem to have minimized this problem.

Pills also tend to build-up on acrylic because of the soft nature of the fiber, but can be easily vacuumed away before soil has time to set.

Carpet that build up static electricity soil easily since electrical charges attract dirt. Again, nylon has a problem. Producers have worked to eliminate it by tufting antistatic yarns into carpeting, grounding backing with copper wires and applying antistatic sprays.

Allied Chemical, one of the major man-made fiber producers, recently introduced the first third-generation nylon, Anso X, which is specifically engineered to prevent conductivity by using an antistatic additive in the polymer stage.

Static does not present major difficulties in other fibers. Polyester has about half the build-up of nylon, as does acrylic. Polypropylene, due to its inert chemical nature, has none at all.

All man-mades resist moisture, some a great deal more than others, and this factor determines the fiber's capacity to accept dyes, its stain resistance and its maintenance characteristics.

Nylon, with the greatest tendency to absorb moisture, takes the widest range of colors and can be dyed by the largest variety of processes. Polyesters and acrylics both dye well using various techniques. Olefin, the least absorbent fiber has the most limited dying capabilities.

Logically, an absorbent fiber that dyes easily will also stain rapidly. Polypropylenes are nearly impossible to stain while nylons stain more rapidly than any other man-mades.

It should be remembered, however, that there are few substances that can permanently stain man-made fibers if mishaps are treated quickly. Like dyes, stains must set over a long period of time.

Moisture resistance or absorbency also influences carpet cleanability. Since Olefin is very nonabsorbent, it can easily be maintained using everyday care methods such as vacuuming. Nylon, polyester and acrylic, on the other hand, need periodic specialized cleaning such as wet or dry shampoo to retain their original look.

Matting and crushing are governed by fiber resilience, the ability for a fiber to spring back to its original pile height and shape. If a resilience problem exists, a visible traffic pattern can be seen long before a carpet is actually worn. Carpet textures, discussed later in detail, do much to determine resiliency.

Acrylic is the most resilient fiber, which accounts for its popularity in high-pile styles. Nylons and densely constructed polyesters also spring back well. Olefin has some problems here, while the fiber does regain its shape, it does so relatively slowly. For this reason mills have, for the most part, chosen to limit its use to low-level height constructions.

Fibers have different densities, or abilities, to cover square footage. Olefin, a high-bulk yarn, offers the greatest coverage, with acrylics and nylons following closely. Polyester trails in this area, and its reputation has suffered greatly because of it. Actually, a polyester carpet tufted with a sufficient amount of yarn is every bit as full and dense as its counterparts.

While man-made fibers will not actually burn, they do have tendencies to melt or stick at different temperatures. Modacrylics, the most heat-resistant of all, will not support combustion but will shrink at 250°F and stiffen at 300°F. Polyester, claimed to be self-extinguishing, will melt at between 480°F and 550°F. Acrylic sticks at 450°F to 500°F. Nylon melts at 414°F to 500°F, depending on type, while polypropylene, with the least heat resistance of any of the man-mades, melts at 320°F to 335°F.
Luxurious master bedroom is carpeted with “Riverwind” (1) made of Monsanto Acrilan acrylic. Tufted fabric is available in 14 colors in 12’ and 15’ widths. The pattern retails for about $8.95 a sq. yd. J.P. Stevens, New York City. Circle 265.

Lush-looking “Saxon Mist” (2) unifies an eclectic living area. Carpet of Dupont Antron nylon, shown here in Aztec gold, is offered in 22 heather tones in 12’ or 15’ widths. Retail price is $13.95 a sq. yd. Congoleum, Kearny, N.J. Circle 266.


Comfortable contemporary living area is accented with “Mascot” (4) made of Eastman Kodel polyester. Available in 14 shades including seven tweed colorations, the carpet retails for about $7.95 a sq. yd. Cabin Crafts, Dalton, Ga. Circle 268.

Traditional living area carpeted with “In Vogue” in gypsy pink (5) is warm and informal. Tufted of plied Kodel polyester, the carpet is offered in 16 colors. Approximate retail price is $8.95 a sq. yd. Walter Carpets, City of Industry, Calif. Circle 269.

Pink plush “Star Mist” (6) adds a youthful touch to this bedroom/sitting area. The carpet, made of heat-set Celanese nylon, is available in 18 colors and retails for about $10.95 a sq. yd. Collins & Aikman, New York City, Circle 270.

Mediterranean mix is accented by black and white shag, "Domani" (2). The carpet, blended of Acrilan and modacrylic, is available in 11 multicolor combinations and 16 solids. Approximate retail price is $12.75 a sq. yd. Philadelphia, Cartersville, Ga. Circle 272.

Playroom/bar takes on a lively look with red, white and blue shag "Happy Holiday" (3). Constructed of heat-set Allied Chemical nylon, carpet is available in 20 colorations at $9.95 a sq. yd. Columbus Mills, Columbus, Ga. Circle 273.

Warmth is the key to a multipurpose living loft carpeted with "Grand Alliance" (4) in vermillion red. Tufted of DuPont nylon, the shag is available in 20 colors and retails for around $11.95 a sq. yd. West Point Pepperell, Dalton, Ga. Circle 274.


Soft shag "Seventh Heaven" (6) covers floor and sleeping platform in this multi-use guest room. Constructed of continuous-filament...
Spring-time is captured in the master bedroom with “Swinging High” (8), an abstract-patterned shag in Celery green. Made of DuPont nylon, the line consists of 20 colorations and retails for $9.95 a sq. yd. Mohawk Carpets, New York City. Circle 278.

Bold plaid upholstery on living room furniture is accented by a warm yellow shag, “Turning Point” (9). The Avlin polyester shag comes in ten shades and retails for about $8.95 a sq. yd. Stevens-Gulistan, New York City. Circle 279.

Casual-looking downstairs den is warmed-up with “Shah” (10), a Zimmer-printed carpet of Enkaloft spun nylon. Printed in a tie-dye effect, the carpet is offered in four colorations, retailing for $9.95 a sq. yd. Jorges, Rossville, Ga. Circle 280.

Loose-laid textured carpet squares, which can be easily replaced and rotated, end wastage and maintenance problems. The line, consisting of plush, tweed and the shag squares shown (11), is available in at least 50 colors. Pieces are 18” square. Rondelay, Div. Huegatile, Kenilworth, N.J. Circle 281.
Office/sitting room with a clean contemporary motif is highlighted with "Barclay Square" (1) a three-color geometric-patterned carpet of Herculon® Olefin fiber. Available in ten color combinations, the pattern is achieved by tufting together three different colored yarns. Reasonably priced carpet has a polypropylene backing. Stephen-Lee-dom, New York City. Circle 282.

Bright townhouse entryway is boldly geometric with red and white candystriped wallcovering and red brick-patterned "Capri" (2) carpeting. The printed nylon floorcovering is featured in five colorations with nonwoven polypropylene primary and secondary backings. Retail price is approximately $7 a sq. yd. Triton Mills, Trend Industries, New York City. Circle 283.

Compact kitchen and adjoining informal dining area are carpeted with "Sultana" (3), a cut-pile, Zimmer-printed level-loop nylon. Available in eight shades in 12' widths, the fabric has a polypropylene primary backing and a high-density foam secondary. Suggested retail price is about $6.50 a sq. yd. Normandy Carpets, Dalton, Ga. Circle 284.

Eat-in kitchen is carpeted with bright yellow-and-brown printed "Dealer's Choice" (4). The carpet, made of Herculon® Olefin fiber is soil- and stain-resistant. Pattern is over-printed on a solution-dyed background-yarn. Offered in five colorations, the carpet is economically priced. Welco Carpet, Calhoun, Ga. Circle 285.

Small-apartment kitchen is transformed into a lively work space with colorful printed "Mexicana" (5) carpet. Tufted of Allied Chemical nylon, the Spanish-tile-inspired pattern is in tight level-loop construction with a high-density foam backing. Available in four color combinations, the line retails for approximately $8.95 a sq. yd. Majestic, Cartersville, Ga. Circle 286.
Children feel comfortable playing on the floor of a family room carpeted with “Shetland Plaid” [6]. Warm enough to sit on even in winter, this scotch-plaid motif fabric is constructed of a blend of wool and nylon. Available in five color combinations, it carries a retail price of about $14.25. Downs Carpet, Wil­low Grove, Pa. Circle 287.

Active boy’s room is carpeted in “Illustration” [7], a three-color checked pattern of continuous-filament nylon that is designed to take abuse. The level-loop floorcovering intended for heavy traffic area is backed with high-density foam. Available in eight colorations, retail price is around $8.95 a sq. yd. Bigelow-Sanford, New York City. Circle 288.

Warmed-up ski lodge is modern, yet rustic, with geometric-printed “Young at Heart” [8] covering the floor and seating corner. The mosaic-inspired level-loop pattern is impervious to wear and dirt. Available in eight colorations, retail price is about $8 a sq. yd. Johns-Manville, New York City. Circle 289.

Sunken terrace is comfortable underfoot when carpeted with “Colony Point” [9] a low-pile fabric of Hercu­lon® Olefin yarn. The indoor/outdoor quality is shown with contrasting colors cut and pieced to create a wide stripe effect. Carpet carries a 3-year guaranty for residential use against fading or wear. Offered in 8 shades, the floorcovering is foam backed. Ozite, Chicago. Circle 290.

Outdoor deck carpeted with “Oak­mont” [10], indoor/outdoor floorco­vering, is an extension of the interior. The Acrlan 2000 carpet flows through the living room out to the deck. Offered in eight colors and a choice of backings, the level-looped style is about $9.95 a sq. yd. Burke, San Jose, Calif. Circle 291.
Floors and walls of a compact studio are made warm and soundproof with “Sun Valley” (1) carpeting. Constructed of Herculon® Olefin yarn, the easy-to-maintain fabric is offered in eight lively colors. The rugged durable carpet is stain- and soil-resistant. Roxbury Carpet, Framingham, Mass. Circle 292.

Active children or outdoor weathering can’t harm “Courtyard” (2), shown here in a bedroom/play area for two young boys. The three-level random-sheared indoor/outdoor carpet of American Cyanamid Creslan acrylic has a cobblestone pattern. The floorcovering is available in ten shades and carries a retail price of around $11 a sq. yd. Evans-Black, Dallas, Tex. Circle 293.

Expansive living room with a comfortable contemporary theme is carpeted with “Royal Court” (3), a free-flowing scroll design. The deeply sculptured carpet is made of high-lustre acrylic fiber and is available in 11 solid and tweed colorations in 12’ or 15’ widths. Retail price is around $12 a sq. yd. Certain-Teed, Valley Forge, Pa. Circle 294.

Lively formal dining area is enhanced with three-level random-sheared “Treadglow” (4) carpet. The floorcovering with a jute backing is available in ten shades including four gold tones and four different greens. Constructed of Enkalure multi-lobal nylon, the style has a suggested retail price of about $6.95 a sq. yd. Falcon Carpet, Dalton, Ga. Circle 295.

Clean contemporary dining area which doubles as an entertainment center is accented with “Warmest Regards” (5). Tufted of Enkaloft spun staple nylon, the cut and loop pattern of swirling tracery is offered in 12’ and 15’ widths with a jute backing. Retail price is approximately $10.99 a sq. yd. E.T. Barwick, Chamblee, Ga. Circle 296.
Textures influence how and where carpeting should be used

Four basic textures or styles of carpeting are most frequently used in today's housing industry. They are the shag, the level loop, the sculptured look and the plush.

The shag, a casual tousled-look carpet of long twist yarns, is the most popular style. Available in long or relatively short yarns, shags offer tremendous design versatility, being equally at home with contemporary or traditional furnishings. The loose long threads help hide soil but tend to lie down and crush easily, needing time to spring back. Shags require some care and attention to avoid the matted-down look.

If extremely heavy traffic is expected, level-loop carpet is the answer. The rugged floor coverings are dense and tightly tufted to spring back. Shags require some care and attention to avoid the matted-down look.

The sculptured look and the plush. Textures influence how and where yarns, shags offer tremendous design versatility, being equally at home with contemporary or traditional furnishings. The loose long threads help hide soil but tend to lie down and crush easily, needing time to spring back. Shags require some care and attention to avoid the matted-down look.

Other styles with short yarn lengths also offer superior wear characteristics while defying wear. This style is also the easiest to maintain since vacuuming or even sweeping often removes all visible surface soil.

Other styles with short yarn lengths also offer superior wear characteristics while defying wear. This style is also the easiest to maintain since vacuuming or even sweeping often removes all visible surface soil.

The rugged look of the evenly weighted carpet is no exception. Quality carpet pays off in the long run, and you'll feel good about spending the money. A recent survey revealed that homeowners now spend an average of $5 to $8 a square yard for carpeting, a wise investment that always benefits you.

When you buy good carpeting, plan to keep it good.

Your carpet only works for you as long as it remains vibrant. A well-planned series of carpet maintenance programs helps eliminate many problems before they arise.

For owners of rental projects, a lease-guaranteed program of carpet maintenance is worth investigating. Agreeing to professionally cleaning the carpet once or twice a year may seem a great fringe benefit for the tenant, but actually it’s the best way to protect your own investment because it lets you supervise maintenance in areas where you have no control over everyday care.

Any system of preventive maintenance you can establish will work to your advantage. For example, lay protective runners and mats over carpeting in public areas at the first sign of rain. Your tenants will deposit layers of mud and stains on the plastic not your carpeting.

If you foresee replacement problems before you purchase carpeting, you may eliminate future headaches. Don’t be attracted by stock-end bargains. What looks like a terrific buy now may not look quite so good in three years when you need to fill in and can’t match the fabric.

Establish a system of replacement. Always check your salvage possibilities. If you have three vacant apartments, plan to recarpet one and use the salvage from it to repair the other two. This way you get truer color wear and match in all three.

Whether units are for rent or sale, you have to consider design diversity. No set rule dictates that you must use only one floorcovering throughout a project. Edward Haleman, a New York carpet consultant, has devised a two-carpet system that can work to your great advantage.

Both carpets used must blend well visually and be interchangeable. It is most important that both utilize the same installation techniques so no labor changeover is required.

In some units a shag is used in living areas and a printed carpet in kitchens. In others, the print is carried into the family room or foyer and in still others, it is used in a small bedroom and extra bath. This enables you to use your own salvage and fill-in as necessary, avoiding a make-shift appearance.

The two-carpet system offers individuality and eliminates the monotonous uniform look common to mass carpeted areas. One thing that always benefits you is good quality. A recent House & Home survey of 1,000 builders indicated that they are now spending an average of $5 to $8 a square yard for carpeting with a trend towards higher-priced lines. It never pays to save money on heavily used items and carpet is no exception. Quality carpet pays for itself; a lesser grade you pay for.

<table>
<thead>
<tr>
<th>FIBER</th>
<th>TRADE NAME</th>
<th>MANUFACTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic</td>
<td>Acrilan</td>
<td>Monsanto</td>
</tr>
<tr>
<td></td>
<td>Creslan</td>
<td>American Cyanamid</td>
</tr>
<tr>
<td></td>
<td>Orlon</td>
<td>Du Pont</td>
</tr>
<tr>
<td></td>
<td>Zelfrome</td>
<td>Dow Badische</td>
</tr>
<tr>
<td></td>
<td>Zeefran</td>
<td>Dow Badische</td>
</tr>
<tr>
<td>Modacrylic</td>
<td>Acrilan</td>
<td>Monsanto</td>
</tr>
<tr>
<td></td>
<td>Verel</td>
<td>Eastman Chemical</td>
</tr>
<tr>
<td>Nylon</td>
<td>Allied Chemical Nylon</td>
<td>Allied Chemical</td>
</tr>
<tr>
<td></td>
<td>Caprolan</td>
<td>Allied Chemical</td>
</tr>
<tr>
<td></td>
<td>Celanese Nylon</td>
<td>Celanese</td>
</tr>
<tr>
<td></td>
<td>Cumuloflt</td>
<td>Monsanto</td>
</tr>
<tr>
<td></td>
<td>Du Pont-Nylon</td>
<td>Du Pont</td>
</tr>
<tr>
<td></td>
<td>Enkaloflt</td>
<td>American Enka</td>
</tr>
<tr>
<td></td>
<td>Formelle</td>
<td>Rohm &amp; Haas</td>
</tr>
<tr>
<td></td>
<td>Nylon 66</td>
<td>Beaulit</td>
</tr>
<tr>
<td></td>
<td>Phillips Nylon 66</td>
<td>Phillips Fibers</td>
</tr>
<tr>
<td>2nd generation nylon</td>
<td>Anso</td>
<td>Allied Chemical</td>
</tr>
<tr>
<td></td>
<td>Antron</td>
<td>Du Pont</td>
</tr>
<tr>
<td></td>
<td>Cadon</td>
<td>Monsanto</td>
</tr>
<tr>
<td></td>
<td>Enkalure II</td>
<td>American Enka</td>
</tr>
<tr>
<td>3rd generation nylon</td>
<td>Anso X</td>
<td>Allied Chemical</td>
</tr>
<tr>
<td>Bi-Constituent</td>
<td>Source</td>
<td>Allied Chemical</td>
</tr>
<tr>
<td>Polyester</td>
<td>Avlin</td>
<td>American Viscose</td>
</tr>
<tr>
<td></td>
<td>Dacron</td>
<td>Du Pont</td>
</tr>
<tr>
<td></td>
<td>Dow Badische Polyester</td>
<td>Dow Badische</td>
</tr>
<tr>
<td></td>
<td>Encron</td>
<td>American Enka</td>
</tr>
<tr>
<td></td>
<td>Fortrrel</td>
<td>Celanese</td>
</tr>
<tr>
<td></td>
<td>Kodel</td>
<td>Eastman Chemical</td>
</tr>
<tr>
<td></td>
<td>Monsanto Polyester</td>
<td>Monsanto</td>
</tr>
<tr>
<td></td>
<td>Quintess</td>
<td>Phillips Fibers</td>
</tr>
<tr>
<td>Olefin (polymyrenes)</td>
<td>Herculon</td>
<td>Hercules</td>
</tr>
<tr>
<td></td>
<td>Marvess</td>
<td>Phillips Fibers</td>
</tr>
</tbody>
</table>
When buying carpet these two pennies look alike, but there's two sides to them.

One is Magee's "Penny Wise" theory. The other is the "Penny Pinching" theory.

Trouble with the "Penny Pinching" when buying carpet is... The Trouble. The Trouble is not getting what you bought.

Show you what we mean:

Next time you're "Penny Pinching" on carpet write down what he says he's delivering in pile height, pile weight, fiber, stitch, flammability, delivery and government protection.

Then check what he's delivered against what he's supposed to deliver.

You may find you have The Troubles.

Flipping to the other side of the coin gets rid of the Troubles.

That's Magee's "Penny Wise" theory.

By spending a few pennies more, you get what we say you're supposed to get, when you're supposed to get it... in quality, service and profits.

Magee says it's your choice how you see a penny. But remember by you thinking you're saving a penny or two... you may be overpaying.

THE MAGEE "PENNY-WISE" CARPET CO.
999 Third Ave. New York, New York 10022
Attn: Housing & Building Dept.

Please rush me one of your "Penny-Wise" salesmen because...

I know I've been taken □ I think I'm being taken □ by a "Penny-Pinching" Co.

Name ___________________________
Title ___________________________
Company _________________________
Address __________________________
City ____________________________
State ________ Zip __________

CARPET BY MAGEE
s. the "penny-pinching" theory.

(When you're buying carpet from a "Penny Pincher," use this page on us to write down what you're suppose to be getting. Magee says, you may find you have The Troubles.)
Make your bathrooms something special with the patented Showerfold tub and shower enclosures. There’s nothing like them.

Showerfold’s flexible panels open all the way like a curtain. So there’s full access for easy in-and-out, bathing youngsters and cleaning up. Yet Showerfold closes lock-tight like a door. Positively keeps water inside. Showerfold has built-in safety, too.

Panels are guaranteed crackproof and shatterproof for life (no call-backs, no replacement costs).

No upkeep either. Panels won’t mold, mildew or fade—wipe clean with a damp cloth. Closed bottom track prevents build-up of scum and soap.

Eye appeal? Definitely. A rich choice of decorator colors, accented with gleaming trim, enhances the bath beautifully.

Showerfold looks expensive... but isn’t. There’s a style for every type and size of tub and shower.

One man can install Showerfold in minutes. It’s that simple, that light. Yet those panels are rugged enough to lean against. Showerfold can take it.

Model Home Special: Try a Showerfold for only $12.00. That, plus a half-hour installation, is all it will cost to show off a Showerfold in your model home... to let buyers see its advantages firsthand.

For full information, write Kinkead Industries, Chicago, Ill. 60646, Dept. HH-972.
Successful builders know this about Malta V.P. tilt windows

They reduce total installed cost ... and have tremendous appeal for the home buyer.

Malta's V.P. Tilt wood windows are vinyl protected. They require no painting and virtually no maintenance as all exterior frame parts are vinyl clad, weatherstrip is rigid P.V.C. vinyl and sash is factory finished coated. Rigid vinyl nailing flanges make weather-tight installation a breeze and units are completely factory assembled.

And ... V.P. Tilt windows are easy to sell to the home buyer. Sash tilts inward for easy cleaning. Completely removable too. Screens and storm panels install easily from roomside. All are features home owners want.

Fast, economical installation ... easy to sell. Isn't this what you're looking for in a window? Write today for Malta's V.P. Catalog.

Malta

261 Johnstown Road, Gahanna (Columbus), Ohio 43230

A SUBSIDIARY OF PHILIPS INDUSTRIES INC.
Test drive our 16' hardboard lap siding.

It’s fully equipped.

Georgia-Pacific’s 16' hardboard siding. A great performer. Lap after lap. It handles like a dream. Corners beautifully. Available smooth or textured. And comes factory primed ready for you to paint. You’ll get a lot of mileage out of this siding because it’s so tough. G-P’s siding won’t split, check or crack. It resists moisture, mildew and termites. And you can drive nails flush without denting the surface. Call your G-P representative today for the economy siding that’s fully equipped and guaranteed. He’ll deliver as much as you need. Fast. Or, come and test drive it at your Georgia-Pacific dealer.

Georgia-Pacific
Portland, Oregon 97204

CIRCLE 114 ON READER SERVICE CARD
Learn how your company can take advantage of the finest, fastest growing, and most profitable real estate development package.

NEW YORK SEPTEMBER 25-26
SAN DIEGO OCTOBER 26-27
DALLAS NOVEMBER 27-28

House & Home and AMR have assembled a faculty of outstanding land planners, developers and builders to share their experiences with you in a vital 2 day seminar. Learn how the experts assemble a building site, get the local zoning ordinances necessary to allow the best possible use of the land. Learn how to get the financing, how to design marketability into your project, how to increase the rate of return on your investment.

Learn why the planned unit development, PUD, can be the key to your success in the 1970's.

For additional information, please complete and return the coupon.
Raynor offers you over 1,733 choices in garage doors. Residential, Commercial and Industrial.

In every popular garage door style, size and material... and in a price range to match your budget. Ribbed steel... Flush steel... Insulated steel... Aluminum... Fiberglass... Paneled wood... Hollow-core flush wood... Rolling steel doors... Fire curtain doors... Aircraft hangar doors... Service station doors... whew! The point is, we can offer the doors you need to attractively and securely close any opening.

And we back up every Raynor overhead-type door with a registration number permanently recorded on data film for positive identification and quick replacement of any damaged parts... today, tomorrow or twenty years from now. Send for one of our handy garage door reference guides to get all the specifications. Raynor... we build better doors.
Dry-installation system speeds stair construction

Prefabicated steel and concrete stair system is precast, eliminating messy, time-consuming, on-site pouring and drying. The system consists of landing platforms and self-positioning steel-encased precast treads. Components are engineered to be efficiently handled by two men equipped with a level, a rule and two 3/8" wrenches. After setting the landing frames at the correct level and completing masonry work, the stairway is moved into place and fastened to the frame (above left). One man places treads on the stair while the other loosens each bolt for fastener and tightens it again to secure the step (top right). Precast landing panels are then placed into the frame. Using a fishbone compressor, one man seals joints while the other fastens bolts (above right). American Stair, McCook, Ill.

Lucite time pieces, lights and furniture are functional contemporary design elements for model units. A corner floor piece with Danish walnut trim and an up-dated grandfather-clock look stands 60" and chimes every quarter hour. Included in the collection are smaller clocks for tables and desks, a selection of lighting fixtures and a series of Lucite cubes and pedestals. Classic Contemporary Design, San Francisco.

Pre-finished plywood paneling. "Illusion," is printed to add decorative dimension. Available in the tree pattern shown, in flower designs and in vertical stripes, the standard-size plywood panels come in a full range of colors. Protected by a Poly-clad top-coat, paneling is washable, durable and easy-to-maintain. Evans, Portland, Ore.
HEAD AND SHELVES ABOVE THE REST

FLOAT-AWAY

If you use a quantity of doors and shelves, you won’t find a better supplier than Float-Away.

Here’s why:

1. Dependable deliveries. Float-Away can deliver the styles and the sizes you need, when you need them.

2. Guaranteed pricing. We guarantee current pricing against your purchase order on all shipments through 1972.

3. Fleet of trucks. When you order sizeable amounts, in most cases, Float-Away assures you direct, on-schedule deliveries with our own truck fleet.

4. Quality products. Float-Away manufactures the finest bi-fold closet doors and shelves on the market. All pre-finished with our exclusive Floata-Plate process.

Write today for complete information.
CHARLESTON HEIGHTS TOWN HOUSES BY BECKER BUILT HOMES, LAS VEGAS, NEVADA.
General Electric has a program to get your kitchen appliances to you where you need them. When you need them.

The Contract Register is our computer system. We use it to coordinate the appliance manufacturing and distribution operation we've set up for the building boom of the seventies.

That's quite a job.

We have four regional distribution centers and over sixty warehouses around the country, so you'll have the appliances you'll need nearby.

We have factories, too. Nine of them. The largest, Appliance Park in Louisville, Kentucky, makes enough appliances to fill more than one hundred freight cars and truck trailers every day.

And we're expanding. But not by building just another factory. We're building another Appliance Park. This is Appliance Park East, in Columbia, Maryland. It will be about the same size as the one in Louisville. And we're expanding seven other plants too and have added a new multi-million dollar research and design center in Louisville.

Then, to make this gigantic system work for you, we employed the computer. At GE, all signed contracts for major appliances are recorded in the contract register—an advanced computer system which keeps data on quantity, models, color, door swing, voltage, etc. Together with the date and place required.

To give all this a more personal touch, each month a GE contract sales specialist in the field reviews, up-dates, and revises each contract as needed.

And if you ever need parts, our nine regional centers are strategically located throughout the country, and all parts are kept up-dated by our computer system.

Keeping you supplied is a big job, but we at General Electric have been working hard to be ready to serve you.

So the next time you have an appliance order, think of our factories. Think of our warehouses. Think of our computer. And say to yourself, "This is a job for General Electric."

GENERAL ELECTRIC
Surface-mounted bathroom cabinet offers three-way viewing and double capacity storage. Unit is available with optional incandescent top-lighting. Also shown is a marble-top lavatory with an integral bowl and back-splash and pecan-finished vanity base. General Bathroom, Elk Grove Village, Ill.

CIRCLE 200 ON READER SERVICE CARD

Provincially styled bathroom cabinets feature doors with ornamental carved borders. Special self-closing hinges permit doors to be snapped onto any number of bases after installation. Included in the line are the bases, matching flush or recessed wall cabinets, mirrors and frames. Chemcraft, Elkhart, Ind.

CIRCLE 201 ON READER SERVICE CARD

Fiber glass tub surround is easily installed over any hard, solid surface. No grouting, mitering or edge moldings are required. Side pieces wrap around to form part of the back wall, eliminating troublesome corner joints. Swan, St. Louis, Mo.

CIRCLE 202 ON READER SERVICE CARD

Matte glaze ceramic wall tiles are available in fifteen decorator shades including newly added colors of lemon yellow, lime green, spicy mustard, harvest gold and ripe avocado. Tiles are 4 3/8" squares. Florida Tile, Lakeland, Fla.

CIRCLE 203 ON READER SERVICE CARD

Lavatory faucets have flip-type lever handles and a 4" spout. The 4 3/4"-wide centerset Olympian is available in two models: the "8000," equipped with an aerator and pop-up waste and "8002," with lift rod and extension. Unit is offered in a choice of four finishes, bright or brushed chromium or gold. Faucets feature a Pos-I-Pak brass cartridge which carries a 8 3/4-year replacement guaranty against leakage or repair. Bradley Washfountain, Menomonee Falls, Wis.

CIRCLE 204 ON READER SERVICE CARD

Thermostatic mixer valve offers positive water temperature control. The temperature is set on a control valve and maintained to insure comfort and safety in bathing and washing. A Freon control cartridge regulates water temperature within ± 1°. Unit can be repaired by simply replacing this cartridge. The line includes a full set of tub, shower and lavatory fittings and a kitchen sink unit. Temperature limit of 110° on tub and shower models prevents scalding. Eljer, Pittsburgh, Pa.

CIRCLE 205 ON READER SERVICE CARD
A TOTALLY NEW UTILITY COMBO THAT CAN SAVE YOU SPACE, TIME, MONEY, MATERIALS AND MAINTENANCE.

- It’s an Electric Direct Expansion Fan Coil for summer cooling...
- an Electric Air Heater for Winter-time Comfort...
- an Electric Water Heater for Year-Round Operation.

THE ELEC-TRI-PAC.
It’s a water heater, air heater and an air-conditioning fan coil combination designed especially for multiple-unit apartment complexes, condominiums, office buildings, residences, and other limited-space applications.

IT’S A SPACE SAVER.
The 40-gallon Jetglas water heater, fan coil and 5, 8, 10 or 12KW strip heater will fit neatly into a 24”x28” area—a standard 2-foot closet. Cooling is supplied by a compact, 1½ or 2-ton remote electric air conditioner.

IT’S A TIME SAVER.
The Day & Night Elec-tri-Pac can cut installation time up to 110 minutes per unit, because you’re installing one combination unit as compared to installing three separate units individually.

IT’S A MONEY SAVER.
On all Day & Night Elec-tri-Pacs you can use a single circuit breaker and single electric circuit. This is even possible in the models with 8KW air heaters or larger as a result of the Current Limiting Sequence Circuitry furnished as standard equipment. You’ll save up to $600 on a 20-unit building on wiring, circuit breakers, and labor alone.

IT’S A MAINTENANCE SAVER.
All electrical controls and the T&P relief valve are readily accessible through the front. The factory supplied air filter is placed on the outside of the casing for ease of service.

If you’ve got a building project, now or in the near future, that looks right for our new Elec-tri-Pac, you can get more information by contacting your nearest Day & Night distributor. Air Conditioning, Heating, Water Heating from the Day & Night Company.

La Puente, California, Collierville, Tennessee
THE HANDY WAY
Calculate Material Needs
The CONSTRUCTION CALCULATOR
will save you $$$ on every job you do.

NEVER BUY TOO MUCH AGAIN
Professional contractors use the CONSTRUCTION CALCULATOR to save time as well as money. Quick and easy to use, you just follow the directions in the Book of Facts included with every CALCULATOR.

NOW FIGURE EXACT NEEDS of paint, brick, tile... any building material. Do it the HANDY Way.

ORDER NOW. SAVE ON YOUR NEXT JOB.
$4.98
Please add 35¢ handling and postage to all orders. New York State Residents Please Add Tax

HANDY MANUALS
403 Hillsboro Parkway, Syracuse, N.Y. 13214
Interested in a Real Estate Calculator? Send for information.

THE MOST USEFUL HOIST

LADDER PLATFORM HOIST FOR BUILDING MATERIALS
Plywood, Wallboard, Lumber, Roofing, Shingles, Brick, Block, Mortar, Crated Fixtures
Designed for easy portability yet rugged enough to handle tons of material a day to heights up to 44 feet. Handles 400 lb. loads at 110 ft. per min. on heavy duty sectional ladders with electric or gasoline powered winch.

Write for Catalog,
REIMANN & GEORGER, INC.
1853 Harlem Road, P.O. Box 681
Buffalo, New York 14240

PRODUCTS/BATHS

Five-in-one bath-accessory center includes a grab bar, a single handle control, a soap and shampoo tray, a diverter and a tub filler. The "Moenique" is available with a built-in pressure balancing system that maintains water temperature within 1°. Model, equipped with a self-adjusting cartridge, has strong sandwich-style mounting. Moen Div., Stanadyne, Elyria, Ohio.

Please add 35¢ handling and postage to all orders. New York State Residents Please Add Tax

Fiber glass corner shower is specially engineered for use in limited area installations, such as small second baths, where maximum space utilization is a must. Folding shower doors slide open from either end of the molded unit to provide freedom of placement. Curved design eliminates the need for a third wall or end jams. Kinkead, U.S. Gypsum, Chicago, Ill.

Economy-priced bathroom cabinet is surface mounted for quick, easy installation. Steel-bodied "Moderne" has a baked-enamel finish inside and out. Unit is equipped with an incandescent light and an electrical outlet. Plate/float glass or window-glass sliding-door mirrors are electroplated and copper backed to prevent silver spoilage. Miami-Carey, Monroe, Ohio.

Decorative vanity tops with integral bowls and backsplashes are thermoformed from acrylic sheet and reinforced by structural plastic material. Units are not affected by household chemicals. Tops are available in solid and marbled colors in lengths of 25" to 40". Peerless Plastics, Evansville, Ind.
Join the plywood savings plan where you work.
APA® Single Wall can save 30-40% on siding-sheathing costs.

APA Single Wall as combination siding-sheathing completely eliminates one application step.

That amounts to a lot of money. In time and in materials.

And plywood single wall with framing spaced 24-inch o.c., rather than 16-inch o.c., can save even more. We just proved it in two test houses in Pleasanton, California. One with 24-inch spacing for walls and partitions. One with 16-inch o.c. Both 1,600 sq. ft.

The tests, conducted by the NAHB Research Foundation, showed wall savings of $140 on the house that used 24-inch framing.

Good savings on walls. Even better when you build the whole house on a 24-inch module—floors, walls and roofs. We call it Mod 24 construction. You can call it anything you like. But the fact is the Mod 24 system uses less material, less labor and less money. Total savings of $218 on the 24-inch o.c. Pleasanton house. $218!

APA Single Wall and Mod 24 construction. Builders will like the savings. Codes accept the construction. Send the coupon at right for these books and learn more about building better for less.
Plan 2:

Double wall construction 24-in. o.c. can save 40¢ per lin. ft.

The 40¢ figure compares plywood wall sheathing with framing 24-inch o.c. to plywood sheathing 16-inch o.c., and is derived from tests conducted by the NAHB Research Foundation.

We know some builders are going to continue to use double wall construction, no matter what we say about single wall.

That’s just great—as long as you use plywood sheathing. Because plywood sheathing is stronger, pound for pound, than any other material. You can forget about let-in bracing and building paper. Plywood is accepted for 24-inch o.c. construction by major model codes.

And plywood sheathing applied over framing 24-inch o.c. saves money. Just how much depends on you. For example, you’ll save the most if you use Mod 24 framing-spacing for the entire house—walls, floors and roofs.

If you want more facts on plywood sheathing and Mod 24 construction, we’ve got them. Send the coupon—and join the plywood savings plan.
These newly-built apartments with gambrel rooftops take on an interesting Dutch Colonial feeling. All exterior block surfaces were sealed first with a brush coat of THOROSEAL cement-base coating to fill and seal all cracks and voids. A spray coat of THOROSEAL PLASTER MIX was then applied for a finishing texture. (Super bonding ACRYL 60 was used in both.) Here's another example of remarkable THOROSEAL qualities—low cost finishing that protects, waterproofs and decorates for the life of the building.

Attractive spray texture enhances Dutch Colonial look

Thoroseal Plaster Mix finishes and waterproofs masonry quickly and economically!
Sculptured tiles with a Spanish look can be used as solid patterns on interior walls or as accents. The line is offered in the matte white finish shown or in five bright glazes: antique gold, harvest gold, beige, yellow or antique white. All tile shades are available with color-coordinated grout to provide an unbroken appearance. U.S. Ceramic Tile, Canton, Ohio.

Decorative panels for the tub area are highly resistant to heat, moisture and stains. The ¼”-thick pre-finished hardboard panels are 5'x6'. The soft-lustre marbleized "Sarona" pattern is available in rose, blue, green and white with matching edge moldings. Only occasional wiping is needed to maintain the original lustrous appearance. Marlite, Dover, Ohio.

Acrylic-faced fiber glass bath unit, designed to meet the needs of small-volume contractors, is 30 lbs. lighter than a comparable steel tub. "ACRA-BATH" combines the strength and lightness of a fiber glass core with the toughness and color fastness of an acrylic exterior. Units are available in white and standard fixture colors. Universal-Rundle, New Castle, Pa.

Self-rimming china lavatory is 19” in diameter and 6½” deep. Designed for use in vanity counters, the unit can accommodate a 4” centerset faucet. Lavatory with anti-splash rim and concealed front overflow is offered in four colors: avocado, gold, blue and beige. Borg-Warner, Mansfield, Ohio.

Kool-O-Matic solves airconditioner overload problem in apartment complex

Problem: Despite complete gravity ridge-and-soffit attic ventilation system, the airconditioning system wouldn't hold upper-floor apartment temperatures at a comfortable level. Tenants were complaining, threatening to move out. The airconditioning system was constantly overloaded, required frequent service.

Solution: 150 Kool-O-Matic Automatic Power Attic Ventilators were installed directly on roof in minimum time. Electrical connections were readily made to existing circuits.

Result: The upper-floor apartments are now comfortably cool. There are no more complaints. No tenants were lost. The airconditioner load and operation and service costs were substantially reduced.

Building? Remodeling? Let Kool-O-Matic forestall attic heat and moisture problems (or you/Get complete details, now!

Wood Finishing Made Easy

Stains, Waxes, Seals in one operation

Time was when wood finishing was a long, arduous task. Today, Cabot's Stain Wax does the job in a single application. This unique "three-in-one" finish, suitable for all wood paneling, brings out the best in wood, enhancing the grain and producing a soft, satin finish in your choice of twelve colors plus black, white, and natural. When a flat finish is desired, use Cabot's Interior Stains.
Panel-Clip's Top plate tie,
THE APPROVED WAY TO SAVE MEASURING AND CUTTING TIME.
Accepted by the FHA, the International Conference of Building Officials and the Southern Building Code.*
Panel-Clips Top Plate Tie beats the conventional fly-by and hold-back method in every way.
• requires less figuring and eliminates cutting
• holds over a half ton as opposed to 214 lbs. with 16 penny nails
• made out of hardened zinc coated steel
• no problem in plant operations
For further information write:
The Panel-Clip Co.
BOX 423, FARMINGTON, MICHIGAN 48024

Why pay an answering service when you can own your own?
Dictaphone has a machine to make sure you never lose another cent through a missed phone call or a garbled message. In fact, we have a whole line of them. They're called Ansafones. You can buy one outright or possibly lease it for about what you're paying your answering service now. And it works for you 24 hours a day, 7 days a week.
For a free brochure describing how much an Ansafone can help you, mail this coupon now.

Dictaphone
Box L 9-20, 120 Old Post Road, Rye, New York 10580
Please send me full details of the Ansafone line.
Name
Company
Address
City, State, Zip Code

Ansfone and Dictaphone are registered trademarks of Dictaphone Corp.

H&H September 1972

PRODUCfS/DOORS, WINDOWS

Spring-action T-bolt astragal for use on double doors incorporates weather-stripping and door lock and latch devices. The permanently installed anodized aluminum unit requires no maintenance. Empire Metal, Los Angeles, Calif.
CIRCLE 227 ON READER SERVICE CARD

Replacement window with full or half screens has a tilt-in sash for easy cleaning. The unit features single-strength, double-strength or insulating glass, a permanent baked-on enamel finish and snap-in muntin bars. Norandex, Cleveland, Ohio.
CIRCLE 229 ON READER SERVICE CARD

Steel doors for residential use are furnished with magnetic weather-stripping around the perimeter which eliminates the need for storm doors. Warp-resistant doors are for single and double entranceways. Armco, Middletown, Ohio.
CIRCLE 230 ON READER SERVICE CARD

Heavy-duty rack and pivot hinge is structured to support doors up to 130 lbs. The hinge, which is designed to eliminate the need for rounded door edges, permits installation with close tolerance fit and concealed hardware. Heavy-gauge metal and bottom pivot support provide extra floor anchorage. Gear housing can be cement-set. Hager Hinge, St. Louis, Mo.
CIRCLE 233 ON READER SERVICE CARD
This is the fastest selling, new apartment floor joist in America today.

Five million lineal feet in the first year and we'll double that in 1972. That's acceptance . . . and for good reason.

The I Series in apartment floor systems will span up to 24 ft. at 2 ft. O.C. (up to 40 ft. in roofs). Available in any length to 60 ft. for multiple spans. It's precision manufactured and provides perfectly level floors. Always straight, no twist or shrinkage and builder after builder reports that installation is two to four times faster than with conventional lumber joists. The plywood webs cut easily for accommodating wiring, plumbing and even large ductwork.

Cost? In many areas of the country it will actually compete with ordinary lumber joists, but everywhere it offers real labor savings and speeded construction for earlier rentals.

Available in depths from 10 to 24 inches from your nearby TRUS JOIST representative. Yes, he's busy but you can still get three week delivery.

Want more information, details, a design manual or free cost estimate on your project? Just ask.

trusjoist

9777 CHINDEN BOULEVARD  BOISE, IDAHO 83702

Eleven plants and 75 sales offices throughout the U.S. and Western Canada

CIRCLE 131 ON READER SERVICE CARD
Remember the old days, when weather delays, material defects, and human errors took big bites out of your profits? Nowadays, wise developers predict profits they can depend upon... with DELUXE Multi-Family residences.

Modern, factory modular construction techniques, along with rigid quality controls, make it easy for you to offer outstanding value at affordable prices... and consistent profits.

Extra quality is designed right into DELUXE Multi-Family residences, because volume factory purchasing power allows premium grade, traditional materials to be used. On-site setup is simple and fast. And, DELUXE Multi-Family units are built to endure.

With such a wide choice of floor plans and optional features, DELUXE HOMES practically sell themselves.

Investigate the DELUXE Multi-Family Homes merchandising programs, and discover how easily you can count your profits... then, watch them grow!

DELUXE HOMES

Decorative door covers simulate a hand-carved wood look. Available in walnut or white finish, "Fashion Doors" are applied with contact cement in the same way as wallcovering. Covers are for use indoors or out. Decor Doors, Orange, Calif. CIRCLE 228 ON READER SERVICE CARD

Aluminum vent windows can be opened to any position and held by an adjustable friction stay arm. The 1 1/4"-deep units accept glass from 3/4" to 1 1/2". White bronze handles lock the vents into closed positions. Amalite/Anaconda, Atlanta, Ga. CIRCLE 231 ON READER SERVICE CARD

Pocket door set engineered for one-man installation requires no cutting of metal rail. The sturdy unit is adaptable for use with any type of wall construction including tile. One frame fits all door sizes up to 3'6"x6'8". National Mfg., Sterling, Ill. CIRCLE 232 ON READER SERVICE CARD

Heartwood push-pull door handles are set into aluminum extrusions for strength and rigidity. Designs, carved from 1 1/4" solid American black walnut, are created by American artists. Wood is protected by a resin-oil formula. The line is available with offset and straight projection mounting brackets. Custom designs may be ordered. Builders Brass Works, Los Angeles, Calif. CIRCLE 132 ON READER SERVICE CARD
70 Maytags average just 32¢ apiece for repairs at Hazelcrest Condominiums.

Reports Mr. Joseph C. Masterson, Manager: "We’re all-Maytag here, and our 35 Maytag Dryers have proved every bit as dependable as our 35 Maytag Washers."

Opened in December of 1968, Hazelcrest Condominiums comprise 35 handsome buildings with a total of 285 units and 712 occupants in Hazelcrest, Missouri.

“We decided to go Maytag all the way, dryers as well as washers,” writes Mr. Masterson. “It proved to be a good move. The residents couldn’t be more pleased with these machines, and our whole laundry room operation is exceptionally smooth. Repair costs on our 70 Maytags have been practically negligible, averaging only 32¢ a year per machine.”

Of course, we don’t say all Maytags will match the record at Hazelcrest Condominiums. But dependability is what we try to build into every Maytag Commercial Washer and Dryer.

Find out what Maytag dependability can do for you. We’ll also send details on exclusive Maytag DIAL-A-FABRIC Washers that let customers dial a programmed cycle for any washable fabric . . . even wool! One dial setting does it. Mail the coupon.

THE MAYTAG COMPANY, Advertising Dept. HH-9-72, Newton, Iowa 50208.
GENTLEMEN: Please rush me full information on the dependable Maytag-Equipped Laundry package.

Name.__________________________________________________________
Address._______________________________________________________
City.___________________________________________________________
State.____________________ Zip Code.___________________________
Phone.__________________________________________________________

CIRCLE 133 ON READER SERVICE CARD
PRODUCTS / COATINGS, ADHESIVES

Adhesive foil system is designed to increase the dependability of air handling closure systems. Available in a wide selection of smooth face or scrim patterns, the foil has high initial grab and superior adhesive properties. Rolls come in 180' and 300' lengths and 2" to 4" widths. Morgan Adhesives, Stow, Ohio. CIRCLE 235 ON READER SERVICE CARD

Strippable adhesive for applying vinyl wallcovering to wallboards insures easy removal of the material without damaging or marring the base surface. The non-staining, mildew-resistant adhesive can be easily applied with roller or brush. Priming of wallboard is unnecessary. Victex, L.E. Carpenter, New York City. CIRCLE 238 ON READER SERVICE CARD

Latex stain with a water base can be easily applied without sanding or priming. The mildew-resistant coating will not peel, crack or blister. The fast-drying stain, which does not present a fire hazard, can be applied to raw or stained wood but not to painted or sealed surfaces. Available in 16 colors, the stain is ideal for rough-sawn and vertical siding, shingles and clapboard. Brushes and rollers may be cleaned with warm soap and water. Samuel Cabot, Boston. CIRCLE 240 ON READER SERVICE CARD

Send us 25¢, we'll send you 20 new vacation home ideas.

Vacation Homes
5510 White Building, Seattle, Wa. 98101
Please send me your 16-page, full-color brochure of new ideas in vacation homes, including an elegant "gold rush" cabin, a remodeled caboose, a dramatic glass and cedar beach home. I enclose 25¢ for handling.

Name
Address
City  State  Zip

Send 25¢ for helpful booklet and nearest dealer. Write: Portland Willamette Co., 6796 N.E. 59th Place, Portland, Oregon 97218

Choose a fireplace screen and accessories to complement your decor. Portland Willamette firescreens are custom-built to fit your room motif in a variety of soft or bright metal finishes. Ask our dealer about styles, sizes and proper finishes.

Send 25¢ for helpful booklet and nearest dealer. Write:

Red Cedar Shingle & Handsplit Shake Bureau
5510 White Building, Seattle, Wa. 98101

Corner screen
Custom-fitted screen

Glassfyré screen
Frame screen
For us to be the fastest growing kitchen cabinet company, it means a lot of people doing business with us are growing fast, too.

We couldn't be selling our cabinets at the pace we're selling them unless a lot of people like you were also selling them like crazy.

And we're making it our business to keep up the pace.

Here's how.

We have four strategically located factories and seven regional warehouses which means our customers are assured of delivery in the shortest possible time.

And at the lowest possible cost. No matter where in the United States they're located.

We have six complete lines of cabinets covering every price and styling need. Which means our customers have the option of ordering all their cabinets from one manufacturer instead of from several manufacturers, allowing freight costs to be kept down.

And at Triangle Pacific, we offer our customers cabinets with the highest styling and quality at the best value.

In addition to everything else, when you buy Triangle Pacific cabinets, you get the Triangle Pacific sales force, probably the most active sales force in the business.

Every one of our salesmen considers it his job to make doing business with us both easier for you and more profitable for you.

A phone call to Bob Meltzer, President of Triangle Pacific, is all it takes to find out exactly how.

So whether you're just getting involved with cabinets, thinking about adding a new line, or ready for a complete change in suppliers, you owe it to your business to carry Triangle Pacific.

Our styling and pricing will sell your customers. Our service will sell you.
**PRODUCTS/COATINGS, ADHESIVES**

One-system bonding liquid is capable of joining most man-made materials to themselves and each other in 60 seconds. No heat or pressure is needed to secure the union, making "Zipbond" ideal for jobs requiring fast curing time. The alpha cyanoacrylate contact cement can be used with rubbers, metals, plastics, porcelains, woods and glass for fabrication, repair or maintenance. Bonding agent has a shear tensile strength of up to 2,770 PSI. Tescom, Minneapolis, Minn.

CIRCLE 237 ON READER SERVICE CARD

Polysulfide polymer flexible sealant permanently seals wood, metal, glass, tile, masonry and most plastics. The easily applied "Perma-caulk," suitable for interior or exterior use, is waterproof. Macklanburg-Duncan, Oklahoma City, Okla.

CIRCLE 236 ON READER SERVICE CARD

Peel-up carpet adhesive system is designed for the installation and removal of rubber-backed, latex-backed, needlepunch and jute-backed carpets. The system consists of a white latex adhesive and a clear primer coat for use on porous wood and concrete floors. Consumer Glue, St. Louis, Mo.

CIRCLE 239 ON READER SERVICE CARD

A polyurethane finish for exterior or interior wood or metal surfaces, "Defthane" creates a super-hard clear coating that is claimed to outlast varnish 2-to-1. A choice of two finishes, gloss or semigloss satin, is available. "Defthane" is especially recommended for areas where high resistance to weather and wear is necessary. The coating comes packaged in pint, quart or gallon containers as well as 13 oz. aerosol spray cans. Deft, Torrance, Calif.

CIRCLE 241 ON READER SERVICE CARD

We're Big in Copycats

We sell more tabletop, diazo copiers than anybody else. And we do it with soft sell, not soft soap. Because our precision engineered whiteprinters practically sell themselves. They’re dependable quality—no question. They have to be— they’re the only tabletops backed by a 1-year warranty.

The whiteprinter shown here, our Model 747, has a 47-inch throat, gives you printing speeds up to 15 feet per minute, offers a selective 3-speed vapor development system which eliminates liquids in the machine. It's one of the three reasons we're the biggest in copycats. The other two: Model 146, Model 1042. Our full color brochure tells about all three. Please send for it. Blu-Ray, Incorporated, 84 Westbrook Road, Essex, Connecticut 06426. Telephone (203) 767-0141.

CIRCLE 145 ON READER SERVICE CARD

**"Sitting room only"**

...for up to 15 people in Am-Finn’s new “jumbo” Mark 810 Sauna.

Giving you:
- 80 square feet of floor space
- interior walls, ceiling, floor and benches of beautiful kiln-dried redwood
- superior insulation of non-burning polyurethane
- vapor-proof interior light
- pre-fabricated and pre-wired for easy installation

"Sitting room only" inside the Mark 810 Sauna means “standing room only” outside your rental office.

Call or write for more information about our complete line of original Finnish saunas today.

AM-FINN, INC.
Haddon Ave. & Line Street • Camden, New Jersey 08103

CIRCLE 136 ON READER SERVICE CARD
Apartment Builders:
PERMA-DOOR is the only residential steel door with sound and fire rating.

PERMA-DOOR with a STC sound rating of 28 and a 1 1/2 hour fire rating, offers unsurpassed safety, security and beauty for all types and styles of apartment entrances and stair tower doors. These doors are available as standard from your distributor's warehouse.

PERMA-DOOR®
by Steelcraft® Manufacturing Company
9017 Blue Ash Road, Cincinnati, Ohio 45242 U.S.A.
Phone (513) 791-8800
An American-Standard Company
now—for the first time—you can preserve and protect your copies of House & Home

Beautiful, custom-made Library Cases to hold a full year's issues of House & Home!

Sturdily constructed of handsome dark blue or red leatherette and embossed in gold, these cases preserve and protect your copies of House & Home—and keep them ready for quick, easy reference.

These handy cases also conserve valuable space and reduce library clutter in your office or home.

With each case you receive a gold transfer to print or write the year on the cover.

Order your House & Home Library Cases today. Simply fill in the form below and drop it in the mail.

House & Home Library Cases,
1221 Avenue of the Americas New York, N.Y. 10020

Enclosed is $_______ for _____ Library Cases
g $4.25 each; 3 for $12.00; 6 for $22.00

Check color preferred: □ red □ blue

Allow 3 weeks for delivery of House & Home Library Cases.

Name

Address

City State and Zip

Pollution control:
A corporate responsibility

Pollution and pollution abatement have become important aspects of every business. They affect budgets, profit and loss, position in the community, corporate image, even the price of stock in some cases.

Pollution is a now problem that is receiving attention from astute businessmen. Water treatment plants, fume scrubbers and filtration systems, land reclamation, plant beautification, litter prevention, employee education programs, are all types of things industry is doing to help in the pollution fight.

But regardless what a businessman is doing today he must be considering pollution control efforts for tomorrow.

One thing he can do is write for a free booklet entitled "71 Things You Can Do To Stop Pollution." It doesn't have all the answers on pollution. But it might give a businessman a few ideas for both today and tomorrow.

People start pollution.
People can stop it.
Washington Homes Inc. makes their “Mid-American Dream Homes” a reality with Crown Aluminum.

Anybody can make a $50,000 house look like a $50,000 house. Building a home that will cost half as much, and look just as great isn’t so easy. But Washington Homes, Inc. is doing it. Using Crown Aluminum exterior building products, they’ve built many beautiful homes in Washington and Baltimore communities at an average price of $25,000. According to Washington Homes’ Executive Vice President, Lawrence Breneman: “We find our buyers are more and more conscious of quality construction, design, color selections and most of all maintenance-free products. Crown Aluminum provides the answer for all three.”

For more information about Crown Aluminum’s Dream Home siding, soffit and fascia, gutters and downspouts, and shutters write or call Merv Feldman, Crown Aluminum Industries, RIDC Industrial Park, Pgh., Pa. 15238. We can help make your beautiful homes affordable. And your affordable homes beautiful.

Crown Aluminum Industries
CIRCLE 151 ON READER SERVICE CARD
DEALERSHIPS AVAILABLE

Canada's leading manufacturer of leisure homes has now established operations in the United States. We are accepting a limited number of franchised dealers. Here is an opportunity for you to become associated with this exciting growth industry.

Please send details regarding dealership requirements to:

Name ........................................
Company ......................................
Address ........................................
City ............................................

Mail to Viceroy Homes Inc.
5552 Secor Rd. Unit #2
Toledo, Ohio
Formica presents the 
“tenant-proof” apartment

FORMICA® products give investment property a long lease on life. Elegant but durable, require practically no upkeep.

Whether remodeling or starting out new, Formica® laminated plastics will please both tenant and owner. Warmth and beauty invite new rentals and renewals. Maintenance is a breeze and refinishing forgotten.

In the kitchen, Formica® laminates on cabinets and countertops wipe clean in a minute, keep the decorator’s look for years. In the bathroom, Formica® Panel System 202 puts an end to dirty grout lines and crumbly, broken tile. Wide moisture-proof panels go right up over old walls for fast, low-cost modernizing. And our new, factory-applied adhesive makes the job even easier, saves time and money.

Put Formica® laminates where the traffic is . . . on lobby and elevator doors and walls to resist vandalism and reduce maintenance.

Specify Formica® laminate to keep your apartment beautiful. It’s tenant-proof.

Call your Formica representative or write Dept. HH-9

Leadership by design
Your Project and Our Financing Can Go Together Like Ham 'N' Eggs

(Or why Associated can bring home the bacon)

You can get all kinds of commercial loans from us. Big loans. Little loans. Construction loans. Permanent loans. All the usual loans—apartments, shopping centers, industrial parks, etc.

We also have the ability to structure "unusual" loans. Like gap loans. And wrap-around loans.

We have the money and the know-how because we have the investors and the skilled people. We’re big. Big enough to have over 300 investors nationwide. Big enough to have 41 offices across the nation. Big enough to handle upwards of $20 million in loan applications on a given day. Big enough to have our own commercial loan placement office in New York. And big enough to finance a project anywhere in the country.

To talk business, talk to Jim Innes at (609) 365-4550. He’s our national coordinator. Or call the Associated company nearest you.

You’ll like our language. Money talks.

Associated Mortgage Companies, Inc., 518 Market Street, Camden, N.J. (609) 365-4550
Associated-East Mortgage Co., Camden, N.J. (609) 365-4550
Associated-Midwest, Inc., Cleveland, Ohio (216) 292-3600
Associated Mortgage Companies of Virginia, Inc., Hampton, Va. (703) 838-1600
The Berens Companies, Washington, D.C. (202) 333-8600
Overland Associated Mortgage Co., Kansas City, Missouri (816) 221-9100
Pringle-Associated Mortgage Corp., New Orleans, La. (504) 486-3501
Southern Mortgage Company, Columbia, S.C. (803) 779-5880

Mortgage Sales and Placement:
AMCO Investor Services, Inc., New York City

Non-combustible building board is made of 100% recycled wood fiber material that has been impregnated with chemicals to protect against flame-spread, termites, rot, fungus and moisture. The substance is compressed into lightweight high-density, insulation boards in 3/8", 1/2" or 5/8" thicknesses and sizes of 4'x8', 4'x12', 8'x8' and 8'x12'. Homasote, West Trenton, N.J.

CIRCLE 214 ON READER SERVICE CARD

Polyurethane “Saftiplass” panels can be easily cut or sawed into any size or shape. The plastic material will not shatter or slice, eliminating the potential of serious injuries. “Saftiplass” is much more difficult to break than glass, making it generally safer. The clear, economical panels, available in 24"x48" or 24"x72" sizes, can be used in a variety of applications including shower enclosures, storm windows or doors and room dividers. Lancaster, Redondo Beach, Calif.

CIRCLE 216 ON READER SERVICE CARD

Circular stairs for interior use are available in a number of standard heights. All units allow for a gradual rise with a gentle quarter circle turn to the right or left. Stairs are available in two widths and can be supplied with open handrail on one or both sides or ordered freestanding. Stairways are offered in two wood finishes. Fitzpatrick Stair, Burlington, Ontario, Canada.

CIRCLE 219 ON READER SERVICE CARD

Curved aluminum moldings and screeds for drywall installation can be used for either interior or exterior application. Available in 12 designs, the moldings can be used for arches, reverse arches and paraboloids. The curved units offer a great deal of design flexibility since they can be combined with straight moldings for special effects. Fry Reglet, Glendale, Calif.

CIRCLE 218 ON READER SERVICE CARD
PF-L® siding from U.S. Plywood. The minimum-maintenance exterior that can turn your buildings into best sellers. Because it’s surfaced with Tedlar® A polyvinyl fluoride film that’s just about the most durable exterior finish ever developed.

PF-L comes clean with a simple hosing. Even really difficult staining agents, such as roofing tar, wipe off with soapy water, solvents or detergents. Thanks to Tedlar, PF-L is unaffected by the usual weatherers like chemicals, soil, salt air, sandstorms, rain, hail and extreme temperature.

It has great color stability, too. And because PF-L is naturally resilient hardboard, it resists dents, gouges and other damage.

Another advantage of PF-L is that it’s a money-saver to install. Finished walls can be put up in any weather, by ordinary workers, with conventional carpentry tools, either direct-to-stud or over sheathing.

PF-L is available in Lap or Board and Batten. In Shell White, Granite Gray, Doeskin, Georgian Gold and Bayberry, with a full line of Tedlar surfaced accessories to match.

PF-L. A great way to build in minimum maintenance in multi-family and single-family dwellings. For more information, contact your local U.S. Plywood Branch Office.

U.S. Plywood
A Division of Champion International
777 Third Avenue, New York, N.Y. 10017

CIRCLE 169 ON READER SERVICE CARD
GRANDEZZA RUSTIC NO. 964, GLAZED

beauty of style and harmony
...of interior and exterior

BUCHTAL
RUSTIC CERAMIC TILE

Can these pictures do justice to the warm, vibrant variations of these glorious tiles?
Can they tell about their everlasting durability?
We suggest an in-person meeting!

Now on display at the showrooms of their exclusive U.S. representatives and distributors:

AMSTERDAM CORPORATION
41 EAST 42ND STREET, NEW YORK, N.Y. 10017
New York (212) 697-3300 • Philadelphia (215) 732-1492
Miami (305) 891-4331 • Oakland (415) 444-6050
Washington, D.C. (202) 529-8835
Call or write for free color brochures

ORIENTAL RUSTIC NO. 954, GLAZED

Prefabricated, pre-erected stairs are suitable for use in masonry, concrete, steel or wood structures and precast systems. Each steel tower contains a complete staircase up to 40' high including treads, risers, landings and rails. Towers can be used during the construction period, eliminating the need to erect wood rails and ladders. Pico Safe Stairs, Hyattsville, Md.
CIRCLE 215 ON READER SERVICE CARD

Post base clip aids in beam erection, making post positioning easy even when bolts are out of line. The adjustable two-piece clip consists of a base cover of 16-gauge zincplated steel and a support plate of 11-gauge galvanized steel. The cover, equipped with weep holes to prevent moisture build-up, has a special finish that resists weathering and holds paint. Engineered for use with 4"x4" posts, the clips are termite resistant and rotproof. Panel Clip, Farmington, Mich.
CIRCLE 217 ON READER SERVICE CARD

Metal building panels with a built-in interlocking-joint system provide weather-tight insulation. The patented joint is equipped with a factory-installed gasket. When combined with a urethane core, the system permits a minimum of air penetration providing totally effective insulation even at joints. Interlocking units make on-site erection fast and easy. Glaros, Rankin, Pa.
CIRCLE 220 ON READER SERVICE CARD

← CIRCLE 170 ON READER SERVICE CARD
Spray-on fireproofing for exposed structural steel beams and columns provides protection for up to four hours. Fire heat causes a chemical reaction in "Pyrocrete" during which cooling water vapor is released. This cooling agent protects the steel against structural failure. Carbone, St. Louis, Mo.
CIRCLE 221 ON READER SERVICE CARD

Elastomeric bearings for steel and concrete structures accommodate movement in vertical, horizontal or rotational directions. Weathertight Neoprene material is virtually maintenance free, requiring no cleaning, lubricating or painting. The bearings can be furnished with holes for use with fastening pins and bolts with no change in performance. Fel-pro, Skokie, Ill.
CIRCLE 223 ON READER SERVICE CARD

Self-locking Tinnerman wood anchors speed fastening of plywood panels by eliminating spanners and lock washers. The anchor is placed over a drilled hole and tapped into the wood. A screw is then inserted into the hole and turned until tight. Clips grab the screw and hold it securely. Anchor can be use with .028" to .031" plywood. Engineered Fasteners, Cleveland, Ohio
CIRCLE 225 ON READER SERVICE CARD

VILLEROY & BOCH
DECORATED CERAMIC TILES
Distinctive designs decorating the most distinguished interiors.

Exclusive U.S. representatives and distributors:
AMSTERDAM CORPORATION
41 EAST 42ND STREET, NEW YORK, N.Y. 10017
New York (212) 697-3300 • Philadelphia (215) 732-1492
Miami (305) 691-4231 • Oakland (415) 444-6050
Washington, D.C. (202) 529-8315
Call or write for free color brochures
How to lower your construction costs effectively with Lull High Lift Loaders!

Material costs are pretty well fixed but you can do something about the high cost of labor with effective material handling on the job with these machines. Here's how . . . .

By working effectively in gumbo mud . . . loose sand . . . snow . . . and rough ground! In fair weather or foul Lull High Lift Loaders speed materials to your crews keeping them busy working . . . not waiting for materials.

Four wheel drive . . . four wheel steer — oscillating axles for solid ground contact and superior weight distribution keeps material moving to your crews. WHAT ELSE? Built in load lifting stability for safety... extendible forward reach . . . lift capacities up to 6,000 pounds . . . lift heights to 41½ feet . . . 20% more ground clearance . . . more engine power . . . low profile for getting under 10 feet high openings or doors.

Want Proof?
Send for our brochures today detailing machine benefits and specifications

Rigid plastic foam insulation functions as nonstructural sidewall as well and requires no vapor barrier. T&G edging runs on all four sides of the lightweight boards providing leakproof mating. On-site tailoring of window and door areas is easily accomplished by cutting material with a sharp knife. AMSPEC, Columbus, Ohio

Fast-setting cement for patching and anchoring is safe and easy to use. The water-mixed material spreads easily with a trowel. It permanently secures bolts, posts, railings and signs or repairs cracks and holes in floors, walls or ceilings. Weather-resistant “Pre-Krete” is available in one-, two-, five- and ten-pound boxes. Pocono Fabricators, East Stroudsburg, Pa.

Framing device, which anchors wood sills to either concrete or masonry-unit foundations, replaces the conventional bolt anchor in most installations. The 18¾"-long, 1"-wide zinc-coated steel unit can be bent into a V where penetration into a 6" concrete slab is needed. When 15" penetration is required, two anchors can be connected. TECO, Washington, D.C.
The long and the short of Palco-Loc Redwood

LONG IN LENGTH—up to 20 feet—where it counts the most; for fascia, soffits, rake, frieze boards, corner boards, trim.

SHORT ON COSTS—the long lengths reduce application costs and trim waste.

Here's a knot-free clear grade of Certified Kiln Dried Redwood. It stays flat and straight, holds finishes longer. Can be ordered in vertical grain to eliminate grain raise.

Palco-Loc fascia patterns are single or double-plowed to receive either 1/4” or 3/8” soffits. Palco-Loc is also made in S4S finish, in tongue and groove, and most standard patterns. Available paint-primed and paper-wrapped.

Palco-Loc is finger-jointed with exterior waterproof adhesive and complies with FHA requirements for exterior and interior uses (non-structural).

PALCO
Architectural Quality Redwood

THE PACIFIC LUMBER COMPANY
1111 Columbus Avenue, San Francisco 94133
2540 Huntington Drive, San Marino, California 91108

BUILDING MODULARS? We'll make Palco-Loc to fit your specifications.
show 'em a better way:  
Ra-matic thru-the-wall  
Heating & Air Conditioning

A better way to cool, dehumidify, heat, ventilate, and filter and circulate air in industrial, commercial and residential buildings—the Ra-matic is quiet, economical, and easily installed in new or existing structures.

This forced air unit features a convenient push-button selection system, adjustable air flow, 208/230 volt rating, and AHAM certification.

The Ra-matic heating elements are low density totally enclosed sheath type and are equipped with thermal cutout if normal temperatures are exceeded.

The cooling system compressor is hermetically sealed and internally spring mounted with vibration isolators. The P.S.C. type motor has a capacitor and overload protection.

Convenient installation is achieved with sleeve, louver, chasis, enclosure and extender for flush mounting to any wall thickness.

Quality, convenience, and style make the Ra-matic thru-the-wall unit a better way for many applications.

Vinyl siding features a woodgrain texture. Panels are available in four colors—white, yellow, gray and green—and come in both 8" and double-4" styles. Accessory pieces, such as starter strips, inside and outside corners, undersill trim and window flashings, are color matched. Certain-Teed, Valley Forge, Pa.

CIRCLE 242 ON READER SERVICE CARD

Yellow safety strips of polyvinyl chloride signal a warning. They eliminate the need for constant painting and maintenance. Available are stair nosing marker for concrete stairs, pipe rail marker for railings or gate applications and corner guards for edges of equipment. Pawling Rubber, Pawling, N.Y.

CIRCLE 243 ON READER SERVICE CARD

Vinyl roof expansion joint cover forms a vapor seal. It stepped on it will spring back to the proper position. The cover is equipped with a nailing flange and can be installed by one person. Advantages include its long length, one-piece construction and lack of metal parts. B.F. Goodrich, Akron, Ohio

CIRCLE 246 ON READER SERVICE CARD

Neolon decking is water resistant and has elongation properties which prevent splitting. Designed for roof terraces, balconies, walkways and floors subject to flooding, seamless, easy-to-maintain decking can be applied to concrete, plywood, masonry and metal surfaces. Desco International, Buffalo, N.Y.

CIRCLE 248 ON READER SERVICE CARD

THE ELECTRICOLOGY COMPANY

A Division of Tennessee Plastics, Inc.  
P.O. Box T, C.R.S.  Johnson City, Tn 37601  
Phone 515/928-8101  Telex No. 55-3442

CIRCLE 174 ON READER SERVICE CARD
Here’s how GAF can help you make the house you build somebody’s Dream House.

Just cover the floors with GAF Fashioncraft Vinylflex® Tile. A Fashioncraft Tile floor is perfect for that all-important first impression that can make or break a sale.

It comes in enough eye-catching patterns and colors to give every room in the house a look of style and quality.

And your customers are sure to appreciate Fashioncraft’s handsome assortment of rich natural-like textures.

What’s more, Fashioncraft Tile is as dependable as it is beautiful. Each tile is a full 3/32” thick. And its extra-deep embossing can handle much more wear than regular residential tile.

It’s the kind of long-wear reliability a potential customer can see and feel for himself.

GAF Fashioncraft Tile. For a great first impression—and a lasting one too.

For more information, call your GAF Distributor or write: GAF Flooring Division, Dept. Q-92, 140 West 51 St.,
New York, New York 10020.
Cascade!
Molded Stone shower floors install as easily as they sell.

Lightweight, leakproof Cascade® shower floors install right over sub-floor—no back-up required. Stainless steel drain is factory installed to prevent leakage problems on the site.

Molded Stone® is only 1/5 the weight of concrete for easy handling, yet stronger than natural stone for a permanent, trouble-free installation. The smooth, non-absorbent surface wipes clean in a jiffy, can't rust or corrode, and is unaffected by normal household chemicals. And Fiat offers you nine decorator colors and three different shapes to help clinch the sale. Contact your Fiat representative or write Dept. HH-9.

QUALITY BY DESIGN

FORMICA CORPORATION
© 1972 Cincinnati, Ohio 45202, subsidiary of

PRODUCTS/EXTERIORS

Roof flashing has a snap-on neoprene collar which fits one standard galvanized metal base. Collar comes in three sizes to accommodate vent pipes 1½" to 4" in diameter. Special collar easily snaps onto a protruding lip in the galvanized metal base. Installation time is under 5 seconds. Genova, Davison, Mich.

CIRCLE 244 ON READER SERVICE CARD

Plastic shutters in a woodgrain pattern come in sizes from 36" to 80". Available in black and white, they will not chip, crack, warp, dent, rot or chalk. Slightly recessed edge around the louvered portion gives the shutters a more authentic appearance. Walled Lake Door, Richmond, Ind.

CIRCLE 245 ON READER SERVICE CARD

Redwood plywood siding panels have a factory-applied exterior water-repellent treatment. This rugged finish provides for natural weathering, staining, painting or bleaching. Standard ½"- and ¾"-thick panels are available 4' wide and 8', 9' or 10' long. Georgia-Pacific, Portland, Ore.

CIRCLE 247 ON READER SERVICE CARD

Vinyl shutters are hung on pre-drilled black brackets that simulate hinges to provide an authentic look. Available in panel or louver styles, shutters are of high-impact vacuum-formed vinyl skin bonded to a treated wood subframe. Widths are 14" and 18", and heights range from 35" to 75". Andersen, Bayport, Minn.

CIRCLE 249 ON READER SERVICE CARD
Encore.  
From the Cabinetmaker.  

The proud cabinet.  
Because it offers all the quality of a more expensive line. But not the price.  
Because it offers the styling you’d expect from one of Del-Mar’s top lines. And the practicality you demand.  
Its provincial styling adds a touch of sophistication to any kitchen. And Encore’s finely crafted pecan hardwood finish, deftly tooled hardware and tight, solid construction are all part of the same craftsmanship that has made Del-Mar one of the undisputed leaders in the industry.  
With a strict quality control system to keep you happy. And a total service program to get you the right cabinets, at the right place, at the right time. With no excuses.  
Encore is also proudly supported by a full line of features and specialty cabinets. As are all Del-Mar lines.  
So when it comes right down to it. Encore is more than just quality, styling, practicality and a price you can take advantage of.  
It’s a cabinet you can be proud to install.  

Del-Mar  
THE CABINETMAKER  

U.S. Plywood-Champion Papers Inc.
CEDAR CLOSETS FOR ONLY
$5.00 to $8.00 OVER YOUR
ORDINARY CLOSET COST

CEDARLINE - A dramatically different and easier way to install cedar closet lining made from Tennessee Aromatic Red Cedar processed into large flakes and compressed into an attractively textured pattern. Has the same strong, lasting cedar aroma, so highly valued for generations, that was found in fitted cedar boards. It’s all cedar—no fillers or other woods added.

CEDARLINE comes in standard 4 ft. x 8 ft. panels and easy-to-handle 16 in. x 48 in. panels. Panels are 1/4 in. thick. Can be cut to fit and nailed directly to studs or over existing walls. Need no finishing. Can also be installed with standard-type panel adhesives.

Give your closet that wonderful forest fresh scent. See your Cedarline dealer, or write to us for further information and samples.

Cedarline
A PRODUCT OF
GILES & KENDALL
P.O. Box 188 Dept. PA, Huntsville, Ala. 35804

CIRCLE 178 ON READER SERVICE CARD

LITERATURE

Wall systems brochure provides data on two types of exterior wall panels. Included is information on the variety of interior finishes which can be used. Accessories are listed. Chart shows available exterior colors. Armo, Middletown, Ohio.
CIRCLE 301 ON READER SERVICE CARD

Modular cabinetry and shelving applications are shown in sketches of various rooms in a typical house. Page facing each illustration shows components used and lists the model numbers. Custom-unit descriptions, installation instructions and specifications included. Wood-Mode, Kreamer, Snyder Co., Pa.
CIRCLE 302 ON READER SERVICE CARD

Adhesives, coatings and sealers are categorized. An adhesive guide lists various combinations of bonded materials and adhesives recommended for each. A coating and sealer guide lists various possible applications and the recommended brand product for each. Comprehensive tables provide data on description, performance and application. 3M, St. Paul, Minn.
CIRCLE 303 ON READER SERVICE CARD

Wallcoverings are displayed in this sampler of 26 of more than 60 patterns in the line. A specification chart is included. L.E. Carpenter, New York City.
CIRCLE 304 ON READER SERVICE CARD

Wheel loader catalog provides a full range of specifications and production data. A comparison with other wheel loaders in the size class is supplied via graphs and diagrams. Ask for form AE021122 at your local Caterpillar dealer.
CIRCLE 306 ON READER SERVICE CARD

Door weathersealing system is explained in this black and white brochure. Reasons for air infiltration and water leakage are analyzed, and text data is presented. Design information and requirements for the weathersealing system are given. A questionnaire is included so that the reader may provide information to help the company recommend the proper system to fit specific needs. Schlegel, Rochester, N.Y.
CIRCLE 308 ON READER SERVICE CARD

Stone-surfaced siding panels are shown in nine color photographs. Panel sizes and weights are given for each of the three thicknesses available. Application is discussed. Modular Materials, South Plainfield, N.J.
CIRCLE 313 ON READER SERVICE CARD

"Buyer's guide for the small contractor" lists benefits, options, attachments and specifications for construction equipment. Included: track loaders, wheel loaders, track-type tractors, motor graders, elevating scrapers, pipelayers. See your local Caterpillar dealer for a copy of brochure AEC12112.

Concrete equipment is pictured on the job and in silhouette-type illustrations. Descriptions and specifications are included for vibrators, grinders, trowels, scrappers, tampers, saws and their accessories. Charts match models with proper attachments. Hole-punched for binders. Stow, Binghamton, N.Y.
CIRCLE 314 ON READER SERVICE CARD

Electrical wiring devices are cataloged in guide of commonly used items. Devices which do not comply with the 1971 NEC requirements have been omitted. Broadsheet-sized brochure shows NEMA configurations where applicable and notes UL and CSA listings. In easy-to-use chart form. Includes illustrations of AC switches, receptacles, wall plates, locking devices and lighting products. Bryant, Bridgeport, Conn.
CIRCLE 315 ON READER SERVICE CARD
NEW Interior Latex Stains—formulated for color uniformity. There are 30 colors in this REZ line and they've been especially developed for uniform color "take" on various species of wood. So, if you want a color-matched finish on oak paneling and pine bookcases, for example, there's no problem.

NEW Solid Color Latex Stains—great for exterior or interior. REZ offers 36 new solid color latex stains, too. While they're ideal for highlighting ceiling beams, wall panels, doors, etc., they are particularly suited for the rough sawn or textured exterior siding that is so popular today.

Whatever the mood you plan to create—whether it be contemporary, rustic or even antique—REZ has the fashion-right colors to match. And, these colors are available in a brand new selection of finishes that go on easy and dry fast (30 minutes). Soap and water clean-up.

For literature on REZ Latex Stains write to The REZ Company, One Gateway Center, Pittsburgh, Pa. 15222; or P.O. Box 3638, Torrance, California 90505.
Caradco... puts buyer excitement in wood casement windows

EXCITEMENT
Unique modular system permits arrangements that complement any exterior.

EXCITEMENT
A full 90° opening for easy inside-outside cleaning.

EXCITEMENT
Double weather-stripping seals out cold, heat, dirt.

EXCITEMENT
Permanent, leak-proof vinyl glazing assures all-weather comfort.

You get both in the Caradco C-200' casement. Plus all these bonus features that make the Caradco package an even better buy:

- Exciting charm, exciting versatility.
- Concealed hinges, gold-tone operators, factory-priming outside, screens, grilles (storm panel version). Excitement! To make it happen, see your Caradco dealer.

Caradco Window and Door Division
Scovill

Main Plant, Dubuque, Iowa 52001/Hainesport Assembly Plant, Hainesport, New Jersey 08036/Ohio Assembly Plant, Columbus, Ohio 43204

CIRCLE 181 ON READER SERVICE CARD

H&H September 1972 181
There's only one SHEETROCK*
We offer the best service in the business from our nationwide network of gypsum plants. You're never more than a convenient haul away from a dependable supply of SHEETROCK gypsum panels. With facilities covering the nation, we're "right next door" with the industry's broadest line of gypsum panels and accessories for residential, commercial, high rise and modular construction. There's only one supplier who can give you single-source service like this. Just as there's only one SHEETROCK.

UNITED STATES GYPSUM

BUILDING AMERICA

CIRCLE 182 ON READER SERVICE CARD
It's for wood.
It costs less than paint, goes on easier, lasts longer.
It won't ever crack, peel or blister.
It's trouble-free for re-do over paint or stain.
It comes in 30 solid colors and 36 semi-transparents.
That's the beauty of it.