Prizewinning concrete masonry house—product of professional teamwork

Also: Who's to blame for the code mess?
Factory in the field: new management tool
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Mr. J. Ralph Corbett
NuTone, Inc.
Madison and Redbank Roads
Cincinnati 27, Ohio

Dear Ralph:

I am most pleased to inform you that the Past Presidents of the National Association of Home Builders have selected NuTone, Inc. as the recipient for the 1963 Manufacturer of the Year Award.

You and your associates deserve the highest praise for your outstanding contributions to the Home Building Industry through the past years. This Award is a justly deserved recognition of those efforts.

Sincerely yours,

E. J. Burke, Jr.

This high honor is appreciated by our staff of 150 Salesmen and Managers, who are in day-to-day contact with the Builders, Contractors and Architects serving the Home Building Industry.

NuTone's 1600 employees also share our pride in this award. We shall all work harder than ever, to continue to deserve your confidence and support.

Chairman of the Board, NuTone, Inc.
...America's Most Dependable Electrical Built-Ins!

NuTone Built-Ins are engineered for practical daily use in homes and apartments to give you "in the home" reliability that is unmatched by competitive products regardless of price. They are low-cost, trouble-free and easy to install.

New Deluxe Catalogs—Write
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JANUARY 1964
"The only ones quiet enough for our sound-conditioned homes."

That’s what Ike Jacobs, President of Fox & Jacobs Construction Company, says about the Waste King Universal disposer and dishwasher. His Dallas homes have attracted nationwide attention by demonstrating that units with scientific sound control can and do sell faster than comparable homes without it. Naturally, when it came to choosing the quietest disposer and dishwasher, Ike Jacobs chose Waste King Universals. He knew you could carry on a conversation in normal tones while grinding steak bones in the Super Hush disposer. That you could never tell what part of the cycle the dishwasher was in just by listening. Ike Jacobs also knew you could install these hard-working Waste King Universals and walk away from them. If you think quiet, trouble-free appliances might do some loud talking for your homes, see your Waste King Universal distributor or representative. Or write Waste King Universal, Department H-1, 3300 East 50th Street, Los Angeles 58, California.
October housing starts hit unprecedented annual rate

The seasonally-adjusted rate of private non-farm housing starts hit 1,835,000 units in October, a new peak for the series. Homebuilding apparently ended the year 10% ahead of 1962 levels, reflecting continued momentum in multi-family units. FHA new-home applications are below 1962.

House probe crimps appliance resales by builders

The Congressional probe (News, Nov.) of appliance-distribution practices which have long irked dealers has led one leading manufacturer—General Motors—to change its methods. And the change may well set a pattern for other appliance makers.

The House small business subcommittee heard testimony that some builders bought carloads of appliances direct from the factory, installed only a few in their homes, and then resold the rest at cut-rate dealers at prices below wholesale prices paid by established dealers.

Now, GM Vice President Philip J. Monaghan has told the subcommittee, GM's Frigidaire Sales Corp. intends to "minimize" resales. Frigidaire will ask its builder customers to agree in writing to install appliances in new construction and resell any leftover units to Frigidaire. (The Federal Trade Commission must approve the contract changes.) But Monaghan says Frigidaire "feels it must sell directly to builders or lose altogether a substantial volume of sales."

New dry-lumber standards face fresh delays

The American Lumber Standards Committee's Jan. 1 target date for putting new dry-lumber standards into effect has been shoved back two or three months. Reason: fear of nit-picking criticism by a dwindling band of opponents who are pressuring Congressmen to make sure the change is not rammed through.

FHA, whose officials at first promised to adopt the new cost-saving standards at once as a "non-standard," has been pressured into dragging its feet until they become official.

In September, the Commerce Dept. and ALC unveiled a "simplified" plan for ballotling by industry groups on the new standards—necessary before they can be issued as commodity standards to be observed voluntarily by lumber producers and users. First step was to ask over 200 trade associations to submit typical membership lists, not to exceed 200 from any one.

The list was finally completed just in time to bump into a Post Office request to delay mailing until after Christmas. Meantime, Commerce's Office of Commodity Standards is wrapping up its final editing of the ALC proposal and preparing a report to the Justice Dept., which must also approve the change because the lumber industry standards fall under a 1941 anti-trust consent decree.

Will manufacturers' pick up the tab for joint research?

Assistant Commerce Secretary J. Herbert Holloman's ill-fated scheme to thrust the government into technical construction research may turn out to be the needle that galvanizes the industry into long overdue action. Major materials manufacturers are studying a proposal by Stanford Research Institute for a multi-million-dollar-a-year probe into housing technology. SRI is thinking about a tab of $50,000 per company for three years to finance creation of a housing research center in Santa Barbara. It would investigate everything from factory vs. on-site building to product design, production methods, marketing systems, financing tools, components, and dimensional and performance standards.

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JANUARY 1964
 Builders back subsidized mid-income housing

In the Forties, the National Association of Home Builders rallied its membership growth around opposition to federal subsidies for public housing. In the Fifties, the association largely stuck with its opposition to federal subsidy for new housing, although for a few years of mortgage pinch it urged builders be granted a direct pipeline to the Treasury for mortgage loans under Fanny May special assistance.

Last month in Chicago, at NAHB’s 20th annual convention, builders abruptly junked their historic stand against subsidies, by withdrawing their three-year-old opposition to FHA’s controversial Sec. 221d3 program of below-market interest rates (currently 3½%) for middle-income housing. The program taps Treasury cash for 40-year loans via Federal National Mortgage Assn.—at less than the Treasury’s cost of borrowing 40-year money. Instead, NAHB directors demanded that 221d3 be broadened from rental and co-op housing to include sales housing.

In 1961, NAHB opposed d3, as it is commonly called, but Congress enacted it anyway. That same year builders started seeking new ways to house low-income families and directors finally approved a plan to use d3 and low-income demonstration subsidies to see if 100 renters could be converted into home-owners in Tulsa (News, July ’62).

Bag of complaints. But this was only sparring compared to the struggle over d3 in Chicago. Builders came loaded with complaints. “This program is not being restricted to middle-income families as Congress intended.” Builder George Martin of Louisville told his urban renewal committee. “It is being used as a vehicle for co-operative housing.” Martin charged that some FHA offices are even urging builders to use d3 for co-ops because the limited dividend corporations, non-profit corporations, and public agencies also eligible for these low-rate mortgages have found the program too cumbersome.

Sec. 221d3 has also been used to bail out shaky Sec. 220 renewal projects* and create more unfair competition in the market place, some complained.

Retiring NAHB President W. Evans Buchanan revealed that NAHB has been trying to get H colorful study to relate the relationship of various housing programs. “They don’t know in Washington when they have a Sec. 221d3, or a 207 or a 213 (co-op) in the same market competing with each other,” he said.

HFA Administrator Robert C. Weaver, in his convention remarks, confirmed that HFA expects to ask Congress to extend and expand Sec. 221d3 this year. Weaver added that he hopes d3 will be made permanent before it expires June 30, 1965. “It is the most successful program of its type ever enacted,” he asserted.

But Sen. John Sparkman (D., Ala.), chairman of the Senate housing subcommittee, was non-committal on d3’s future. It is experimental and we will look most closely at it next spring,” he said.

Way to fight public housing? With this background, the d3 issue exploded into debate as NAHB directors shaped association policy. Directors were confronted with conflicting advice. The resolutions committee urged them to continue NAHB opposition to Sec. 221d3 and any other below-market rate program. On the other hand, the mortgage and legislative committees urged a policy calling for extending Sec. 221d3 to sales housing.

“This [221d3] is the only ammunition NAHB has to fight public housing,” asserted Builder Joe Rosati of St. Petersburg. “If we don’t promote this, the units will go to public housing. We have just used this to defeat 400 new public housing units on the basis that private housing can do the job. I urge you to defeat (the resolution opposing d3).”

President Buchanan urged directors to take a clear stand against Sec. 221d3 because the National Association of Real Estate Boards and other private industry groups blame NAHB for the d3 program. “We should clear the air,” he observed.

Builder Phil Emmer of Gainesville, Fla., who has pioneered new ways of credit treatment for low-income families (News, Nov.), argued eloquently in behalf of d3. “We say we are for decent housing for all Americans. But if we do this, we are against public housing and we are against private housing doing the job. I think we are sticking our head in the sand. The subsidy for a family under Sec. 221d3 is $12 a month compared to $30 a month for public housing. And with private ownership, you have less cost, you have better management, and you eliminate politics. Instead of just saying we fight everything, let’s be positive.”

The upshot was a standing vote. Only about 50 of nearly 200 directors present opposed d3.

Subsidized sales, too. Directors also demanded that d3 be reshaped into a program they can use more easily to put low- and middle-income families into new housing. Arguments were lively. Said Builder William James of Myrtle Beach, S. C.: “I’m willing for people to live in rental housing at 3% interest if necessary. But I do not feel it would be wise to open sales of housing at 3% interest.”

Agreed Builder Dean Morrison of Oakland, Calif.: “We don’t have to give it to them on a subsidized basis.”

But Builder Roland Catarinella of Pittsburgh contended that favoring subsidized rental units alone would reverse NAHB’s long-standing support of home ownership. “I would rather have some home ownership at low interest rates than rent to

*For one project even Sec. 221d3 could not help, see p. 25.
them. I think we should oppose it for rental and support it for sales housing." Directors asked that Congress amend Sec. 221d3 to:
- Open it to sales housing as well as rental.

- Let individuals and partnerships qualify as mortgagors. "Many builders, regardless of the NAHB policy stand, are using d3 but aren’t getting depreciation benefits on their individual income tax returns," explained Builder Herman Sar kowsky of Tacoma, legislative committee head.
- Eliminate co-ops and public agencies as eligible mortgagors. "We promise not to build public housing; let them stay out of our private housing (Sec. 221d3)," snapped Marvin Gilman of Baltimore, representing the resolutions committee.

Subsidized taxes? Incoming NAHB President William Blackfield of Honolulu told newsmen that NAHB’s tax studies committee is pondering urging the federal government to subsidize property taxes of families living in middle-income units. Public housing units pay an average $22 monthly tax payment on top of their $7,500 house, except for one thing: the builder could qualify all public housing units pay an average of $22, said Blackfield. In one Iowa city, a builder could qualify all public housing residents for the $49 monthly payment of his $7,500 house except for one thing: the $22 monthly tax payment on top of the mortgage payment prevents them from buying, said Blackfield.

Directors rebuff leaders on FHA warranties

While endorsing subsidies, NAHB directors rejected controls. As one man, they lambasted a bill by Sen. Ernest Gruening (D. Alaska) to force FHA builders to post bonds to repair new homes if shoddy construction makes them unlivable. Sen. Gruening is incensed that FHA had to foreclose 57 homes in Anchorage to fix faulty heating plants which let frost do their business any further.

Builder Roland Catarinella of Pittsburgh wondered: "I don’t know what you’ll tell them, but good luck.”

NAHB directors are so sharply divided on whether to support FHA insurance of loans to buy and improve land they postponed action until their spring meeting.

Behind NAHB’s concern lie broad hints FHA will urge Congress to adopt some form of land development insurance this year. FHA Commissioner Philip Brownstein told builders he has not yet decided what to do, but NAHB endorsement obviously would help him make up his mind.

NAHB supported FHA land improvement loans in 1961, but reversed itself a year later (News, Jan. ’62), on the ground such a program would inflate land prices. Last month, three committees voiced support for FHA land loans. At their behest the resolutions committee backed a resolution supporting 60% to 75% loans on the value of land plus improvements—without a FNMA takeout.

The resolution provoked such disagreement inside NAHB’s executive committee that President Buchanan reported: "We had a tie vote." In introducing the measure to directors, he got in a plug: "I think it if we sit back and calmly look at the objectives that we will combat a very destructive practice, that of short term loans that are discounted at 20% or 30%.

But directors were anything but calm. "We will inflate the value of land," cried Builder Bill Underwood of Jackson, Miss. "We do not need to get the government in our business any further."

Builder Roland Catarinella of Pittsburgh dissented. "Under our anti-bias law, the builder takes the risk. We need the best

Sweeping changes ahead for NAHB?

Directors, concluding that NAHB’s organization is out of kilter with the fast changing housing industry, approved first steps toward sweeping changes. Items:
- NAHB may charge extra for services of limited interest to all members—most likely for multiple-unit builders first. (NAHB collects only $25 dues per member, rejected suggestions for a dues boost a few years ago.) "We’re going out in so many directions there isn’t enough money," explained Ted Pratt, assigned to find solutions. "This does not mean institute that could split off." Also under study: national memberships for manufacturers and other trade groups—a potential revenue builder.
- The Research Institute may reorganize as a separately financed subsidiary of NAHB, commercial research and testing corporation, probably with some non-NAHB trustees. Initially, NAHB would help defray its deficit. A draft of the plan must win approval by directors.

NEWS

Should FHA insure land loans?
Issue divides builders sharply

- Members of four committees—finance, resolutions, by-laws, convention—will be appointed for three-year staggered terms to give more continuity to crucial NAHB programs and policies.

NEW LEADERS of NAHB are, from left, President William Blackfield of Honolulu, First Vice President Perry Willis of Miami, Vice President-Treasurer Larry Blackman of Fort Worth, and Vice President-Secretary Leon Weiner of Wilmington. Weiner won post by 13 votes. Fred Schnell

JANUARY 1964
NAHB backs dry lumber standards

Directors stamped their official blessing on the new standards for dry lumber being pushed by the American Lumber Standards Committee (see p. 3)—despite opposition from California builders.

Past NAHB President Alan Brockbank told builders NAHB's Research Institute and the Forest Products Laboratories had both proved the new standards would give builders better lumber at lower cost. He added: "What more could you want—better lumber, easier to handle, and at less cost."

Some California builders insisted that the new standards would boost costs perhaps $5 per 1,000 board feet for green lumber shipped from smaller sawmills near them.

Research Institute Chairman Dan Grady, himself a California builder, disagreed and assured objectors that the new rules should not change green lumber standards—or prices. Upshot: a nearly unanimous vote approving the new rules.

NAHB's executive and resolutions committees did not approve this stand before the board took action. They said—to the surprise of builders who have helped lumbermen promote the new rules—that they did not have adequate technical explanation.

Directors also called on President Johnson to veto a bill already voted by Congress requiring imported lumber to be marked with its country of origin. North-west producers have been promoting this device to combat Canadian imports (News, Sept.).

NAHB directors not only expressed opposition to this bill but also to similar "efforts by vested interests to preserve for their own benefit costly and cumbersome materials distribution systems and other moves designed to increase artificially the price of a home by legislation."

Builders fear that if the lumber marking bill becomes law, it may be followed by other moves to require use of domestic lumber through Congressionally pressured changes to FHA rules and restrictions in local building codes under labor union pressure.

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Integration: end of the big scare

America's builders have adopted a tight lipped approach to housing integration.

The issue brought an undertone of fear to last year's NAHB convention, which met in the wake of the late President Kennedy's order forbidding racial bias in federally aided housing. Everywhere builders asked: What will happen?

Now it has happened. This year's meeting was in virtually universal agreement that the order has had only a slight effect on housing. Only 40 of the 31,000 convention-goers turned up for an integration panel starring aging (74) former Gov. David L. Lawrence of Pennsylvania, chairman of the President's Committee on Equal Opportunity in Housing.

Lawrence warmly endorsed the housing bias education plan offered to him by NAHB in September and has incorporated most of it in a program his own committee will promote in a tour of major cities early this year.

He also urged NAHB to begin accumulating authoritative facts on how integrated housing affects realty values. "Past studies generally refute the idea of a drop in value, but these reports have been prepared generally by non-business groups," he said. While admitting most studies are outdated, he was unable to recall for newsmen the name, year or author of the most recent study (Property Values and Race, by Luigi Laurenti for the University of California Press, published 1960 from 1955-56 data).

CONVENTION COMMENT

• New approach on integration It was left to a newwaperman to enliven the convention's panel on integration with a plea for "the mind-changing process," a program to open housing to the Negro and improve his economic lot. Said Sylvan Meyer, a former builder who edits the Daily Times in Gainesville, Ga.: "Instead of the short-term programs to alleviate militant Negro pressures, we must think of processes that help change people's minds, of the long-range national goal that permits everyone the opportunity of choice."

• TV or not TV? "Television reception is a factor in selecting a homebuilding area."—Senior Vice President Arthur Needley of California Federal S&L, Los Angeles.

• McMurray backs S&Ls "I strongly urge that you not to be misled by the isolated and relatively few cases you read about (see p. 29). The industry as a whole, except for a very small number of associations, has a most commendable record." Chairman Joseph P. McMurray of the Home Loan Bank Board.

• Weaver denies an exit cue "It wasn't a conclusive conclusion," said Robert C. Weaver when asked if the farewell-like ending to his convention speech was also a conclusion to his career as HHF administrator.

• Builders urged: Go abroad "Everybody's afraid of losing money when he thinks of going south of Texas or abroad. Why, I know of builders who have lost money right here," Builder Don L. Dise of Aurora, Ill., told a panel on overseas housing.

• Quiet on the federal front "I don't look for a change in the executive housing order," said Sen. John Sparkman (D., Ala.).

• Chicago changes staffers Robert J. Eypple, for the last three years village manager of Lombard, Ill. (pop. 27,000) has succeeded E. Eric Jones as executive vice president of NAHB's Chicago chapter (425 members). Jones resigned Nov. 1 to join the Chicago architectural-engineering firm of Fridstein & Fitch.

• Flath leads executive officers Robert P. (for Philip) Flath, 47, of Columbus, Ohio, was upped from first vice president to president of NAHB's Executive Officers' Council at a special election during the convention. The vacancy was caused by the resignation of President-elect John E. Bohman as executive officer of NAHB's St. Paul chapter. Flath has been a professional association executive since 1946.
Emphasis on management, apartments fills panel sessions

Everywhere at the convention, among the product displays or in the meeting rooms, builders seemed hungry for information with an air of eagerness that surprised veteran convention-goers.

On the first day, a ‘Selling Unlimited’ program played to a packed house. That set the pace. Builders arriving late to sessions on marketing or management had to elbow their way through a crowd just to find standing room. Even a session on international housing reported a 400% increase in attendance over a similar program two years before.

How to explain this thirst for facts? Gone from the convention was last year’s pervading concern over racial integration. Absent, too, were big name celebrities that have starred at grand openings in years past.

Never before had a home builders’ convention devoted so much attention to management techniques. There were eight sessions on this area. Apartments, too, got a share of the program reflecting their growing importance in the housing market (five sessions). Computers and data processing drew curious crowds to three technical sessions.

Builders seemed intent upon pulling all three could from the programs. They stayed put, even when a speaker droned over fundamentals (“The builder who succeeds is one who designs to satisfy his market”). They followed alertly complicated legal discussions of cluster planning and condominiums.

In some sessions, builders were treated to news. New FHA and Urban Land Institute Bulletins on land planning were unveiled. A fresh study of the second home market was released. A new use of computers for marketing was revealed.

Finally, there was an unmistakable emphasis on professionalism. In session after session, builders were urged to seek out advisers. This was especially true in sessions on nursing homes, housing abroad, vacation homes, land planning, and model design. One marketing panelist, William Becker, Robilt, Inc., Lakewood, N. J., symbolized the trend. He told builders that he consults twice monthly with three marketing agencies, one for advertising, one for publicity, and one for promotion materials.

And Builder Don Ettore of Columbus, Ohio, said he includes land developers and home manufacturers on his expert team. Result: his eight-man staff sold 400 houses in ’63.

Economic outlook: another good year for housing

Four economists who helped NAHB convention delegates peek into the future could not agree on the need for or the effect of a federal income tax cut. But they were unanimous in their feeling that—with or without a tax cut—housing will have another good year in 1964.

Norman Robertson, associate economist of Pittsburgh’s Mellon National Bank, was the most specific of the four seers; he predicted 1,570,000 starts during the new year, about 560,000 of which could be in apartments. He looked for some slacking off in the rate of expansion during the second half of the year, particularly in apartment starts. NAHB Economist Nathaniel Rugg was a little less optimistic: he felt that last year’s overbuilding of apartments will hold this year’s total starts down to 1.5 million.

The two other economists probed two of the principal influences working on the housing market: the supply of money and the general business situation. Harry S. Schwartz, research director of the Home Loan Bank Board, foresaw some rise in long-term money rates during the second half of the year but noted that mortgage rates will be less affected than the cost of other kinds of credit. Dr. Arthur A. Smith, economist and vice president of Dallas’ First National Bank, saw “no weak or weakening links” in the general business economy and bet on a 5% increase in gross national product this year. Beyond 1964, he predicted that “the economy will slow down because of sheer exhaustion,” but he told convention delegates that they would not experience a major business depression in their lifetimes—nor would their children.
Tradition has it that this kind of hood has to be expensive. Baloney!

We’ve seen it happen too often. A builder goes to the trouble to put in a colonial or provincial kitchen, and then kills the effect with a range hood as modern as tomorrow. Why? Because the traditional hoods were priced too doggone high. Were!

This new Model 700 from Emerson-Pryne puts an end to that. The price is pegged right with most conventional hoods; your wholesaler or contractor can give you the exact price.

Listen to what it offers: handsome antique copper finish, mixed-flo self-contained power pack with filter, two-speed fan control, and twin lights to brighten the entire working area around the range. It comes pre-wired for fast, cost-saving installation, and fittings are supplied for back-of-wall or through-cabinet ducting, with 3½" x 10" opening. It’s available in 30", 36" and 42" sizes. (The scallop accessory is an optional extra.)

Next traditional, provincial, early American, or “rustic” kitchen you build, make it more appealing with Emerson-Pryne’s Model 700 traditional hood; the price is right!

Learn How to Qualify for Emerson Electric’s 1964 Builder Bonus Plan

Emerson Electric would like to feature YOUR homes in LIFE Magazine . . . and increase your display home traffic with an exclusive Win-A-Trip-To-Europe Contest.

For full details, see your electrical wholesaler, or write, Emerson Electric, Dept. HH-1, 8100 Florissant, St. Louis, Mo., 63136.

The complete Emerson Electric Builder Products Package:

HEAT . . . Baseboard Heat, Built-In Heaters, Radiant Heating Cable, Bathroom Heaters from Emerson Electric and Emerson-Pryne.

LIGHT . . . Interior and Exterior Lighting Fixtures from Emerson-Imperial and Emerson-Pryne.


SOUND . . . Intercoms and Door Chimes from Emerson-Rittenhouse.
Space saving gets women to look

...Weldwood Folding Metal Doors

They open quietly and effortlessly on lifetime nylon bearings. And fold back compactly. Women like this. But it's the touch of high style that turns women from lookers into buyers. Weldwood® Folding Metal Doors are designed to add elegance to a room. They're finished in eggshell semigloss baked enamel and have gold-trimmed ceramic pulls.

Weldwood Folding Metal Doors come in three styles. The Villa Door, left above, combines panels and open louvers. The Full Louver Door, not shown, is particularly effective for closets and storage areas where maximum ventilation is desired. The Chateau Door, right above, is gracefully paneled to blend with any decorating style. All are of one-unit steel construction, feature high-quality hardware, factory mounted.

They're a breeze to install or adjust. All you need is a screwdriver. And because of their simple, careful design, they'll give long, dependable service. Reduce complaints.

GUARANTEE. "Weldwood Folding Metal Doors, when used for interior use, are guaranteed by United States Plywood Corporation against faulty materials and faulty workmanship for the life of the installation when accorded treatment which is considered good practice regarding storage, installation, and maintenance. If any Folding Metal Door is found to be defective within the meaning of this guarantee, after inspection by our authorized representative, the door will be replaced without charge and costs of a reasonable nature will be allowed for installation."

Send in the coupon for full details.
How builders can look beyond today's vacancy rates—and spot trouble

The crucial question facing apartment builders and lenders has long been: How will apartments now under construction affect the market when their own units are ready to rent? Even the latest vacancy rates and apartment starts figures are of little help here, because they describe the past, not the future. Apartments started today may not be rentable for two years—when the vacancy picture may be very different.

Advance Mortgage Corp. of Detroit, one of the leading mortgage banking companies in the Midwest, has now come forward with new insight into this problem.

Advance has developed an apartment completion rate that, for the first time, gives a builder a glimpse into the future of any of ten metropolitan markets studied by Advance. It lets him determine approximately when new apartments will be put on the market.

In short, what Advance has done is take apartment overhang (apartments under construction) and spread it out over the next two or more years, showing quarter-by-quarter when the new units will become available.

How many walkups? To develop a dependable completion pattern, Advance first had to break out all elevator units from apartment permit figures. This process revealed an interesting proportion of walkup units to total apartments in the ten markets:

<table>
<thead>
<tr>
<th>APARTMENTS*</th>
<th>1962-64</th>
<th>WALKUP</th>
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<td>2,087</td>
<td>1,281</td>
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</tr>
<tr>
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<td>Detroit</td>
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<tr>
<td>Milwaukee</td>
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<tr>
<td>Pittsburgh</td>
<td>1,852</td>
<td>1,187</td>
<td>64</td>
</tr>
<tr>
<td>TOTALS</td>
<td>88,790</td>
<td>69,137</td>
<td>78</td>
</tr>
</tbody>
</table>

*Starts in 1964 will enlarge totals.

Advance keeps a running check on this walkup-total ratio by subscribing to a special Census Bureau service. At nominal cost, the bureau sells photostats of its form C404 which reveals not only new apartment permits but also those apartment buildings valued at more than $100,000.

By checking back on these larger buildings Advance can separate the elevator units from the total.

Advance then applies its completion patterns to the new permit data—one pattern for walkups, one for elevator units. These patterns were developed by Advance's housing marketing analyst, John Mustial. He studied Chicago and Detroit and found 25% of the walkup units are completed the first quarter after permit, 30% the second quarter, 20% the third quarter, 15% in the fourth and 10% in the fifth.

For elevator units, 10% are completed in the fifth quarter after permit, 25% in the sixth, 30% in the seventh, 20% in the eighth, and 15% in the ninth. This elevator pattern is used only in Chicago. For the other nine markets Advance makes spot-checks on progress of elevator buildings and estimates their completion dates individually.

Total cost for developing the entire statistical survey, Advance estimates, was about $10,000.

Overbuilding ahead. Taking its new material in view, Advance warns: The Midwest "may be overbuilt in apartments some time in 1964. Many apartments will be a long time in renting."

There are two exceptions. Chicago has a good chance to escape overbuilding because its volume of apartments under construction has dropped significantly over the past year (see graph). Detroit, seems likely to avoid overbuilding despite a surge of construction, because it has 7,500 fewer rental vacancies now than a year ago.

In the other markets, apartment building is still on the rise despite unmistakable risks. In the face of difficulty in renting new units in some areas, builders in Indianapolis and Dayton have taken out twice as many permits in 1963 as the year before. In Cleveland, Columbus and Pittsburgh, the increase in apartment permits is more than 50%.

In Milwaukee, where new apartments have been slow to rent for many months, the number of units under construction has increased some 40% over a year ago, with 2,100 units in the pipeline. Cincinnati with perhaps the highest vacancy rate in the Midwest—currently over 15%—has 1,900 units in the pipeline. In Cleveland, 7,300 new units will put a healthy market to a severe test.

Of the ten Advance markets, only three—Chicago, Cincinnati, and Louisville—show declines in apartments under construction from a year ago.

Lender-made market. Why all this apartment building? Advance suggests that builders in the Midwest are responding unduly to the temptation of easy money. "With such good financing around," one Cleveland sponsor told Advance, "how can I afford not to build?"

"If apartment starts continue at their present rate," observes Irving Rose, Advance president, "almost all these markets may be overbuilt by the end of 1964."

The apartment market, Rose concludes, is supported by two undeniable legs—favorable tax treatment and considerable risk-taking by lenders. "If either of these legs should be withdrawn," he says, "demand alone could not sustain the rental market anywhere near present levels."

Preponderance of old units. Advance does not stop with a foreboding forecast of apartment completions. It looks at
where renters live and finds some surprises. One-family units comprised half or more of the rental stock in five of the ten markets studied. Two- and four-family units comprised nearly half the rental stock in Cincinnati and Milwaukee. Roughly half of the rental stock in seven cities (and in Cincinnati, nearly 60%) was built before 1920. Detroit was the only market studied where two-thirds of the rental units are below 40 years old.

Advance, in another contribution to the store of apartment data, offers a way of determining vacancies after 1960, and modifies total stock by adding in new housing and subtracting out losses to urban renewal and other demolition. Advance concedes that its new information portrays only a general picture for each market. And "in apartments," says Rose, "there is no such thing as an average, city-wide market." Even in the weakest markets, some new buildings have been opening with 100% occupancy and waiting lists.

**Closer scrutiny.** What's needed is an analysis of submarkets, of particular rate ranges, of individual neighborhoods. This kind of narrow study, which is much required by the housing industry, is demonstrated in a recent report on downtown Philadelphia. Chester Rapkin, professor of city-planning, and John Pope, research assistant at the Institute of Urban Studies, University of Pennsylvania, conducted personal interviews with owners of 29 luxury apartment buildings (open and under construction) in a tight geographic square centered on City Hall.

Of the buildings completed and available for occupancy by 1962, Rapkin and Pope found a commendable vacancy rate of 3.3%.

But closer study exposed danger signals. Vacancy rates were appreciably higher in some locations (around Benjamin Franklin Parkway, the rate averaged 5.4%, compared to 1.6% in the core around City Hall and 1.2% near Rittenhouse Square). Type of apartment also had strong bearing on vacancy rate. Efficiencies were only 0.4% vacant, but two, three and four-bedroom apartments were 4.0% to 5.0%.

They then compared their findings with the type of new apartments coming on to the market and found:

- Only a third of these new units are efficiencies and small units where demand is the greatest.
- Only a third of the new units will rent for the $100 to $124 range where absorption has been most rapid.

## New-house salesmen put under fair labor wage tent

Homebuilders and Realtors are up in arms because the Labor Dept. is extending its wage and hour tent to cover large new segments of housing and real estate. Homebuilders are looking for ways to upset a ruling that puts new-house commission salesmen employed by builders under the Fair Labor Standards Act. Status of salesmen supplied by a realty agency is unclear. The ruling—made at NAHB's request to settle the issue—would force these changes in methods of paying salesmen and piece-work employees:

- Every employee, regardless of his agreed payment basis, must be paid the current minimum wage.* Full or part-time salesmen working only on commissions are specifically covered even though they earn no commissions in a pay period or payment of earned commissions is deferred.
- Every covered employee must be paid time and one-half for work beyond 40 hours if the company trades in inter-state commerce and 44 hours if the company does business within one state but grosses over $350,000 annually. The base hourly rate for determining overtime is figured by dividing hours worked into all employee remuneration, including bonuses, commissions, and incentive payments.
- Advances or draws are permitted, but proper minimum wages and overtime must be paid during each regular pay period.
- The Labor Dept. stands firm in ruling that new-home salesmen do not qualify under an exemption given retail businesses. And the department also wants to put realty managers under the law if they collect more than $1 million in rents.

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## $500 bonus to winter buyers proves a hit

A few Canadian home buyers are now being paid $100 to move into new homes. This is one expectable but untypical result of the Liberal Party plan of last summer (News, Aug.) to give buyers of homes built between Dec. 1 and Mar. 31 a $500 bonus. The plan seeks to curb high unemployment during the winter.

A Montreal duplex builder, Arrent Properties, was able to offer 64 buyers the $100 move-in payment (see cut) because the buyer would get a double bonus ($1,000) and a $21,900 mortgage on a duplex costing $21,900. To qualify, buyers had to sign up before building began. Across Canada the bonus has made downpayments of $100 and $200 common.

Buyer response was so great that Revenue Minister John R. Garland moved the closing date for applications ahead from Dec. 31 to Nov. 15. In seven weeks, Central Mortgage & Housing Corp., the government's housing agency, received 13,147 applications. If all are accepted, the government will pay $6.5 million in bonuses, but if the program succeeded in boosting winter sales—the government hoped to add 10,000 starts—the smaller downpayments undercut another Liberal pledge: to ask greater equities from buyers.

President C. J. McConnell of the National House Builders Assn. sees this as one problem stemming from the bonus. And he cites another: "Legal fees in Alberta (where McConnell builds) run to some $450. Some houses are being sold for a downpayment of $100 cash. This means the purchaser has provided less than 20% of the cost of the work and nothing at all towards the house or the land. It does not take a very active imagination to see the effect this madness will have on the mortgage insurance fund [2% of the mortgage goes for insurance] at the least hint of a drop in values."
GAO attacks FHA rental programs: room-counts under fire

FHA's already dwindling multi-family housing programs, which have slipped from 18% of apartments in 1959 to 14% in 1962, are under fire in a new General Accounting Office report which could cut two ways:

1. It could produce pressure from Congressmen to force FHA to ditch its room-count allowances for balconies, foyers, and similar areas, thereby cutting maximum mortgages by as much as 25% and perhaps making FHA multi-family programs useless.
2. It could lead Congress to revise or even scrap its penny- wise mortgage limits per room, first written into law in 1938. FHA insiders say the agency will probably ask Congress to do so this year.

GAO probed the room count game as it applies to Sec. 220 urban renewal apartments in Washington, New York, Chicago, St. Louis, Philadelphia, and Los Angeles. The spending watch dogs of Comptroller General Joseph Campbell zeroed in on a 1958 change in FHA rules which lets builders count an extra 1/4-room for foyers, balconies, terraces, and porches in figuring maximum mortgages.

Expectably, the accountants found the new rules yielded higher mortgages than the pre-1958 setup that counted only habitable space like living rooms, kitchens, bedrooms, and dining areas. Some examples of the "substantially larger mortgage amounts permitted under the expanded room count criteria:"

- One loan for $10,101,900 was based on FHA's room count of 2,425. But GAO counted only 1,947 rooms by the old method and said FHA should have pared the loan $2.5 million or 25%.
- In another project, the FHA count was 3,176 rooms vs. GAO's 2,610. The $16.7 million mortgage should have been cut by $2.4 million, said GAO.

Concluded GAO: "Congress may wish to consider whether the inclusion of such items in the calculation of room count is contrary to the intent of the Congress in establishing the per room and per unit dollar limitations on multifamily mortgages."

Missing reason. GAO's report omits the real reason for the room count muddle: Private builders pushed for the extra room allowances because they furnished the only way FHA programs would work at all under the low, low limits imposed by Congress in an effort to prevent FHA from insuring luxury units. The limits: $2,500 a room for walkups, $3,000 for elevator apartments, with increases up to $1,250 per room for high cost areas.

Now, talk inside FHA grows that perhaps FHA should ask Congress to junk the whole room count idea. The agency doesn't like it any better than builders and architects who complain it warps sound design and room layout. FHA men pressing for abolition of room counts argue that FHA has ample authority to keep FHA apartments from becoming all luxury units by controlling total mortgage amounts per unit (as in the one-family Sec. 203b program), debt service, and monthly rentals. Up to now, Congress has shied away from suggestions that room counts be scrapped.

WASHINGTO INSIDE

- Tight housing budget ahead
President Johnson's drive to cut federal spending may hit housing agencies hard in the fiscal year starting in July. Grant programs like housing for the aged and open space may be cut first. FHA likely will fail to get the new people it sought for this year to speed processing and re-sales of foreclosed houses. FNMA and FHA will try to sell mortgages they hold to boost the Treasury's cash income. And VA has already asked Congress to sell $1.3 billion of direct-loan mortgages (4.1% to 5% interest) below par.
- FHA gets foreclosure questions
The hearings into foreclosures the Senate housing subcommittee tried vainly all last year to hold are off. Instead, Senators asked FHA to tell them how ten items affect foreclosures. Some items: outdated local market studies, inaccurate credit reports, assumption of loans.

Industry leaders confer at five-day Nassau meeting

For the 10th year in a row, the incoming presidents of major housing trade groups, their chief staff officers, plus top mortgage building product manufacturers and a sprinkling of housing's elder statesmen met last month for five days of informal talks about their problems and opportunities for cooperation.

The group—90 strong including wives—were guests of House & Home and Time Inc's other magazines at Nassau's Balmoral Club. Sessions moderated by Vice President P. I. Prentice of Time Inc (left), editorial adviser to House & Home, ranged over many fields from better design and housing subsidies to research.
The only cost that matters is cost installed

When your prospect's eyes light up at the sight of this good-looking, good-cooking Frigidaire Wall Oven, she's not concerned about cost installed. But you are. Low installation cost on this oven (and other matching Frigidaire Built-Ins), combined with Frigidaire product beauty and dependability, can help you sell homes in the toughest of markets!

All Frigidaire Wall Ovens are shipped completely assembled with 48" BX cable attached. And, they're designed to make installation fast and simple. Just prepare wall opening and complete regular wiring to junction box. Then connect three incoming supply wires with corresponding color-coded product leads, slide oven in opening, level, if necessary—and install retaining screws. It's done ... in minutes!

Installation speed is a quality feature of all Frigidaire Built-Ins ... a feature that'll pay off for you and your customers! Frigidaire Division, General Motors Corporation, Dayton, Ohio.

That's why this glamorous Frigidaire Slide-In Wall Oven gives you the competitive edge!

Build In Satisfaction ... Build In

Frigidaire Wall Ovens are available in 4 rich colors, white, and brushed chrome.
Realtors bid U.S. halt grants for commercial renewal

The agonizing reappraisal under way on urban renewal (News, Oct. et seq.) has just brought demands for a slowdown from the powerful National Association of Real Estate Boards and its 74,681 members.

NAREB's 56th annual convention this week in New York set a bold new policy plank: "While we believe that non-residential renewal is of vital importance to the preservation and continued growth of our urban areas, we urge Congress to terminate capital grants for such renewal and to enact legislation providing for loans, not to exceed two-thirds of the net project cost, to finance non-residential redevelopment projects that are economically sound and which loans would be repaid because of increased property tax revenues."

NAREB's "new" position is that grants should be limited to slums or blighted areas. "We are for renewal," explains Public Affairs Director Charles T. Stewart of NAREB, "but we're concerned about its use and where the community has an adequate and well enforced building code. It also recommends that loans or grants be limited to slums or blighted areas.

Opposed to write-down, NAREB thus becomes the first major trade association in housing to oppose land write-down grants for commercial or industrial renewal. Up to now, Realtors have merely promoted rehabilitation and conservation, plumped for redevelopment projects wholly financed at home. The new policy stance was devised by a joint committee from Realtors' Washington Committee and its Build America Better Council. Congressmen have talked about this idea for years, and Rep. William Widnall (R., N.J.), ranking minority member of the House housing subcommittee, has just endorsed the loan-only idea for downtown projects.

"We are for renewal," explains Public Affairs Director Charles T. Stewart of NAREB, "but we're concerned over its preoccupation with commercial and industrial properties. Only 10% of all funds went into this when renewal began. Now it's 30%. That is the issue while praising renewal generally.

New horizons. "The greatest frontier facing real estate today is urban renewal," President James F. Oates Jr. of Equitable Life told the convention-goers. "Here is the area from which Equitable is probably going to draw the bulk of its new mortgage investments over the next 10 to 20 years."

And Vice President Charles Seymour of the Philadelphia brokerage of Jackson Cross warned: "Renewal is vital. Its accomplishments and achievements outweigh its disadvantages and failures."

"Added New York Realtor Robert White: "Renewal needs your help in selling the 500 million sq. ft. of land now available in the U.S."

How loan plan works. NAREB's proposal is that grants continue as usual for residential construction but that cities receive only loans on commercial projects. The city would then use increasing tax revenues from the new buildings to repay the loan.

A similar system has already been pioneered in California. It calls for muni­cipalities to issue their own tax-increment bonds. Property tax revenues are then earmarked to pay off the bonds. NAREB does not disapprove of such plans but does point out that earmarking would require constitutional changes in many states.

Government Relations Director John F. Williamson calls the loan-only plan "eminently reasonable. Tax revenues will increase $2½ million the first year after Cleveland completes its Erieview project, he points out. At that rate, Cleveland could pay back the entire $10 million federal outlay in four years."

Voice of government. Federal officials at NAREB's sessions poured cold water on the loan-only idea. Said Urban Renewal Commissioner William L. Sloan: "Congress recognized that cities have to deal with problem areas that are non-residential. And housing quality will be related to the economic health of the city."

"Unless a city has a firm economic base, renewal will not work." HHF Administrator Robert C. Weaver: "A city's economic function will determine the extent of Federal aid. Weaver also challenged another NAREB policy stand: that federal subsidy for moderate income housing is an unwarranted intrusion of the government in the field of housing. NAREB again urged Congress to reject proposals to elevate FHA to Cabinet status. It suggested that FHA be given independ­ence under an appointive board because "political and social welfare considerations are eroding the agency's function."

Tax bill—good and bad. The association's tax counsel, Edwin L. Kahn of Washington, had a word of caution on the tax cut bill passed by the House and pending in the Senate.

"The real estate industry will find itself subject to more basic and adverse changes in the tax laws than any other major sector of the economy," he said. He advised that Realtors should nevertheless "look on the present proposal as an honest effort to correct the structure of the industry." Kahn noted that the House ways and means committee has accepted NAREB's proposal to correct abuses arising from accelerated depreciation coupled with quick resale of property. The association had held that corrective laws should apply only to the excess of accelerated depreciation over normal depreciation, and then only where quick resale justified a denial of the incentive of fast write-off.

The bill embodies this proposal for proper­ty he'd more than 12 months. It taxes as ordinary income only the excess of accelerated over straight-line depreciation. But it considers a sale within 10 years of acquisition as a quick resale, although this treatment is softened slightly by a sliding scale reduction of the portion taxable as ordin­ary income on property sold from the 20th month to the 10th year.

"The industry may well feel that 10 years is excessively long," Kahn explained. "Although the holding period may be criticized in this respect, the basic approach of the bill is desirable." NAREB wants to cut this to five years.

Associate Publisher Joseph C. Hazen Jr. (speaking above) and four House & Home editors make their first joint staff analysis of new trends in housing for a national audience. A record attendance of 8,000 at the National Association of Real Estate Boards' convention in New York heard their 1964 prediction: stable one-family house building, a 10% increase for apartments.
SEGREGATION

Builders win one, lose three in new series of rulings

Whether by coincidence or design, the first year under the Presidential order banning race bias in federally aided housing ended with four different court and administrative decisions. Builders won one, lost three.

Even the victory carried a hollow sound: VA lifted its suspension of Builder House & Home Ltd. of Orlando, Fla., a concern not connected with this magazine, but insisted on the necessity of getting further assurance from the firm, in not selling to a Negro. "Although the record establishes the basic propriety of the suspension," VA said it was lifting the suspension after four months because "you have given assurance that you will not discriminate."

AngrY congressman. The contradictory stand came after Rep. Olin B. Teague (D., Tex.), chairman of the House Veterans Committee, criticized the suspension because the Negro involved had made no clear offer to buy (News, Dec.).

And Teague is still far from satisfied with VA's performance in the case. "I continue to find myself in disagreement with the VA," he says, "I do not believe Builder Norman Rossman was in technical violation and I do not believe that VA is correct in its interpretation that certificates of reasonable value issued prior to the Presidential order are covered."

Says Rossman: "Contrary to what the VA publicly states, it is our opinion that their action constituted reluctant agreement by them with our case. If the VA had afforded us a legal hearing before an impartial court prior to issuing its order of suspension, if the VA had not considered us guilty until proved innocent, the irreparable damage which we suffered in our residential construction business might well have been avoided.

"We can only hope that other home builders will profit by our experience."

One reason for the company's all-out fight against the suspension: VA (and FHA) are crucial to builders in low-price brackets, even with easy mortgage money.

Negroes gain in courts. Negroes' biggest clear-cut victory has just come in New Jersey. A superior court in Camden upheld constitutionality of that state's law banning race bias in the sale of developments of 10 or more homes and in rental of apartments.

The state Home Builders Assn. and Real Estate Board had joined Builder Joseph V. Montero of Pomona in challenging the law with a new argument: It made the builder apeon, denying him the freedom-from-slavery protection of the 13th amendment.

The court found no basis whatever for this contention. Builders in the 11 states and 10 cities that have laws against bias in the sale of private housing had been watching the outcome in hope of gaining a new legal weapon against bias laws.

Into white enclaves. In Pittsburgh, Judge Frederick G. Weir has just ordered the Stanton Land Co. to sell a lot in Stanton Heights Manor to a Negro physician. Dr. Oswald Nickens contended discrimination prevented his buying in the solidly white neighborhood (News, Sept.). Judge Weir's ruling was the first to uphold Pittsburgh's anti-bias ordinance. The judge had helped enact it as a city councilman in 1958.

Stanton Land's attorney contended the refusal to sell was not based on racial grounds but on the physician's aggressiveness and zealousness.

In Baltimore, Chief Judge Roszel C. Thompson of the U.S. district court ordered Montgomery County Developers Abraham S. Sind and Israel Cohen to sell a house to Roland E. Barnes in all-white Regency Estates near Rockville. The judge rejected the builders' argument that they had signed a sale contract for the house to Rauh, who represented Barnes, "drove a hard bargain with the defendants when he found they could not stand publicity" and "generally treated the case as a crusade rather than a civil action." Eleven months earlier the judge had ordered the builders not to sell one of their $26,000 homes until he decided the case.

Counterattack. Gains were not all on one side. With the Illinois Real Estate Assn. already campaigning for signatures to force a referendum on whether the legislature should pass anti-bias housing legislation (News, Dec.), the Chicago Real Estate Board has now sued to void the city anti-discrimination ordinance that triggered the state group's campaign.

The year ahead. The outlook seems promising for rights groups but a look back shows that President Kennedy's anti-bias edict has had only a slight effect on actual operations in housing. Results bear out House & Home's prediction in November '62, the month the mandate was promulgated:

"The impact will be felt at once in some areas, only a little or not at all in others" and "very few Negroes will rush to buy homes in white neighborhoods anywhere. . . ."

Administrator Robert C. Weaver says over 500,000 units built or authorized are now covered by the Presidential order and will make a greater impact on the market this year.

Fight brews in Congress over scope of anti-bias ban

Almost overlooked in the Congressional battle over an omnibus civil rights bill is a crucial question for housing:

Does the bill pending in the House in mid-December ban race bias by conventional mortgage lenders whose deposits are insured by the Federal Deposit Insurance Corp. (FDIC) and the Federal Savings & Loan Insurance Corp. (FSLIC)? They are at odds over interpretation of the words in the bill which went through three different versions. Committee Chair-

man Emanuel Cellar (D., N.Y.) fought for a stronger version of the bill originally sent to Congress by former President Kennedy. A subcommittee (which he also heads) drafted a bill banning race bias in "grants, contracts, loans, insurance, or guarantee" programs of federal agencies.

But under pressure from Kennedy the full committee dropped the words "insurance or guarantee" from the tougher version. Committee sources say this was done to allay any fears that the bias ban would empower FDIC or FSLIC to withdraw insurance from discriminating lenders, banks, or savings and loan associations.

But Southerners call this a "deliberate attempt to mislead those who would be affected . . . This does not constitute moderation or watering down of the bill." They argue that the deletion is meaningless, since the more general words of the pending bill already cover the more specific terms, "insurance and guarantee."

The bill will give the President carte blanche to subject every homeowner to federal control," they cry.

President Johnson has made passage of a civil rights law his first order of business and has just persuaded the House rules committee, where the civil rights bill had been held, to begin hearings this month.

NEWS continued on p. 25

HOUSE & HOME
Renewal critics muff crack at ‘scandal’

If Howard Evans, U.S. Chamber of Commerce staffer and former URA official, is correct in predicting a probe of renewal works, “the greatest single scandal the United States has ever seen,” then renewal critics in Congress missed their first chance to uncover wrongdoing.

The opportunity (News, Nov.) came early in a renewal hearing by the House housing subcommittee of Rep. Albert Rains (D., Ala.). But Republicans—led by the ranking minority member Rep. William Widnall (R., N. J.)—failed to win any damaging admissions from renewal’s advocates. The upshot: Renewal is well on the way to winning more subsidies—perhaps $2 billion—from Congress this year.

Questionable results? Rep. Widnall was openly seeking evidence of “questionable results” of renewal. Said he: “Surely, the wholesale destruction of buildings of standard quality is not the removal of slums and blight. The uprooting of people from their homes, however humble—when the number is in the thousands—is of considerable concern.”

“We think the program should improve. We do not think additional funds or power are the only way for it to do so. We want to make sure that its original purpose of better housing has not been sacrificed to commercial interests, that we are not engaged in taking one man’s business from him to give government support to another man’s bigger business.”

The General Accounting Office, Congressional watchdog over federal spending, had helped spark the probe by charging (News, Sept.) that URA’s approval of the Erieview project in Cleveland pointed up basic flaws in renewal processes. Said GAO:

- URA prematurely approved the $33 million Erieview project without verifying city building inspection reports.
- URA rules let buildings needing only minor fixups be condemned, are so vague that “the city may designate any of its buildings as ‘substandard’ and schedule such buildings for demolition.”

Behind these formal charges swirled in nuendo and rumors about renewal. One story: URA Commissioner William Slayton had helped develop the controversial Erieview plan.

Some answers. But Slayton, renewal’s chief defender, adroitly blunted these barbed questions.

Asked about his part in Erieview, he said he helped gather data from which Architect I. M. Pei had fashioned the Erieview plan, later approved unanimously by Cleveland’s 33-member city council, “I was paid for my services,” he maintained.

“There was no continuing arrangement.”

Widnall pressed both Slayton and Cleveland Renewal Director James Lister about the GAO report. But Slayton replied that URA disagreed with GAO’s claim that many buildings needed only minor maintenance to bring them up to code standards.

“No—but it is impossible to get redevelopment into this area with any incompatible uses there,” replied Lister.

Lister also maintained that most buildings marked for demolition had wooden structural elements—a fire hazard, he asserted, that not even massive amounts of remodeling could correct.

Scandals? GAO said its seven reports had turned up no corruption or stealing as in the interstate highway program.

More to come? Summed up Rains at the hearings’ end: “Of course, some things might go wrong in a tremendous program such as this. But renewal came out with flying colors.”

Widnall agrees: “The hearings have not yet brought out anything that brings this to a head. We haven’t heard any of the complainants in the field.”

Widnall says he wants to bring in some facts developed by the House district committee of Rep. John Dowdy (D., Tex.) in its airing of District of Columbia renewal. Dowdy says his committee has heard testimony with “many inconsistencies and evidences of erroneous representations” in probing the eight-acre Columbia Plaza project in Washington’s Foggy Bottom. The committee staff claims aerial photos, appraisal reports, and demolition permits do not jibe on what buildings were standing in the project at key times.

Dowdy committee staffers are unimpressed with what transpired before the rival Rains subcommittee. Says one: “They are talking about how the idea of renewal works—but our studies show it doesn’t work that way in some cities.”

**FIRST SUBSIDIZED MIDDLE-INCOME HOUSING FAILS**

For a time last month it appeared that 396 apartments in Cleveland’s Garden Valley project would be the first renewal units to be boarded up because they were unlivable near-slums—only six years after they were built.

But FHA, FHA, Rep. Charles Vanik (D., Ohio), and Cleveland officials kept the city from claiming this dubious honor. Built in 1957 on a filled industrial ravine still ringed by heavy industry, Garden Valley apartments had vacancy trouble almost from the start. Private developers suspended mortgage payments in 1961. In 1962, civic leaders in the Cleveland Development Foundation started negotiating to refinance the units with a 40-year, no-down mortgage at 3/4% under FHA Sec. 221d3 (News, May, ’62). The switch was made last May.

The Foundation was convinced the project would succeed despite vacancies running to 42% among the all-Negro tenants. It started another 88 apartments under 221d3. Completed in May, the units have never been offered for rent because the city did not extend a road to them until October.

With mortgage payments rising—Foundation President Upshur Evans puts losses at $400,000—the Foundation stunned the city last month by moving to close the apartments. Reason: a 60-year-old sewer serving the units had collapsed and repairs would cost $1.5 million.

But city and FHA officials judged the apartments habitable and said the sewer could be fixed for $200,000. The Development Foundation says it cannot make repairs: “No blood in the turnip.”

FHA concedes it will have to take over all 484 units, first Sec. 221d3 mortgage to fail. And this poses another problem: Since FHA collects no insurance premium on Sec. 221d3, officials have no clear idea where they will get money to back the $4,301,000 in debentures they must issue to the mortgage holder, FNMA.
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HOMES FOR BETTER LIVING
NATIONAL AWARDS FOR ARCHITECTS,
BUILDERS, AND HOMEOWNERS

Sponsored by the American Institute of Architects in cooperation with HOUSE & HOME and American Home. All the award winners will be published in HOUSE & HOME. A selection of the winning entries will be published by American Home. All the winning entries will be displayed at the AIA convention in St. Louis and at the Octagon in Washington, D.C.

Houses and apartments must be designed by a registered architect and built and completed since January 1, 1961 in any of the 50 states. Outstanding architects, housing industry leaders, and the editors of HOUSE & HOME and American Home will judge the entries. Awards will be made on the basis of outstanding contributions to better living through residential design, site planning, and construction. Winners will be announced at the AIA convention June 14-19, 1964. Awards will be made in three categories:

- CUSTOM HOUSES designed specifically for an individual owner, in three classes according to size: a) Under 1,600 sq. ft. of living space, b) 1,600 sq. ft. to 2,800 sq. ft. c) Over 2,800 sq. ft.
- MERCHANT-BUILT HOUSES designed for a merchant builder and sold speculatively, in three classes according to sales price, including land: d) Under $15,000 e) $15,000 to $25,000 f) Over $25,000.
- GARDEN APARTMENTS (walk-up) built for rent or sale. Buildings shall not be over three stories in height from grade, must comprise four or more living units, and may be single buildings or one of a group: g) Single buildings (or townhouse blocks) h) Multi-building groups.

Pertinent information shall be submitted on the registration blank below by January 26, 1964, accompanied by a payment of $10 for each house or apartment entered. Any number may be entered. A separate registration blank must be submitted for each. Upon receipt of registration blank and fee, each entrant will be sent, for each house or apartment entered, an 8½" x 11" binder and full instructions for preparation. It must be completed and postmarked no later than March 22, 1964. It is registration slip so that you receive the correct binder for your entry.

This registration slip and entry fee must be submitted by January 26, 1964. Make checks payable to: Homes for Better Living and mail to: Homes for Better Living Awards, House & Home, Time & Life Building, New York 10020, N. Y.

Enclosed is check □ money order □ in the amount of $10 covering the entry below.

category: □ CUSTOM BUILT HOUSE □ MERCHANT-BUILT HOUSE □ GARDEN APARTMENT

location ____________________________

owner ________________________________ address ________________________________

architect ____________________________ address ________________________________

builder ______________________________ address ________________________________

submitted by _________________________ address ________________________________
U.S. uses ‘scenic easement’ to halt apartment building

The federal government has just reached across the Potomac River into fashionable Fairfax County, Va., to throw the planned $17 million apartment development of Merrywood into confusion. The move reflects the rising power of open space preservationists as a market force builders must heed more and more. And it also points up the diffuseness of U.S. land policy which builders must follow—if they can find out what it is at all.

Consider what happened at Merrywood. Within 72 hours of the mid-November morning when Builder Sheldon Magazine first set his crews to work clearing the site, the Interior Dept. asked a federal court to grant a scenic easement over the rustic 46-acre site.

Within 24 hours a federal judge legalized the easement and officials began posting signs at the property.

That afternoon a messenger from Interior’s offices delivered copies of the order to the site to show the workmen, in person. The easement 1) barred multi-family units, 2) limited any construction to one-family residences not more than 40' high, 3) prohibited owners from cutting any trees 8” in diameter or 30' tall without Interior’s written permission, and 4) restricted plots to at least one-acre size.

What is it? To Developer Magazine, the scenic easement came as a new and unexpected device in the long war over Merrywood in particular and over preserving open space in general.

Interior spokesmen say Merrywood is the first case where they have used a 1963 law giving Interior Secretary Stewart Udall—who lives near Merrywood—the power to buy “interests” in land “adjacent” to federal property in an urban area. Scenic easements have been bought around Mt. Vernon and Gettysburg, to protect these national shrines. And Merrywood, attorneys contended, is near, but not contiguous to, the George Washington Parkway and Civil War Fort Marcy.

Magazine was quick to contest both the condemnation of the easement and the amount—$500,000—which Interior had deposited in court as its estimate of value. Two days later, he asked a federal court to halt government interference with his building. He argued that 1) the scenic easement law does not apply to his property because it does not directly border federal land, and 2) Interior discriminated against him because it did not get easements on other land along the parkway. (Interior says nearby property owners will donate scenic easements.)

Why here? The reasons Udall moved first against the bitterly-contested apartment project—and thereby made it a guinea pig case in the continuing fight over urban open space—are complex but fathomable. Merrywood belonged to Hugh D. Auchincloss (stepfather to Jacqueline Kennedy; the estate was her girlhood home). The neighborhood includes Attorney General Robert Kennedy and General Counsel Samuel Noel of the Mortgage Bankers Assn. one of the supporters of the protest movement by residents.

When Hugh Auchincloss announced 21 months ago he was selling Merrywood, for apartments, the neighborhood rose in protest and has carried a legal fight all the way to the Virginia Supreme Court.

Too, chairman William Walton, of the National Fine Arts Commission recently wrote Udall urging him to use his authority to take the land.

Whatever the outcome of the Merrywood easement fight, Interior’s use of the easement device to halt apartment construction has larger significance. For Interior attorneys say the department will not hesitate to use it in other areas where they feel national parks or shrines are threatened by builders. And Stewart Udall—kinetic and keen—is a vociferous conservationist seeking to arouse public ire against urban ugliness.

Pittsburgh’s revolutionary labor contract spreads

Two Pittsburgh builders have added their names to contracts following the pace-setting labor pact signed a year ago for East Hills Park. A third may soon follow.

Latest builders to sign up are Town House Developers and Matthews & Arrent, both starting privately financed urban renewal projects in Allegheny County under the new labor agreement. Town House Developers has started a major county renewal project in Rankin, a suburban borough adjacent with U.S. Steel Homes. Their Palisades Plaza will eventually grow to 109 U.S. Steel-designed row houses. Eighteen models are under construction. “The labor contract,” says President George McShane of Town House, “has been instrumental in getting this development going.”

What makes the contract so desirable is the concession that union members would: 1) work Saturdays to make up for rained out days with no overtime, 2) work at wages 10.5% below commercial rates but still above non-union wages, 3) let work continue during jurisdictional disputes, 4) let builders choose tools, methods, and pre-assembled units, and 5) let builders recruit non-union labor if a three-day search fails to turn up qualified union members. With these changes, Builder Roland Catarinella has already increased productivity 5% at East Hills.

To get such a contract, the Pittsburgh civic leaders who are sponsoring East Hills through Action-Housing Inc. negotiated with Pittsburgh’s far-sighted Building Trades Council chief, Anthony Furlan.

Furlan talked leaders of his craft unions into going along with the contract because it gives the BTC a chance to organize the area’s largely non-union housing industry.

The new builders see it offering other advantages. Edward J. Ryan, Realtor handling rentals for MAA’s 578-garden apartment project, says the cheaper labor costs meant rents low enough to let him get 80% occupancy in the first 205 units, even at a slow rental season.

Furlan’s assistant, Angelo Carboni, commenting on the new contract’s influence, says: “The unions are happy because this contract is putting men to work who otherwise would be unemployed. The contract represents a sacrifice on our part, but it helps the contractor. It proves competitive housing can be built with union labor.”
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MORTGAGE MONEY

S&Ls fight jitters over unsound loans; a few lenders quit the mortgage field

The S&L industry, biggest single supplier of mortgage money for housing, is entering a new year running scared. It is already wearing a black eye for widely publicized sins in Illinois, Wisconsin, and California (see col. 3). And beneath these public disclosures runs an undertone of rumor and whisper of even wilder proportions. The fear is that some of this could be taken as fact and that, just as in the case of a stock market reacting to scraps of spotty information, a panic could result for the S&Ls.

As S&L men make their periodic contacts with corporation treasurers and investment advisers they now run into the constant question: "Are you making any bad loans?" We can't tell anything from your balance sheets." Startled by the query, the larger and more conservative companies are producing statistics at computer speed to prove their own soundness. Comparisons are circulating to show reserve, delinquency and expense ratios, and fee income among the S&Ls seeking large deposits from Eastern investors.

Reports one: "I have gotten seven-figure checks from three of the largest U.S. corporations in the last three months. The investment decision-makers are beginning discriminating between companies. This is the mark of an industry coming of age."

But the decision makers are also distinguishing between industries. New York's $2-billion State Employees Retirement Fund, which had broadened mortgage investment only this year, says it is steering away from the mortgage market. Explains State Controller Arthur Levitt, its sole trustee: "I was unable to get safe mortgages."

He plans to press for action by the $1-billion State Teachers Retirement Fund, of which he is a trustee.

Industry begs HLBB: stop talking and act

S&L leaders are not afraid of indictment or exposure for the tiny percentage of malefactors. S&L Commissioner Frederick E. Balderston of California emphasizes that the overwhelming bulk of his 205 state-chartered associations are strong. "There are problems," Balderston admits, "but there is definitely no crisis."

Despite this, new deposits flowing into California from the East are easing. S&L men themselves want the bad apples plucked from the barrel. Their plea is for Chairman Joseph M. McMurray of the Home Loan Bank Board, the government's top regulatory agency for S&Ls, to stop advertising association troubles in speeches and start correcting them by judicious application of the considerable powers they say he holds. His public statements about high foreclosures are hurting them unnecessarily, they maintain.

But a cleanup drive by McMurray's agency broke open the Illinois scandal. He plans three new rules aimed primarily at the West Coast S&Ls. (NEWS, Dec.) and the first of these, requiring associations to amortize fee income over seven years to limit funds available for paying dividends on savings, goes into effect Jan. 1. S&L men are urging McMurray to hold off on a second plan to force fast-growing S&Ls to make extra deposits in their reserves.

The FHA-VA market is steady and the supply of mortgages holds up

The market is moving sideways. That's the capsule description by President Robert M. Morgan of the Boston Five Cents Savings Bank, head of the big Massachusetts Purchasing Group of savings banks. It is borne out by HOUSE & HOME's monthly survey of 18 key cities. FHA reports prices on its 30-year minimum-down new home mortgages have held at 98.2 for the sixth month, although the average dipped 0.1 on higher discounts in three zones—the Northeast (99.6), North Central and Southwest (both 98.1). "The yield is steady at 5.08," says Senior Vice President Frank W. Wortright of Bankers Mortgage Co. of California, "and supply is good."

Yields will hold firm for months, predicts Research Director Saul Klamon of the National Association of Mutual Savings Banks. Sounder appraisals, tighter contract terms, and safer credit risks will all come before yields go up. His forecast: "The long downward slide has halted but we are probably in for some side­wise movement in the near future."

HOUSE & HOME's mortgage men are unanimous on one point. Lyndon Johnson's accession to the Presidency will have no adverse effect on the mortgage market. He's too well known as a sound friend of business.

New indictments heat up S&L scandals in Illinois

A federal grand jury in Chicago has just indicted the present and former heads of the Central States Mortgage Co. for misap­plying $1,012,147 in federally insured funds of the defunct Tinley Park Sav. It is the latest development in a Cook County Sav. scandal that threatens to get worse before it gets better.

Former President Kenneth H. Katschke is accused of using the money to make false loans to President Paul E. Pickle. Pickle is charged with abetting the scheme.

Loan to himself. The indictment also accuses Katschke of making, as trustee for a land trust, purported construction loans totaling $350,000 to a bank and then converting to his own use a Tinley Park check that had been made payable to Central States for the same amount. Assistant U.S. Attorney Robert S. Atkins says Katschke used the money to buy control of the $30-million Chatham Bank in Chicago, now in receivership.

Illinois troubles began when the $19-million Hillsdale sav., unable to meetdividends, gave up and merged into Oak Park Federal last spring (NEWS, May). The state seized and is liquidating Tinley Park (assets: $24 million) and the Beverly Sav. (assets: $30 million). The $8.5-million Concord sav., with several officers under indictment for conspiracy to defraud, is in operating custody (NEWS, Nov.).

Resignation under fire. Disclosure of shady S&L practices provoked widespread criticism of Chris J. Stolfa as supervisor of the sav. division of the Illinois Div. of Financial Institutions. He resigned last month after admitting that a company he headed had sold $5,746 worth of liquor to the Beverly sav. A Chicago Daily News series on the sav. failures emphasized that the crackdown was begun by Chairman Joseph P. McMurray's Federal Home Loan Bank Board. At one point Stolfa's aides were publicly clashing with HLBB examiners.

Mortgage delinquencies at Hillside and Tinley Park were reported to range up to 48%. The Federal Savings & Loan Insurance Corp. has bought $60 million in loans from the three largest sav.s, and some insiders estimate that the agency will put $250 million into mortgages before the mess is cleaned up. Should any California institutions require any such drastic relief (see below), over 50% of the FSLIC's $1 billion in assets could be tied up in nonliquid paper (though it presumably could raise cash by re-selling acquired loans).

Gang connections? Two considerations worry HLBB in the Chicago scandal. One is conflict of interest. The Daily News found several shaky loans and deals among officers of the three big sav.s that collapsed.

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buyers. One sa’s $6-million loan on two motels operated by a Chicago underworld figure went sour this year when the motels went into receivership.

Trouble elsewhere, Illinois is not alone. Gov. John W. Reynolds of Wisconsin asked and got the resignation of sa. Commissioner Roman J. Winkowski after disclosures that he had realized a substantial profit on purchase and sale of stock in Mortgage Guaranty Insurance Corp. of Milwaukee in 1960. The H.R.A. and the Senate committee investigating the Bobby Baker scandal (News., Dec.) are looking into the operations of mgic for possible conflicts of interest among sa. executives interested in mortgage insurers.

San Francisco civic leader and S&L official indicted

The Sacramento County (Calif.) grand jury has just indicted two sa. officials, including one of San Francisco’s civic leaders, on charges of making and receiving illegal loans.


Reciprocal help. District Attorney John M. Price says Beaver’s Trans-Bay did even better by Shaw. It lent $900,000, he says, or $396,000 more than state law allows, to a family corporation headed by Shaw to build 88 apartments costing $710,000.

The two loans were made in August, and Shaw had been president of the San Francisco S&Ls.

The jury contend that Beaver made a $28,316 profit from a surplus created when Shaw’s sa. gave Beaver an illegally large mortgage on four Berkeley apartment houses. It said Beaver put up no money but that General sa.’s mortgage, $152,000 over the legal limit, left him with extra cash even after the deal was closed.

Denial. Beaver said outside the jury chamber: “It’s a ridiculous interpretation of the state law and when it comes to court, I’ll be cleared completely.” He told the jury his $80-million Trans-Bay is having trouble with other loans, with about 10% in delinquency.

Beaver had been president of the San Francisco Housing Authority and was the first Negro to head a public agency in the city.

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending Dec. 6, 1963.

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FMA, VA 5%ks

Immediates: 97-98 Futures: 97-98
Note: prices are not to originate mortgage (but reasonably net to builder) and usually include concessions made by servicing agencies.

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HOUSING STOCKS

Housing companies shift operations to keep profitable

More evidence of the changing nature of the housing industry:
CRAWFORD Corp. has decided to get out of the home manufacturing business. Chairman W. Hamilton Crawford says the Baton Rouge-based company is putting its 140,000 sq. ft. manufacturing plant in Gloster, Miss., up for sale.

Crawford will expand its already large development and mortgage banking operations. In the past two years Crawford has built in an Atlanta renewal project and started work on the $100 mil­lion Crofton community outside Wash­ington, D.C. Its Crawford Home Loan Corp. plans to expand its $100 million mortgage portfolio, provided until now by dealers for its manufactured homes. Crawford earned $2,338,000 on $7,228,000 sales in 1962.

"Although we feel the future of home manufacturing is bright, Crawford Corp. has found there is a greater profit potential in the development of well planned communities," says Crawford.

While Crawford is entering land develop­ment, UNITED IMPROVEMENT & INVEST­MENT CORP. of New York City is gradually leaving that field. It plans to concentrate on mortgage banking subsidiaries already servicing $175 million. That lost $415,000 in 1962 on $7.5 million gross income.

The product mix of the shell home com­panies which survived the shakeout of two years ago (News, Dec.) is now so heavily weighted toward livable homes (as opposed to unfinished shells) sold pre-cut to individual buyers that this category is being reclassified in HOUSE & HOME's stock table as shell and pre-cut homes.

The rush for national and regional stock exchange listing following the Securities & Exchange Commission report proposing new reporting rules for smaller, unlisted companies (News, May) is continuing.

EICHLER HOMES has gone on the Pacific Coast Exchange and NATIONAL HOMES is now traded on the Midwest Exchange. But the American Stock Exchange has just toughened listing requirements for newcomers, saying they must have net worth "substantially in excess" of the old $1 million minimum. Amex also suggests that stocks selling below $2 a share effect reverse splits to boost prices. Three housing companies would be affected: WEBB & KNAPE, FIRST NATL. REALTY, HOLLY CORP.

The bill carrying out secur's proposals has passed the Senate but is stalled in the House interstate and foreign commerce committee.

HOUSE & HOME's index of housing stocks has fallen 3.88% between Oct. 2 and Nov. 6 and mid-December with six categories showing declines. Biggest losers were land development companies, off 12.25% with Maaco falling 7 ½ to 5 1/8. Building companies were biggest gainers. At the same time, the Dow-Jones Industrial average rose 1 ¾ and National Quotation Bureau's average for unlisted companies fell 1 ½.

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JANUARY 1964
In this Chicago 14 unit apartment, the owners are well pleased with a heating system which provides genuine comfort for tenants at minimum fuel expense.

From left to right: Mr. John J. Limperis, co-owner, Mr. Kenneth Bauer, contractor, Mr. Benjamin Daidone, co-owner.

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The B&G Duo-Flo System permits simplified zone control of various building areas to assure proper compensation for the effects of sunshine, wind and occupancy needs. Not only does it improve comfort conditions, but prevents the fuel waste of overheating and can reduce circulating pump horsepower.

As practical evidence of Duo-Flo System value, Kenneth E. Bauer, Vice President of Atomatic, Inc., Chicago contractors, says—

"In the past few years, I have installed several of your Duo-Flo Primary-Secondary Systems. In my opinion there is no better way to zone a hydronic system than with pumps. It may cost the building owner a little more initially, but in the long run he saves money and is assured of comfortable tenants.

"The low rate of service problems with B&G pumps is well known and the new B&G Duo-Flo Control obviously makes it easier to provide pumped zone control."

For complete information on B&G Duo-Flo Control, write to ITT Bell & Gossett Inc., a subsidiary of International Telephone and Telegraph Corporation, Morton Grove, Illinois, Dept. HW10.
North Carolinian to head Realtors

The new president of the National Association of Real Estate Boards, Edward Emerson Mendenhall Jr., is a down to earth man who describes himself as “operator of a typical small town real estate office.”

Mendenhall, 54, will succeed Daniel F. Sheehan of St. Louis in mid-January as leader of the 74,000-member association after serving 13 of the last 14 years on the policy-making NAREB executive committee.

He joined NAREB in 1934 as an individual before a local real estate board was formed in his hometown, High Point, N. C. (population 62,063), and later went on to head both the local board and the state association.

Greensboro-born, he graduated in personnel management from the University of North Carolina in 1930—just in time for the Depression. The only job he could get was with the federal government—as maintenance worker for the Gulford battlefield national military park.

On Valentine’s Day 1951, his brother-in-law, Blake Thompson, asked him to take over his one-man real estate office in High Point while he joined a mortgage company to manage its mounting volume of foreclosed homes. Real estate was then in deep doldrums, but he recalls the agency had a few rental accounts that “paid the office rent and room and board.”

“It must have been 12 or 18 months before I made my first commission,” he recalls. “I sold a $300 lot and got a $25 commission—when I had only expected $15.”

From then on Mendenhall’s fortunes picked up. When the Home Owners Loan Corp. started operating in 1934, he was able to sell many foreclosed homes back to their original owners by working with mortgage companies that would take HOLC bonds. “Then we began to make some money—maybe a couple of hundred dollars a month,” he recalls. One result: Mendenhall married a High Point girl, Ann Robbins, and hired his first employee.

Since then this agency, now named Mendenhall-Moore, has expanded until today it numbers 14 employees, sells about $2 million in real estate yearly, and adds to its income by managing property, selling insurance, and doing a little appraising and homebuilding.

He builds in partnership with local builders, and usually average

Perry Prentice wins lumbermen’s award

Vice President Perry L. Prentice of Time Inc., former editor and publisher and now editorial advisor to House & Home, has just won the Building Journalism Award of the National Lumber Manufacturers Assn.

The award was one of six made by the trade association for service to the lumber industry. An independent agency chose winners. Said Executive Vice President Mortimer Doyle: “Perry Prentice has for many years been the driving force behind House & Home and Archi-
tectural Forum magazines and the building interests of TIME, LIFE, FORTUNE and all other Luce publications.

“Had the Building Journalism Award (founded last year) existed over the past 20 years, there is no question that Perry Prentice would have been the recipient many times. But in the current year he has made so significant a contribution to the furtherance of public and direct user understanding of the potentialities of lumber as a contemporary construction material of the highest order, that even this expression of recognition scarcely reflects our appreciation.”

“THe House & Home Roundtable on the engineered use of wood (June, July, December) has stimulated more discussion, awareness, and understanding of our products by manufacturers, architects, builders, and consumers than any other single article in recent years.”

Plumbing ware makers find loss, sue aide

Plumbing Fixtures Manufacturers Assn., has suddenly discovered that it doesn’t have as much money as it thought it had. A substantial discrepancy in its financial accounts was brought to light in a recent audit. The short-age occurred while William B. Kramer, 38, was executive secretary of the association (Jan. 1955 to Aug. 1963). FPMA insists that association operations will not be seriously affected by the loss, mainly because it has a substantial cash reserve on hand. However, it has filed a suit against Kramer, seeking to attach his assets. In addition, the association has opened its files to the Internal Revenue Service.

PEOPLE continued on p. 40
new

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Mirror Bright Prefinished Forrest Wood Block Flooring.
save 14% to 41% while giving your customers the most durable wood flooring on the market today!

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- FAST INSTALLATION . . . Forrest Wood Block goes down fast in mastic. Forrest Wood Strip is nailed with standard flooring nails or automatic nailer. Tongue and groove edges for perfect fit.
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- FORREST WOOD FLOORING MEETS FHA REQUIREMENTS
- PROTECTED BY HEAVY CORRUGATED CARTONS.

FORREST INDUSTRIES, Inc. • P. O. BOX 178 • DILLARD, OREGON

New Forrest Mirror Bright Prefinish on Forrest Strip Flooring creates enduring beauty at very low cost.
Builder mortage broker indicted

A federal grand jury in Miami has indicted Walter J. Cowart, builder of 3,500 homes in Jacksonville and lifetime national director of NAHB, and four others on charges of making false statements in applying for FHA insurance.

Indictments of builders on such charges are rare because mortgage men usually fill out application forms. But Cowart came a cropper because he operates Cowart Investment, a subsidiary mortgage banking company.

Also indicated were J. Edgar Cowart and Allen L. Cowart of Cowart Homes Inc., Vice President Norman C. Kleusner of Cowart Investment, and former Cowart Sales Manager Thomas C. Dean.

The 48-count indictment charges the defendants falsified deposit-receipt forms forwarded to FHA and stated falsely that buyers had no unpaid debts. Alleged result: Ten buyers illegally qualified for FHA insurance between June 1959 and 1961.

Builder fends off attack by town

Most builders are familiar with the howl of the irate homebuyer who discovers a chipped sink. But few builders have had their name hooted all over town because they failed to make do on a service contract.

This nightmare has befallen Florida Builder Alvin Sherman, His Development Corp., of America in Miramar became the angry target of two small daily newspapers which charged him with violating the building code. After one buyer picketed Miramar's city council with a crude sign (see photo), the city hired Architect James Dodd to check the complaints.

Sherman came fighting back. He filed a $200,000 damage suit for interfering with DCA house sales against the loudest of his newspaper hecklers, who was also a picketer. Then he filed a $100,000 slander suit against a family that, he charged, solicited complaints. "We can cope with complaints but we can't permit rabble rousers to destroy our reputation," he said.

Upshot: Most of the fuss seems to have been stirred up by three or four families who went to the newspapers and city hall with their complaints—90% of which, says Sherman, were unjustified. One: grass died six months after the family moved in. Sherman admits there was some cause for some complaints (e.g. blisters in cement swimming pools); he's tending to those. He has also revised form letters he uses to deal with complaints to personalize the message. And the architect found no code violations, calming the homeowners.

ANGRY PICKET

"Council decided to take a look"

ANGRY BUILDER

"We can't let them destroy us!"

ASSOCIATIONS: Mark Townsend has been elected president of the National Lumber Manufacturers Assn. Operator of a large sawmill and panel fabricating plant, Townsend Lumber Co., Stuttgart, Ark., Townsend is a veteran of association work. He is a past president of both the National Hardwood Lumber Assn., and Southern Hardwood Producers.

The Gypsum Association has elected Andrew J. Watt president. Watt has been vice president-marketing for U.S. Gypsum Co. since February 1962. He joined the company in 1938 as a sales correspondent. In May 1962 he was elected to USG's board of directors.

R. H. Bickerson, partner in the Bickerson Clay Products Co., Columbus, Ga., has been named president of the Structural Clay Products Institute. Bickerson was a leader in the just-completed consolidation of SCR and its research arm, the Structural Clay Products Research Foundation, Geneva, Ill., BUILDERS: Dr. James Gillies, UCLA's nationally-famous professor of real estate and urban land economics whose studies on second mortgages helped trigger the collapse of California's Ten Percenters (News, Mar. '61), has joined the board of S. V. Hunsaker & Sons, home developers of Irwindale, Calif. He is also on the board of Brentwood Financial Corp. Hunsaker made its first public offering (News, Aug.) when the Humaker family gave up 19% control. The company is using the $1,240,000 net proceeds primarily to finance homebuyers' second mortgages.

DIED: Curtis M. Robbins, 72, twelve-year member of the California Real Estate Commission and a real estate man since 1920. Nov. 2, in San Francisco; Chris R. Jones, 73, past president of the California Real Estate Assn., Nov. 7 in Sacramento; Clyde Wilkinson, 48, vice president of marketing for American Radiator & Standard Corp., Nov. 27 in Huntington, N.Y.

FHA'S FERGUSON

He put 40 into home loans

Former FHA head Abner Ferguson dies

Abner H. Ferguson, 82, the FHA commissioner who was largely responsible for putting the Veterans Administration in the parallel business of guaranteeing home loans, died Nov. 29 in Washington.

An attorney, Ferguson joined FHA in 1934 and became commissioner in 1942. When Congress began debating the VA home-loan program near the end of World War II, Ferguson argued that processing should be handled by VA instead of FHA. "I don't want the job of foreclosing on veterans," said he. Congress then set up the second home-loan processing agency. Ferguson resigned in 1945 and practiced law, retiring in 1955.

Died:

J. Edgar Cowart and Allen L. Cowart of Cowart Homes Inc., Vice President Norman C. Kleusner of Cowart Investment, and former Cowart Sales Manager Thomas C. Dean.

SLUSSER, 72, was FHA's first FHA employment by 67% before he resigned in 1959. His penchant for reducing excesses was so relentless he inevitably angered public housers.

While FHA head, Slusser re- duced the agency's Treasury borrowings from $640 million to $24 million. He helped steer public housing away from monolithic projects with two notable firsts: 1) a development designed especially for the aged, and 2) scattered site development of single and duplex public units mixed in with other homes in Cedartown, Ga.

Slusser resigned in December 1959 and returned to Akron and to his real estate business (which he had been forced to quit in a conflict - of - interest controversy the year before). Two years ago, he moved to Sarasota, Fla., where he died Dec. 3, at the age of 66.
Technology ... research ... gremlins

After technology, what?

H&H: Just read the November issue from cover to cover, as I am prone to do. As I put it aside, the surge of creation welled in my breast. I submit it without a cringe:

Oh give us that plastic that lasts fifteen years,

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

Research in housing

H&H: Kudos on your most provocative article on technology in the homebuilding industry [Technology's promise & performance, Nov.]

CURTIN R. SYKORA, vice president
Lifetime Homes
Old Saybrook, Conn.

H&H: I don't think I've ever seen that much information about housing research let alone seen it in one place. You correctly pointed up a problem that we have got to face: It is not the traditional suppliers who are conducting the important research, by and large, but the outsiders who want a piece of this lucrative market. We have no right to assume that we own this market. We will probably lose it if someone else can provide the builder with a substitute material that does a better job than the original. Homeowners are only interested in how well the house goes together and how well the house, as an entity, does its job.

GEORGE CHEEK, manager
public relations department
Douglas Fir Plywood Assn.

Gremlins in the warranty

H&H: A bit of chastisement for a goof in the story (MARKETING ROUNDUP, AUG.) on the ten-year warranty now in effect on all homes built by Downey Bros. (bros., brothers) of Houston. Your story reads Downey Bros. and quotes Mr. Brosm ... It is gratifying to know that others are also bugged by the gremlins which hide out in typewriters.

TED NABORS, general manager
Coastal Advertising Agency
Houston

• Gremlin-beset HOUSE & HOME apologizes to Builder D. (for Doyle) F. W. Downey.—Ed.

BEAT SURFACE CRACKS—TROWEL WITH THOMPSON'S

Every time you pour concrete, here's a smart "finishing touch" that makes for satisfied customers ... eliminates costly patching and repair call-backs. Simply trowel-in Thompson's Water Seal on your final troweling. Results: a crack-free, spall-free surface that's waterproof and dustproof; much greater strength and wear resistance. (Non-treated concrete measured 260% more abrasion loss than concrete treated with Thompson's in certified laboratory tests.) Thompson's Water Seal ... seals, waterproofs, cures. Saves you time and labor. Does not contain silicones. Write for brochure and certified test data.

THOMPSON'S WATER SEAL
E. A. Thompson Co., Inc.
Merchandise Mart, San Francisco

LETTERS
More and more, the guarantee of a reasonable profit for a builder depends on thoughtful planning of his project... planning that must often be done as much as a year in advance. A simple error in judgment in the selection of a house design or in establishing pricing or financing can be disastrous. This is why certain large successful builders today spend thousands of dollars to obtain accurate market analyses to help them in their planning.

Now, for the first time, builders of all sizes can get this kind of valuable planning help as a service from Barrett. This service, called CONSULTRON, is a customized marketing program tailored to your project by William R. Smolkin, nationally recognized building consultant. For years, Bill Smolkin has gathered first-hand knowledge and experience in all phases of the building trade. This data has been programmed into a computer which, when fed the answers to a few basic questions about your project, will supply a detailed, multi-page marketing program for your project.

What kind of advance information can you expect to get from CONSULTRON that will help you plan your project more profitably? Here is a partial sample:

- an optimum price range for your new homes
- a practical budget and plan for sales and merchandising
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- profitable design standards for new homes in your locality
- a complete guide for advertising your project most effectively
- expected profits on your total project before taxes

With the help of CONSULTRON before you build, you can keep your operation on a firm business basis from start to profitable finish. To obtain this unique service just mail the coupon, or have your Barrett dealer put you in touch with a Barrett representative. Whichever way you choose, do it now!

BARRETT... EXCITING NEW BUILDING MATERIALS FROM CHEMISTRY. In addition to unique marketing services, such as CONSULTRON, Barrett also offers a complete line of quality building products. These are backed by the research and development programs of Allied Chemical Corporation, one of the world's largest producers of chemicals.
Now Barrett and William R. Smolkin join forces to offer builders a unique new service—one that can help you establish optimum price ranges, the most profitable design standards, and practical sales, financing, and advertising plans for your next project.

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City

Zone State

Wm. R. Smolkin

* CONSULTRON is a service mark of Allied Chemical Corporation
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WHICH TYPE PICKUP DO YOU NEED?

Chevrolet now makes four different types, each with its own distinct advantages. Whichever one you buy, it's going to prove out a lot more truck than your money bought last time!

**THE FLEETSIDE**

Based on sales, this is the best liked pickup in the world. The outstanding feature of this model is its large body that extends clear out over the wheels. You can buy the Fleetside with either a 6 1/2- or 8-foot body and either 115-inch or 127-inch wheelbase. It is usually voted the best riding truck because it has coil springs at all four wheels and independent front suspension. The cab and body lower side panels have double-wall construction. The standard engine is our 230-cu-in. Six. If you need more power than that you can get a 292 Six or a 283 V8 at extra cost; also 4-wheel drive. Chevrolet Fleetside—best for all-around use.

**THE STEPSIDE**

If you'd rather have flat interior body walls and convenient side steps between the cab and the rear fenders, you should ask to see the Chevrolet Stepside. It comes in the same two sizes as the Fleetside, plus one bigger size—a 9-foot body on a 133-inch wheelbase. This big model has a heavier frame, four-speed transmission, and leaf-spring rear suspension for maximum payloads. It has the same standard engine and options as the Fleetside model. Chevrolet Stepside—easy to load, more sizes.

**THE RAMPSIDE**

Nobody else makes a pickup exactly like this one. It's the only pickup with a ramp at the side. Elephants have trod the ramp without breaking it. It is 4 feet wide and so is the piano hinge that holds it to the body. Two spring-loaded latches keep the ramp tight when it's up. The ramp makes loading easy because it's only a 16-inch rise. Also there is a conventional tailgate at the rear. The body and frame-floor assembly are very rigid because they are welded together. A 95-hp aluminum air-cooled engine in the rear never needs water or antifreeze. A 110-hp engine is available at extra cost. It's a fine riding truck because it has independent coil spring suspension front and rear. Corvair 95 Rampside—easiest to load and unload.

**EL CAMINO**

El Camino explains itself when you look at it. We wanted to offer people a vehicle that could not only work hard but look like a million dollars doing it. The result, we believe, is the best looking pickup in the world . . . the only one with that mark of distinction—Body by Fisher. You can order it plain or fancy: bucket seats, air conditioning, 4-speed transmission, 220-hp V8 engine are some of the extra-cost options. El Camino—the 1964 knockout! See your type of pickup at your Chevy dealer's. . . . Chevrolet Division of General Motors, Detroit, Michigan.

QUALITY TRUCKS COST LESS

![Chevrolet Logo]
"Humph! who's given home lighting the dimming range and economy that I have?"

"HUNT ELECTRONICS has!"

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That's right, Lady . . . I always install Broan!

As an electrical contractor, I know what's going on inside your kitchen built-ins. And I know Broan's got other hoods beat by a mile.

Take this Dual Blower range hood I'm putting in for you. See those seams? Heliarc welded and hand polished. See that smooth finish? See the shape of the thing? Designed to pull in kitchen odors with extra efficiency. Pretty good looking, too, if you ask me. And a perfect match with the rest of your appliances — I know you ladies always go for the big choice of colors with Broan.

But I'm no interior decorator. All I know is, Broan hoods have a pair of "squirrel cage" blowers inside that do the job better than any I've seen. They're certified by HVI, too — HVI's the Home Ventilating Institute that tests the power of blowers like these at the engineering labs of Texas A&M — and that's good enough for me!

And frankly, Lady, putting in a Broan saves me a lot of headaches. Easy to install. Practically no service calls. Fast delivery on special orders. And happier customers — that's a fact. Funny, I've been installing Broan range hoods, exhaust fans and bathroom heaters for over 30 years now. But some people are just finding out about 'em. I see lots of contractors, builders and distributors switching to Broan, more dealers beginning to stock Broan products.

You take a look around, too, Lady. Bet you're not the first on your block with a Broan!

Kitchen Range Hoods by BROAN MANUFACTURING CO. HARTFORD, WISCONSIN Manufactured in Canada by Superior Electrics Ltd., Pembroke, Ont.
Water in lumber can be the No. 1 cause of construction problems. A house built with unseasoned lumber is saturated with water. More than 500 gallons of it.

Often this results in expensive call-backs due to cracks in walls and ceilings, nail popping, squeaky floors and sticky doors and windows. Kiln-dried lumber helps eliminate these problems. And new Weyerhaeuser Engineered Kiln-Dried Lumber performs even better.

Engineered Dry Lumber is precisely manufactured to exact sizes with a new 15 per cent average moisture content (19 per cent maximum). This results in slightly smaller sizes (1 1/2” for framing, 3/4” and 5/8” for boards), with absolutely no loss in strength and stiffness.

Try Weyerhaeuser Engineered Lumber on your next project and pocket the in-place savings you get from easier handling and trouble-free performance.

For more information, see your Weyerhaeuser dealer or write us at Box B-20, Tacoma, Washington.
An open letter to the new President of the United States:

Housing's biggest need: cutting its high-cost

Dear Mr. President:

You may suppose that all is well in the housing industry, with starts booming along at the greatest rate ever. You might well think this is one sector of the economy you could leave well enough alone.

The appearance is deceptive. The fact is that the $20 billion-plus housing industry—5% of gross national product—is limping along at about 60% of its true potential. One reason for this lag is the senseless and outmoded requirements imposed on housing by localities—requirements that inflate its cost needlessly. We said a mouthful about these in our last issue and we say more on page 80. Another reason is the federal government itself. The $150 billion that the federal government has committed to housing programs has done next to nothing to attack housing's biggest problem: the much-too-high cost of a good new home. On the contrary, federal "aid" to housing has compounded this problem (while making it more tolerable—temporarily). Instead of attacking costs, postwar housing programs have tried to soften their impact by reducing down payments and spreading out maturities to slice monthly payments. Now the idea is afoot that because new housing is too costly for some middle-income families to buy or rent, we should have massive new cheap money programs to create the illusion that high-cost housing is actually cheap.

This is the quack medicine that helped get housing into today's high-cost problem, Mr. President. Cheap money means costly land and costly housing—costly for everybody if programs are big enough. In New York City, the most immediate result of the Mitchell-Lama easy financing program has been to inflate the price paid for the land under some Mitchell-Lama projects from 50¢ to $2 a square foot.

Easy terms in any industry are a device to make overpricing acceptable. It is time the government stopped feeding housing pills that worsen its worst ailment. Instead, government ought to help housing attack the causes instead of the symptoms. Housing needs your help on items like: Strenuous efforts to solve the code muddle. The U.S. could help a lot, not by propounding a federal building code, but by giving industry up-to-date scientific data on technical criteria. Indeed, FHA itself needs much better technical guidelines than it now has, or can get, to fulfill its responsibility to let new and improved ways to build be used promptly.

A land policy—federal and local—that makes sense for today. HUD Administrator Weaver has recognized this need. Land costs too much because land is usually underassessed and undertaxed. This promotes slums, land speculation, and urban sprawl. The federal government abets this by letting land speculators deduct their costs from ordinary income taxes, then cash in their profits as capital gains.

As you yourself once told homebuilders: "We must guard carefully against artificial restrictions that will limit the economic capacity of the industry."

We hope you mean that, Mr. President, for the industry urgently needs your help to overcome many such restrictions.

Out-of-control costs

In the last 37 years, the cost of residential construction has nearly tripled. That is a 50% faster rise than wholesale prices, a 60% faster rise than consumer prices.

The biggest ingredient, as every builder knows, is labor costs. Building trades wages have soared 261%. Materials prices are up only 152%. Land, which isn't counted in construction costs, has suffered the worst price inflation of all: 300% in the postwar years, according to one estimate.

These out-of-control cost increases are housing's worst problem. Some can be controlled by tax revision; some require sweeping changes in local attitudes and regulations (e.g. zoning and codes). Unless the job is begun, private housing may be in for long-term trouble.
One of the American goals is that housing be a triumph of free enterprise.”

“We cannot rule out public housing for special circumstances. But our primary goal is to expand the opportunities for private industry.”

“I am willing to do everything within my power to use the credit of the government to bring down the price of money.”

WHERE PRESIDENT JOHNSON STANDS ON HOUSING ISSUES

From Lyndon Baines Johnson, the housing industry can expect both a sympathetic ear and a wide background of knowledge—especially in housing finance.

President Johnson is expected to continue the housing and community development programs of the late President Kennedy, of course. Even the controversial ones, like FHA Sec 221d3, and area redevelopment loans and grants. Urban renewal may get a boost—despite a rising chorus of complaint about the way it operates. For businessmen are backing it, and Lyndon Johnson listens to businessmen, as a Texan would.

Nobody foresees any quick changes in housing’s official hierarchy. HHP Administrator Robert C. Weaver is too important to the Negro vote Johnson will need to win re-election. The job of deputy HHP Administrator is open. Who—if anybody—fills it could be an early tip to the new Administration’s tilt on housing.

Gradually, look for changes in style and emphasis in housing policies. What kind of changes? The best guide is the record of the new President’s words and deeds in his six years as majority leader of the Senate, his three as vice president, and the contacts he has made with housing groups and leaders.

President Johnson’s Populist heritage shapes his stand on federal spending and interest rates

“For five generations, my forebears have been legislators,” says Johnson proudly.

Significantly for housing, those forebears include Grandfather Sam Ealy Johnson, elected as a Populist. Now no more than a footnote in history books, Populism and its theories appear to have shaped the ideas of Lyndon Johnson. For example, Johnson often spoke in the Senate of the “moneylenders” who control housing, reflecting Southern and Midwestern farmers’ distrust of Eastern financiers which gave Populism its impetus.

The Populists, at their zenith in 1892, favored free coinage of silver, an idea later adopted by Democrats and seen in Johnson’s repeated advocacy of lower interest rates—forced by the financial power of the government if necessary. Examples:

- In tight-money 1957 he plugged for using $1.4 billion from the National Service Life Insurance Fund to make 4 1/2% loans to veterans instead of raising the VA loan rate to 5%. Raising the rate would only force all other interest rates upward, he argued.
- When the Eisenhower Administration hinted at raising the 2% rate on rural electrification loans in 1957, Johnson snapped: “We will fight them with beer bottles.”

But Johnson has tempered his low-interest stand. When the question of boosting the VA rate from 4 3/4% to 5 1/4% came up in 1959, Johnson asserted:

“I am willing... to do everything within my power to use the credit of the U.S. government to bring down the price of money, but I will not do it on this bill because such action would not provide any housing for veterans.”

Johnson has pushed housing legislation to fight a recession, but prefers loans to public works

To forestall any possible sag in the U.S. economy from the Administration changeover, Johnson is already pressing Congress for quick enactment of President Kennedy’s tax-cut bill (NEWS, July et seq.). But in the past Johnson has preferred to boost business activity and lessen unemployment through government subsidized loans instead of massive public-works spending.

His action in 1958 was typical: with 5.2 million persons unemployed, he pushed through by April the controversial Program Ten emergency housing bill which let FNMA buy $1 billion of FHA and VA mortgages at par. Johnson did this because he estimated it would add 200,000 housing starts that year, even though it means yielding on another point—the VA interest rate was boosted from 4 1/2% to 4 3/4%. President Eisenhower signed the measure reluctantly because the loans constituted a direct drain on the Treasury.

In the fall of that year, Johnson told NAHB directors of his
THE NEW PRESIDENT IS NO STRANGER TO HOUSING LEADERS AND TRADE GROUPS

SAVINGS & LOAN LEADERS in U.S. S&L League heard Johnson in 1959 extol thrift industry as "monument to American confidence."

LUMBERMEN headed by Strayer E. Pitman (seated, r) joined Sen. Warren Magnuson (standing, l) and Rep. Julia Hansen (seated, l) to seek Vice President Johnson's help in developing new lumber markets abroad. "All I've been hearing has been lumber, lumber, lumber," smiled the vice president.

approach. "I do not believe that aside from its own payrolls and its direct contracts the government can 'provide jobs.' But the government can remove restrictions on free enterprise, the government can assist private industry, the government can provide cushions against loss." Johnson noted the rate of housing starts increased 155,000-a-year after the bill's passage, and said the "bill was designed to stimulate residential construction to lead our economy out of despondency. And I am convinced that this objective was accomplished."

"We are all, I believe, in agreement that this use of FNMA is purely an emergency function. If it were at all clear that private investment sources would do the job, I do not believe that Congress would authorize the program."

Johnson has supported public housing as part of housing bills, and on one notable occasion used his formidable skill to stall debate on a move to cut public-housing authorizations from 135,000 to 45,000 units annually until he was sure he had enough votes on the floor to defeat the amendment. In 1959 and 1960 Johnson thrice voted against cuts in public-housing authorizations. He has told homebuilders: "We do not—and cannot—rule out public housing for special circumstances. But our primary goal is to expand the opportunities for private industry."

On civil rights, Johnson stands for firm laws and enforcement tempered by conciliation

Perhaps no part of the Johnson stance is so misunderstood as his views on civil rights. Here is his record: In 1957 Johnson was chiefly responsible for the compromises which won a bill setting up the Civil Rights Commission and empowering the Attorney General to seek injunctions in federal courts to protect voting rights for Negroes. But in 1959 Johnson worked out a compromise which ended an effort by Northern liberals to curb Southern filibusters. Days later Johnson sponsored his own civil rights bill setting up a federal community relations service to conciliate school desegregation and other racial disputes. And as Vice President, he headed the Presidential Committee on Equal Opportunity in employment, which since last July has enforced the ban on job bias in federal insurance and...
grant programs, including both renewal and FHA insurance. In this job, "He had five opportunities every day to hedge his stand, and he didn't," says one insider.

Johnson, who thinks of himself more as a Westerner than a Southerner, gave this broad outline of his views in 1959: "Far too many of the measures that are proposed are efforts to punish people for the sins of their fathers. There is in many of the proposals an underlying tone almost of 'blood guilt.' ... Punitive legislation may satisfy the soul of those who feel outraged. But it aggravates—not heals—the gaping wounds. ... The outward manifestations of tolerance can be enforced by guns, clubs, and bayonets. But understanding does not exist until the people themselves will it to exist. ... We must also face the fact that the issue is not going to be solved by force—because the ultimate goal is human acceptance and that is never secured by force."

**Johnson has steered clear of endorsing a cabinet post for urban affairs and housing**

Johnson has approached big-city problems by advocating measures other than raising HIIF to cabinet level. In 1958 he told the Texas League of Municipalities that the implications of "the developing alliance between big government in Washington and big government in city hall" posed "a matter of the most serious national importance." Then he called for a study commission (an idea later sidetracked) to prove the needs, roles, and responsibilities of each area of government so strong local government could be maintained as a "critical area of freedom."

Last August Johnson returned to this theme before the American Municipal Congress: "If we list the most pressing domestic problems of today, the majority of them are local problems." Since 1950, he noted, state and local spending for domestic problems has risen three times faster than federal spending for these purposes. Local government still raises 70% of its own revenue locally, gets 28% from the state, and only 2% from the federal government. "We need action today. We need to be doing our homework here in our own land. We are not economizing; we are not saving; we are not being prudent—we prudent fellows have to keep in mind the sky to be the limit. The Administration said, 'Let us have legislation hostage to win reluctant votes for controversial subjects like public housing that might not pass Congress unless wrapped into an omnibus housing bill.'"

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**Johnson has favored congressional control of FHA spending but opposed legislative discount ceilings**

In 1959 the Eisenhower Administration sought to free FHA's authority to insure mortgages from its traditional role as a legislative hostage to win reluctant votes for controversial subsidy programs like public housing that might not pass Congress unless wrapped into an omnibus housing bill.

Johnson spoke passionately—if mursky—in opposition. "The Administration wanted to take the lid off FHA. It wanted the sky to be the limit. The Administration said, 'Let us have no limit.' We have retained the ceiling on FHA. ... This is still a contingent liability. We prudent fellows have to keep in mind all contingent liabilities."

But Johnson has stood neutral on another FHA issue, discounts. When Sen. Hubert Humphrey (D., Minn.) proposed FHA commissioners and vadministrators get power to control discounting, Johnson dismissed the issue: "I have sufficient confidence in their judgment to vest that authority in them."
Factory in the field: a top builder develops a new key to better management and lower costs

Physically, the building shown above is a 12,000 sq. ft. warehouse and fabricating shop. But to Builder Robert Schmitt of Berea, Ohio, it embodies a management concept that may be one of the biggest steps yet taken toward industrialized homebuilding.

Schmitt states his concept this way: "We organize and control the flow of materials from the time they leave a manufacturer's dock, through storage, fabrication, and into a finished house to minimize the high cost of buying and handling materials."

Jalfco (Schmitt's corporate name for his factory-warehouse operation) grew out of a significant fact uncovered by Project TAMAP—the Time and Methods Analysis Program sponsored by NAHB, the Stanley Works, and Schmitt himself. TAMAP showed that only 19% of Schmitt's total house cost was in labor; 81% of cost was in materials. So Schmitt figured if major cost reductions were to be made, he must attack the high cost of buying and handling materials.

Schmitt designed Jalfco to make cost reductions in both areas. His warehouse-plant is located right in his current subdivision. The building is demountable, and when the project is completed, it will be moved to another site and its slab will become two tennis courts. This new facility cuts his material costs three ways:

1. As a warehouse with a surrounding material yard, it lets him buy in volume, direct, and so at lower prices.
2. As a weatherproof fabricating plant, it lets him build trusses, panels, plumbing trees, and other components cheaper under cover than he can build them outdoors or at the site of each house.
3. As a central marshalling facility, it lets him put all materials and tools into well-organized packages for every single job that must be done on a house, from prefabricating wall panels to supplying vent hoods, lets him move them easily to sites by power equipment.

Jalfco is still too young (it started operating five months ago) for Schmitt to know precisely how much it is cutting costs. "But we know it is saving money," he says, "and we know it's giving us a faster, smoother operation." Schmitt has another yardstick: a year and a half ago he set up a smaller version of Jalfco (two house shells joined together) in another subdivision, and was able to drop the price tag on a $30,500 house to $28,500. "We've only just started," he says. "Big savings are yet to come."

While Schmitt's Jalfco operation includes dozens of cost-cutting ideas, it is not a panacea for all builders. Warns James Shequine, industrial engineer who headed up TAMAP for Stanley:

"No builder should make a carbon copy of Jalfco. Jalfco represents a management system based on Schmitt's market (75 to 100 custom houses a year), Schmitt's crews (non-union and no subcontractors), and Schmitt himself. The important thing for other builders is to understand the management principles behind Jalfco and see how they apply to their own operations."

Schmitt himself adds: "The principles can be adapted by any builder with a 20 to 25 houses-a-year volume. To see how he puts his new management concepts to work, turn the page."
Schmitt's warehouse provides a cost-saving on-site inventory of all his materials . . .

Schmitt’s warehouse is laid out to cut handling costs. The Jalfco facility also permits the economies of volume purchasing, but, argues Schmitt, this is only part of its value.

“When we first started buying in quantity,” says Schmitt, “we quickly saw that all we were doing was having our materials dumped in different places. We didn’t have control of them, and we handled them too many times after we got them. That was a huge waste of money.”

As the plan and pictures above show, Jalfco is laid out to avoid this waste. Specifically:

Materials are stored so that inventory can be taken by eye. Stacks and bins are open so that Jalfco’s superintendent or the purchasing agent can walk through the building and yard and tell at a glance what materials need reordering. This eyeball control is fast, eliminates most paperwork. (Schmitt buys most materials in 10-house quantities, tries to keep ten houses ahead at all times. For special items, and particularly advantageous buys, he may buy in 30- to 40-house quantities.)

Materials are stored so they can be moved by power equipment. Schmitt’s two forklifts are vital to Jalfco’s operation, and most materials are banded as packages and palletized. (Schmitt takes his pallets on deposit from suppliers, pays extra to get good ones that will stand up under fast handling.) Lumber is stacked diagonally so forklifts can reach each pile. This planning has cut Schmitt’s materials handling costs to the bone. “We used to handle a stud six times before it was in place,” says Schmitt.
TO FABRICATION

PREFINISHED PLYWOOD is stored vertically, sheathing, right, flat.

SHORTS AND CRIPPLES, cut from scrap 2x4s, are stored in a dolly according to length.

RADIAL SAW is near door so short pieces can be cut as lumber is brought in.

TRUSS WEB MEMBERS are stored in dolly. Hanging pieces are patterns for standard sizes.

and it cuts handling to a minimum by storing materials close to where they will be used

"Now we handle it just twice—once as a stick of wood, and once as part of a finished panel."

Materials are stored so they speed up fabrication. While most materials go directly from Jalfco to the building site, some— principally framing lumber and plywood—are first built into panels and trusses. Some of these items go into components as is, since Schmitt buys pre-cut studs and most panels are made from full plywood sheets. Long truss members are cut on the truss jig. But some pieces, like jack studs and truss web members, must be cut before they are stored. Schmitt stores them on dollies (right, above) which pick up the pieces at the saw, store them in out-of-the-way corners until they are rolled directly to the panel and truss jigs. All shorts and web members are cut to standard sizes and put on marked shelves on the dollies, so no measuring is necessary. (Most of Schmitt's panel shorts are salvaged, many from concrete forms.)

Jalfco also provides maintenance space for power equipment. Schmitt's operation relies on power equipment (19 different earth-moving machines, forklifts and special-purpose trucks), so breakdowns would be costly. One end of Jalfco is a maintenance shop (opposite page) with a schedule board showing when and how each piece is to be serviced. Easily damaged machines are stored in a shed outside.

As noted above, some of the materials stored in Jalfco are fabricated into components before leaving the building. To see how Schmitt's prefab operation works, turn the page.
FACTORY IN THE FIELD continued

**Panel Jig** is two lengths of channel iron fastened to floor, with lines marking stud spacing. Here, corner post is set into position.

**Door Panel** is assembled in jig. Nailing is easier on floor than on a table, and no time is wasted in walking around a table.

**Building Paper** is peeled off roll and nailed to framing. Sheathing (foreground) is brought into fabrication area from warehouse as needed.

**Truss Jig** is seven tables like this at gusset positions. Clamp holds members in place.

**Steel Tracks** let jig tables be moved for different spans and different roof pitches.

**Finished Truss** is lifted from jig. End cuts were made by hand power saw.

**Two Men** carry truss to dolly, (right). Metal gussets are nailed, clinched from one side.

**Spray Priming** of windows is done in paint shop. Windows are hung on drying chains attached to sliding racks above.

**Door Hanging Jig** was built by Schmitt's men. A finished prehung door can be turned out in seven minutes.

Schmitt's fabricating process requires few men and a minimum of costly equipment . . .

**Basic to Schmitt's fabricating process is flexibility.** Reason: he builds no two houses alike. Thus he standardizes his production systems but does not standardize the components he builds. As the pictures above show, his jigs are easily adjusted to different panel and truss sizes. And they are so simple that he was able to build them himself, or have them fabricated locally.

Schmitt's in-plant fabrication is based on three principles:

1. Some parts of a house (trusses, panels, doors, etc.) can be built much more efficiently with fixed plant equipment, and can be moved to the site more easily as components than as pieces.

2. Some components can be built more cheaply than they can be bought. For example, Schmitt can build a 26' truss for about $8—less than half what he would pay a fabricator.

3. Some of the labor of Schmitt's work force can be stored up via the trusses and panels workmen make in bad weather. In good weather there are only two or three men in Jalfco's fabricating crew—not enough to keep up with site work. In bad weather framing crews who cannot work outside move into Jalfco and build components for houses to be completed later.

This labor-storage principle influenced Schmitt's fabricating methods. For example, the truss jig is designed for a three-man team. But as many as five men or as few as one man can also build trusses with only a small drop in efficiency. One big dividend: Since Schmitt can build regardless of the weather, he does not have to lay off men, can thus keep an experienced work force together the year round.
SLAB PACKAGE holds all tools for the job, including nail aprons. Tubing and wiring to go under the slab also are included.

WHEELBARROW and pre-assembled corner blocks fit in compartment in rear of box.

FOUNDATION PACKAGES hold tools and materials for staking out (front box) and trenching (rear box). Jalfco crew stocks boxes according to lists on covers.

To see how Schmitt moves these and other unitized packages to the site, turn the page.

Packaging materials and tools is vital to Schmitt's system. It is by far the most important part of the Jalfco operation. The pictures above show how all materials, tools and components for a specific site job are packaged into units that can be moved from Jalfco to the job by forklift, truck or trailer.

Schmitt's packaging principle has two aims:
1. To make sure all crews have everything they need to work with all the time. All components, tools, and materials for a job are waiting at the site when Schmitt's men arrive; they don't even need the traditional tool boxes. And since they now wear standard uniforms, they could theoretically show up in the morning in their underwear and be ready to go to work.

2. To keep supervisors free to supervise. Schmitt's foremen used to be responsible for the ordering and delivery of all materials for their jobs. Now they are completely free of it, and both the speed and efficiency of their operations have risen.

Two types of unitized packages are assembled in Jalfco:
- Custom packages, including panels, trusses, windows, etc., for specific houses, which must be made up from control schedules.
- Standard packages, covering foundations, slabs, partitions, trim, etc. for any house. The items and the tools are put into what Schmitt calls "phase boxes" (above) with more than enough material for most houses. When the site job is finished, the phase box is returned to Jalfco and restocked according to a fixed inventory list. To see how Schmitt moves these and other unitized packages to the site, turn the page.
From his factory to his sites, all Schmitt's materials move on wheels . . .

Materials handling machines work best with packaged loads. The driver of a forklift, for example, does not have to run back and forth from the warehouse to the construction site with separate loads of materials. He delivers one phase box, and returns it to the warehouse when the job is done. In just two trips he has provided a construction crew with all the tools and materials necessary for its phase of work.

Schmitt's machines do more than haul materials from warehouse to site. They also help speed on-site construction. Here is how:

1. Machines virtually put materials into a work crew's hands. Pallets of block, for example, are trucked around the foundation and unloaded block by block at the places where they will be laid.

2. Machines are used as self-contained workshops. A plumbing truck, for example, carries all pipe, fittings, and tools needed for roughing in. Since Schmitt's plumbers work on just one house at a time, the mobile workshop can stay there until the job is done. And Schmitt has a special truck for exterior spray painting. It has a built-in compressor that is run by a power takeoff and a top rack that serves as a scaffold for painting cornices and gable ends.

3. Machines hold material and tools for ready on-site use. For example, trusses and gable ends are delivered in a special trailer which feeds them to framing crews in the order in which they are set. A smaller trailer carries tools and scaffolding used by masons.

And roof sheathing is both delivered to the house site and lifted up to the sheathing crew by a high-lift fork truck.
FIELD TELEPHONES are installed at strategic points around the site so field supervisors can easily contact the warehouse. Phones are connected to the site’s underground circuits.

FRAMING COMPONENTS, including trusses, left, and wall panels, right, are piled next to the slab. Trusses are placed near the end of the house through which they will be carried and erected.

SITE REFUSE is collected and burned in old dump truck bodies (top), then thrown into an on-site pit (bottom), which will be filled in.

MORTAR PACKAGE includes an open box for sand, a closed box for cement bags, and a concrete mixer. Boxes are carried by a forklift truck, and the mixer is towed behind the truck.

and are placed close to the points of use to save time and motion at the building site

4. Machines are even used to get rid of building refuse. Discarded dump truck bodies, bought for $20 apiece, are placed at each building site to consolidate all scrap. Flammable material is burned, and when the container is filled, it is forklifted away and dumped. Nearest municipal dump is several miles away, so to save time Schmitt dug his own refuse pit on the site. It will be filled in when the project is finished.

Finally, to tie his whole operation together, Schmitt has a communications system between his factory and his building sites. Field telephones are tied to the subdivision’s permanent underground wiring system. This lets field supervisors coordinate their work closely with the factory operations and get materials delivered precisely when they are needed.

FROM FOUNDATION TO FINISHED HOUSE Schmitt is now building on site faster, more efficiently, and at lower cost because of his factory in the field.
Building entrepreneurs are learning that housing is no longer a one-man show and that they need a whole group of professionally-trained people to perform the many highly specialized housing jobs. How can builders get maximum return from the professionals they so badly need? Here is one successful builder's answer:

Builder Matt M. Jetton (above, left) who makes that statement, can back it up with a remarkable sales record in one of the sickest U.S. housing markets, Tampa.

Jetton, president of Sunstate Builders Inc. (75-houses-a-year), used the distinguished team of professionals standing at the table with him on his most recent promotion house (cover and p. 74). The payoff: The house won a top design award for the architect, a top merchandising award for the builder; it helped sell 34 houses averaging $29,000 while it was being promoted and immediately afterwards; it produced a wealth of local publicity for the subdivision where it was built; and, as important as anything else, it sold the first week it was offered for sale—right after the promotion.

Jetton's use of talented professionals on the promotion house was not a one-shot effort. His Carrollwood subdivision, which won a top land-planning award in 1962, is a full-blown product of professional teamwork: It was planned by a professional land planner and involved the work of a score of architects, landscape architects, and interior designers (see p. 76). Jetton has his own realty firm which handles all his new sales and resales. Like many builders, he works closely with his mortgage lender—First Federal &L of Tampa. Says First Federal’s executive vice president, Joseph W. Dalton: “We’re so convinced that Jetton’s concepts are sound that we’ve invested more than $7 million in mortgages at Carrollwood. It can’t lose.”

Jetton and his professional team exemplify a powerful trend in housing:

More and more builders are using more and more professionals. Examples abound:
• Last year big Builder William J. Levitt, who had handled most design and planning problems within his own organization, retained noted Architects George Nemeny, George Nelson, Donald Lethbridge, and Carl Koch as consultants for his ever-widening operation, which now includes Long Island (p. 49), New Jersey, Maryland, Florida, Puerto Rico, and Paris, France.
• Rochester, N.Y. Builders Caldwell & Cook, eager to retain design leadership in their market, have just retained prize-winning Architect John Anderson—a move urged by their marketing consultant, Stanley Edge.
• Builder Ross Cortese, developer of Rossmoor and Leisure World, California’s most successful retirement community, has engaged Collins & Kronstadt, architects, engineers, and planners, to plan a new community in the Washington D.C. area and design a variety of houses for it.
• The most attractive and successful urban renewal efforts in the U.S.—Washington’s River Park and San Francisco’s Diamond Heights and Western Addition—are prime examples of teamwork by professionals and farseeing entrepreneurs who retained them.
• Developers of satellite cities, now ablazing from California to Florida, from Michigan to Texas, are using the best professionals they can retain: Howard Ahman-
when they work together as a team

son of Los Angeles' Home Federal sat. hired Land Planner and Architect William Pereira (see p. 86) to plan three tracts totaling 10,000 acres in California; Baltimore Mortgage Banker James W. Rouse hired away William E. Finley, director of the National Capital Commission, to plan a satellite city for 100,000 residents between Washington and Baltimore; T. Jack Foster & Sons retained Land Planners Ruth & Krushkhov and Landscape Architects Royston, Hanomoto, Mayes & Beck for $500 million Foster City, Calif.

The list is almost endless. Publisher Paul Hornsleth of House & Garden phrases the trend aptly when he says, "America is on a design jag."

Says Builder Jetton: "My whole future in building is based on the increasing use of professionals. Only with them can I compete." He recently provided office space in his own headquarters building for Architect Eugene R. Smith and Interior Designer Edwina Black because "I need professionals closer to my customers."

Jetton offers this advice on coordinating the work of professionals and making the most of their talents: "The building entrepreneur—the man who holds the check book—must lead the team." How does Jetton lead? He follows three hard-and-fast rules:

1. He makes sure all his professionals realize they are working in a competitive market: "They must be taught to design and plan within a price range and at a profit to the builder. An architect with no previous experience in merchant building takes about six months to learn how to design a house that can be built at a profit. Too often his initial detailing, for example, costs twice as much as standard detailing. So in the beginning he must lean on the builder to be sure his designs are both workable and economical. But eventually he designs a better, more salable house."

2. He spells out his objectives for each professional: Does he want a mass-built house or an individually designed one? Does he want to be right with the market or a little ahead of it? Does he need a house to sell quickly or a promotion house to draw traffic?

3. He gets all his professionals together at the outset and stresses the importance of working as a team: "An interior designer can do little about furnishing a room with badly-placed windows unless he can make his point to the architect at the start. A landscape architect can't provide a better planting scheme or suggest modifications to help marry a house to its land unless he gets in at the beginning. No one professional has all the answers, but he can give better answers when he hears other professional opinions."

Sums up Jetton: "Professionals, working together for a builder, produce far more than a better end product. They save his time—the most valuable time in his organization. And they even help him tap new markets. Every professional has a following that will come out to see what he has done. I'm convinced that professionals don't cost—they pay."

To see how they pay, turn the page
How professional teamwork paid off in a prizewinning promotion house

The house shown above (and on the cover) is the first to capture the two top awards in the Portland Cement Assn.'s Horizon Homes program. One of 72 Horizon Homes built this year, it was the national award winner for both design and merchandising. And unlike many promotion houses, this one sold fast—in less than a week after its promotion.

In planning the house, Builder Jetton had one objective: to project an image of his company as a design leader.

"I wanted a house that represented the tops in design," he says, "something people could appreciate even if they didn't want to buy it so they would come to us when they wanted an individual house built." So Jetton formed a task force of five prominent men (shown on p. 73)—an architect, a land planner, a landscape architect, an interior designer, and even an abstract painter. Then he promoted the product of their joint effort with the help of his ad agency, Carlson & Co. of Indianapolis.

The payoff: a million dollars in sales during and just after the promotion.

The cost: $23,100 for the house, $3,000 for the architect’s fee, $6,400 for the lot, only $8 for land planning (one lot’s share of the $6,400 subdivision planning fee), $3,200 for landscaping (including the landscape architect’s fee), $7,200 for interiors (including the interior designer’s commission), and $400 for a painting.

The house—which sold for $37,800 with land—was designed principally of concrete in various forms—block for walls and columns, brick for facings, precast concrete for channel beams and roof slabs, poured concrete and terrazzo for floors. Predominant forms are inverted channel beams supporting roof slabs and carrying air-conditioning ducts and wiring. Lowered ceilings—under the channels—are in the baths, storage rooms, and alcoves. Precast slabs spanning the beams form the ceilings in all major rooms except the kitchen, which has a dropped luminous ceiling.

Says Architect Mark Hampton: "There are infinite variations possible within this concept."

Says Jetton: "There is infinite potential from using professionals in housing."

LIVING ROOM with walls of white concrete brick in stack bond was furnished and decorated by Robert John Dean, AID of Paul T. Ward Inc. The painting, commissioned for the house, is by Artist Harrison Covington.

FAMILY ROOM, also decorated by Interior Designer Dean, has a free-standing bookcase of aluminum standards, prefinished hardboard, and wood-grain laminated plastic matching counters and cabinets in kitchen (below).

KITCHEN was the cooperative work of Designer Dean and Architect Mark Hampton. Sink is out of sight behind laminated-plastic counter which screens a lower utility counter from the family room. Ceiling is luminous.
Photos: Black-Baker

TERRACE is off the living room, which opens onto it from under a deep overhang formed by one of four inverted channel beams supporting the concrete roof slabs. Landscape Architect: Jack O. Holmes.

T-SHAPED PLAN centers on the kitchen. Family and living rooms are to each side, carport and master bedroom at front and rear. Children's rooms are off the family room. Doors and windows are beneath roof channels.

SEATING AREA of master bedroom was furnished by Designer Dean. Low ceiling of closet area and entry to room, right, was created by inverted channel beams which house the air conditioning ducts (note register).

continued
How professional teamwork paid off in steady sales in a top-rated subdivision

Builder Matt Jetton's Carrollwood community (above and right) was named "the best residential subdivision for 1962" by LIFE and the National Association of Home Builders.

Sales results bear out these accolades. Since opening Carrollwood in 1959, Jetton has sold $8 million worth of houses priced from $17,500 to $70,000. His community has been featured locally in newspapers and nationally in LIFE, Parents, and Living for Young Home-makers. And other builders have flocked to Tampa to see how he does it.

The answer: professional effort—firmly but tactfully coordinated by Jetton. It all started when he called in Brockway, Weber & Brockway to plan the lakefront site. Says Jetton: "Ernest L. Greene [of BW&B] had an excellent approach. Before he came up with a plan, he made sure he understood all my objectives. He asked what lot sizes I wanted, what price houses I planned to build, what recreation was needed. Then he made his suggestions." Greene laid out winding streets and took maximum advantage of the lakefront.

Early in the planning, Jetton met with his enthusiastic mortgage lender (see p. 72). He now gets 80% construction loans combined with final mortgages, pays 5 3/4% interest plus a 1 1/2% fee.

Carrollwood's houses—four models are Better Homes & Gardens Idea Homes—reflect the design skills of more than a score of professionals. The roll includes 13 architects (all AIA members)—plus talented Designer Betty Wild O'Neal, Jetton's design chief for years—13 interior designers (10 are ASD members), among them topnotch professionals like Melanie Kahane and Edwina Black, and several landscape architects.

Jetton meshes the work of professionals with his own ideas. He insists on sidewalks on every street (except along lakefront sites) because "they are the sinews that knit together a neighborhood." He landscapes lavishly, demands design variety. No two houses are alike. Customers tour models as samples of what Jetton builds, then are introduced to an architect who designs to fit their needs. An interior designer is brought in after the architect has turned out a preliminary plan.
SWEEPING DRIVEWAYS and big trees set off houses, which were sited along curved streets by Land Planners Brockway, Weber & Brockway. These houses are typical of most seen in Jetton's community.

LUXURIOUS DRESSING ROOM adjoining a master bathroom was decorated and furnished by Interior Designer Nancy Warren, who selected colors, fabrics, and furniture to create a warm atmosphere.

COLORFUL BOYS' BEDROOM was decorated by Interior Designer Marice Bisson, who used plaid bedspreads, double chest of drawers, and eye-catching wallpaper panels. Big closet has plenty of storage for two children.

continued
A panel of experts tell how to use professionals better — and how much they cost

"The days of picking your favorite scapegoat in housing are gone. You now recognize each other as economic and professional necessities."

With these words, House & Garden Publisher Poul Hornsleth (above) helped keynote a joint business-professional seminar, held late last year in Tampa, on the economics of professional teamwork in housing. The meeting was co-sponsored by the University of Florida, the University of South Florida, and HOUSE & HOME.* It brought together a panel of experts (right) who told 272 business and professional men (almost 40% of them were building entrepreneurs, 60% were lenders, appraisers, real estate men, interior designers, landscape architects, and architects) how they might better work together.

"The final authority on what makes a better house is actually a committee of two experts—known as husband and wife," said Publisher Hornsleth. He scored builders who let draftsmen "splice together a composite house" based on mass surveys of consumer attitudes and preferences. Homebuilders can "benefit greatly" from intelligent market analysis, said Hornsleth. But the marketing expert can't create a better house all by himself. Neither, for that matter, can the architect.

... Landscape architects should do more than wince when they pass a raw new subdivision devoid of all planting. Their services are much needed. ... Mortgage lenders should, as a matter of sound business practice, see housing needs in the context of today's profoundly changing living patterns. ... The American family is entitled to the kind of house that can be created by an industry that sees the full scope of its opportunity. There is incentive enough and profit enough for all of you."

Panelists who followed Hornsleth set down some of the ground rules, mapped strategy, and weighed the costs of cooperative effort. Excerpts from their remarks are at right.

*Participating sponsors: Home Builders Association of Florida, Florida West Coast chapters of the American Institute of Architects, American Institute of Interior Designers, Society of Real Estate Appraisers and Producers Council, Florida Savings & Loan League, Mortgage Bankers Association of South Florida, Tampa Board of Realtors.
LAND PLANNER
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WHAT A PRO CAN DO AND WHAT HE CHARGES: "A good land planner can help a builder avoid the purchase of unproductive land, develop the optimum number of buildable parcels, keep development costs down by avoiding excess grading and drainage. He not only helps the builder develop readily marketable house sites but also helps him develop a reputation for reliability with the local planning agencies. What does he charge? We charge from $2 to $10 an acre for master planning, up to $50 per house for plot plans. Some charge more, some charge less. You can even get much of your planning done free by a government agency, but you only get what you pay for."

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U.S. Plywood Corp.
New York City

DESIGN IS EVERYONE'S BUSINESS: "We long ago learned that the way to get a position on the housing team was through design. Design is no longer good for business; design is the business. The manufacturer has learned certain basic truths. First, his products must fit housing architecturally; he cannot sell dimensional products any more; the product must fit the entire housing concept. Second, the product must fit a house economically; we must add value without adding cost. Third, we must not cuss the builder, but find out what we can do to serve him. It's as simple as that, and anything theoretical or academic opposed to those premises just won't hold water."

MORTGAGE LENDER
E. ALBERT PALLOT
President
Biscayne Federal S & L Assn.
Miami

A FUSION OF EXPERTS IS NEEDED: "When housing growth began to slacken in Florida, and there were hundreds of unsold homes, we determined to set up an architectural advisory board to check on the housing we financed. We got five outstanding Miami architects to serve because we told them this was a community problem—not a problem peculiar to us. Now we insist that builders come to us with architect-drawn plans. The board looks over the plans and shows how land planning could be improved for better viewing, how to make apartments soundproof, why closet space should be increased, why balconies should be expanded. The service is provided free. The results are amazing. We need a fusion of experts to produce better housing."

REALTOR
CHARLES K. CHEEZEM
President
Charles K. Cheezem Inc.
St. Petersburg

A TEAM MAKES HOUSING AN INDUSTRY: "The biggest single factor in the emergence of housing as an industry is the team concept. Years ago, when we had all the business we could handle, we didn't take the time to offer our services, explain them, or say what we could do for a fee. Today we must. Builders could make an ideal swap with Realtors by exchanging what they know about selling new houses for the Realtors' help in selling trade-ins. Manufacturers must learn more about the builder at the grass roots level: what new products he needs to cut costs, how to help him sell, what longer warranties can mean to him. Architects should visit builders and sell their services. Realtors should contact builders about selling some of the houses they build in scattered locations."

APPRAISER
PERCY L. WAGNER, MAI
Senior Vice President
Chicago

YOU DEAL WITH PEOPLE NOT THINGS: "In the real estate business you are dealing chiefly with people, not bricks and mortar. So an appraiser's job is to analyze how a building, a subdivision, or a community is created to satisfy the needs and desires of people, some still unborn. Our analysis includes not only the economic life of an individual building but the economic life of the surrounding neighborhood—created by good or bad planning, with good or bad architecture, and with good or bad interior design. We must see if obsolescence is projected into the new building—not so much because of physical deterioration as by the attitude of people toward the thing that was created."

A PICTURE IS WORTH A THOUSAND WORDS: 'In marketing houses today, talent is the key. The master key is the ability to exploit talent wisely and well. Treat talent as it should be treated. Pay for it: we pay the recommended 6% AIA fee plus 3% for supervision plus $75 royalties for prototype houses that can fit different design and family conditions. Respect it: learn to appreciate architecture, interior design, and landscaping—and how they bear on a house. Expose the pros to their peers: we seat several architects together, and we've been spared many real goofs by getting an interior designer early in the game. Those of us in business ten years from now will have learned best how to exploit the talents around us."

A TEAM MAKES HOUSING AN INDUSTRY: "The biggest single factor in the emergence of housing as an industry is the team concept. Years ago, when we had all the business we could handle, we didn't take the time to offer our services, explain them, or say what we could do for a fee. Today we must. Builders could make an ideal swap with Realtors by exchanging what they know about selling new houses for the Realtors' help in selling trade-ins. Manufacturers must learn more about the builder at the grass roots level: what new products he needs to cut costs, how to help him sell, what longer warranties can mean to him. Architects should visit builders and sell their services. Realtors should contact builders about selling some of the houses they build in scattered locations."
In an earlier time, when transportation was rudimentary and construction, like almost everything else in American business and industrial life was a largely local affair, building codes took the legal shape they retain today: locally controlled.

This legal heritage is, of course, reinforced by the U.S. Constitution, which reserves to the states powers not granted the federal government. Most states (New York is the conspicuous exception) have left building codes wholly to their local governments. The diversity of building regulations thus spawned—some 5,000 local codes across the U.S.—has become today’s code mess. We are not here concerned with wasteful provisions in codes. It is more than 40 years since Herbert Hoover, then Secretary of Commerce, told Congress that waste written into local codes was adding a needless 10% or 20% to the cost of new housing. It is still so. But this waste is far overshadowed by the wasteful cost of diverse codes. For this diversity denies the building industry the giant cost savings of standardized production.

At the top of the heap of code regulation lie the voluminous pages of the four model codes: the Uniform Building Code, sponsored by the International Conference of Building Officials; the Basic Code, sponsored by the Building Officials Conference of America; the Southern Standard Building Code of the Southern Building Code Congress; and the National Board of Fire Underwriters’ code.

These model codes give the illusion of uniformity where little exists. An NAHB survey of 900 cities with more than 10,000 population showed that while over 70% of them based their codes on a model code, almost all had modified the models to their liking.

Since the Twenties, the story of building codes has been one of effort after effort to wrest standardization from this costly chaos. The federal government tried in the Twenties, and came closer than anybody else has since. As regional code-writing bodies, with voting control in the hands of local building inspectors, came into being through the Thirties, Forties, and Fifties, at least a dozen attempts were started to standardize their separate building codes in keeping with the rapid industrialization of housing. All have failed.

What lies behind this repeated pattern of failure to unify technical provisions that could save U.S. homebuyers and renters hundreds of millions of dollars a year if translated into industrial efficiency? Quarrelsome factions and petty jealousies have played a big part. But almost everybody is to blame for today’s building code mess—industry, building officials, the public. Manufacturers have helped promote confusion as they vie for code favoritism to help sell particular materials. Building officials have maintained disunity via competitive proprietary regional codes. The public has watched in largely silent apathy.

As Winston Churchill has said, it is not the men who are evil; it is the law or, in this case, the lack of law or a voluntary substitute for law—a technical performance standard to which, in the words of George Washington, “the wise and honest can repair.”

How we got into the mess is the subject of the following article, written for HOUSE & HOME by one of the nation’s top code men. It is the first of a series.
Why we don't have code uniformity—even though industrial logic and most experts agree we need it

By Hal Colling

Thousands of cities in the United States operate under one or another of the four basic building codes. But there is little or no uniformity, even between any two cities using the same code. Confusion is piled on confusion by a multiplicity of code revisions even in the strongholds of the code groups. And the code groups compete continually to enlarge their strongholds and drive out rival codes.

Can today's code chaos give way to code uniformity? The answer is No, not until dedicated public interest takes the leadership and follows through. Why public interest? Because both code people and industry have demonstrated clearly that they cannot (and often don't want to) achieve uniformity. The roots of the code mess they planted go back to the beginning of the century.

The first national code, by fire underwriters, limited its focus, and failed to sweep the field

From 1905 to 1927 only one building code was proffered to the U.S. for nationwide adoption. It was sponsored by the National Board of Fire Underwriters. Its main objective was then, and is now, the reduction of insurance claims and losses. Through the years it has made fire prevention a science. NBFI and its affiliated National Fire Protection Association have kept the nation supplied with standards for such items as sprinkler systems, flammable liquids, fire doors, and protection of openings. But many code experts contend NBFI has also imbued the term fireproof with a false security. As Maurice Webster, writing in the Atlantic Monthly in 1946, said: "Fireproof is a very reassuring term when you don't know what it means . . . Had you been on the 19th floor of the LaSalle Hotel on the night of its great fire last June (1946), you could have taken comfort in knowing that the fire could rage up to a temperature of 2,000F. over a period of four hours before any danger of failure in the supporting columns. That no one could have survived such an ordeal is beside the point."

NBFI had virtually a clean sweep of the standard code field until 1927, when the lumber industry organized to fight NBFI restrictions against use of wood, and brought out its own code covering recommended uses of wood in structures. The same year Pacific Coast Building Officials Conference (later ICBO) brought out its first edition of the Uniform Building Code.

Since the underwriters had the first proprietary code and more funds than other groups, they might have established a building code laboratory to develop basic codes and standards. But NBFI, fearful of jeopardizing its own priorities by such an approach to the code problem, refused to draw in other code groups. Some were welcome to sit in but had no power. So this early opportunity for uniformity went by the boards.

Even today, the underwriters exert strong influence over codes across the U.S. For, as at least one code group has formally complained, fire underwriters sometimes threaten to impose higher fire-insurance rates on cities whose building codes do not conform to NBFI standards. Yet experts disagree over the validity of some NBFI standards. ICBO, for example, has challenged deficiency points assessed against cities NBFI thinks have inadequate fire-alarm circuits. With universal phone systems, alarms are needless, ICBO argues.

Herbert Hoover, as Commerce Secretary, started to write a national code but failed

Right after World War I, the postwar depression stimulated studies that might turn up ways to beef up the building industry. The 1920 Senate committee on reconstruction and production reported that "the building codes of this country have not developed upon scientific data but rather on compromise; they are not uniform in practice and in many instances involve an additional cost of construction without assuring more useful or more durable buildings."

Herbert Hoover, then Secretary of Commerce, appointed a building code committee of seven nationally known architects and engineers to draw up definite requirements and recommendations that could be used by any community in preparing local codes. The committee worked closely with the National Bureau of Standards until 1933 when its work was turned over to ASA which thereupon formed with NBS the Building Code Correlating Committee.

Neither Commerce nor ASA developed a national building code. They might have in the '20s (when no building officials group had yet written a code). The original committee plan, subject to the same pulling and hauling that has beset other efforts, became a series of eight reports suggesting elements of codes which localities could adopt. Many did so, and the work of Hoover's experts was adopted as the basis for the 1927 PCBOC code.

continued
Producers of materials, fighting for a bigger share of the market, have abetted disunity

It is no wonder that building codes have become a battleground for the makers of materials that supply the $60 billion construction industry. For it is the nation's largest—accounting for 10% of the nation's total output of goods and services. And provisions of building codes—even obscure and technical ones —can make a crucial difference in sales—and profits. So the pressures of competition have historically led building materials manufacturers to seek the broadest code acceptance for their products that they can manage. Sometimes, they have sought and won a coveted edge for one material at the expense of another.

Such efforts seem the essence of free enterprise, at least on the surface. In building codes, the trouble is that the industry lobbies have come to dominate their regulators, the building officials. When industry lobbies become so strong that they serve to prevent new materials from winning code acceptance, while pushing through approvals for their own materials, code groups should review their methods. But they haven't. In fact, some code bodies tacitly accept the premise that industry should control the code.

The result so far of a generation of battles over codes by materials interests has been 1) gradual acceptance of new materials and methods like light steel, plastics, and fire-re- retardant-treated wood, 2) a proliferation of code diversity and complexity with all its countless costs to buyers of building.

Battle lines are usually drawn between combustibles and noncombustibles. How Balkan these internecine skirmishes can become is illustrated by what happened after publication in January 1957 of suggested revisions to PCBOC's Uniform Build-

ing Code to permit use of plastics. The impending move made two warring factions of the lumber industry—heavy timber and fire-retardant treated wood—close ranks and join steel in fighting the common enemy, plastics. (Until that time each of the lumber factions claimed the other was too comb-
bustible to be used in certain noncombustible ways.) In spite of close cooperation among various industry lobbies, plastics did gain a toehold in the UBC in 1957. Lumber has since used its new unity to gain noncombustible acceptance in three of the proprietary codes and a toehold in a fourth. But lumber had to battle gypsum and steel all the way to do it.

When New York's State Building Code Commission was created by Gov. Thomas E. Dewey in April 1949, industry lobbies of almost every stripe made common cause against it. Clearly they would not be able to influence a state code commission easily. Their attitude was summed up in this letter by B. L. Wood, code consultant to the American Iron & Steel Institute, to the New York Sun, May 2, 1949.

"The state law, in effect, voids all local building codes and local regulations," wrote Wood [incorrectly], "and substitutes for them state regulations as yet unwritten ... Unless a city can take local legislative action to abrogate the state building requirements within 30 days of their publication, it automatically surrenders its privileges to the state ... What assurance do we have that the [state] regulation will not repeat inadvertently the errors which appear in [New York's 300 or more] municipal codes, or introduce still more serious errors?"

The first slice of the New York code—covering one- and two-family dwellings—was promulgated in the fall of 1951. In-fighting became intense and it wasn't until 1956 that the rest of it was completed and put to use.

Building officials, left to cope with the chaos, have remained divided

There are two reasons: 1) There are almost as many different viewpoints and interests among building officials as in industry; 2) Industry lobbies, nudging and beguiling underpaid officials, keep differences between officials at a fever pitch. Agencies established years ago to draw code groups and officials together have foundered on the lack of strong leadership among officials.

Efforts by code men themselves to unify codes go back more than 50 years. In 1912, F. W. Fitzpatrick, executive officer of New York's International Society of State and Municipal Building Commissioners and Inspectors (the first director of a building officials' organization) proposed national uniformity in building codes. He suggested his code as a basis for agreement, but promptly ran afoul of what he called "power wielded autocratically" by the insurance business. His experience foreshadowed what has happened again and again. In 1915, the Fitzpatrick organization went into oblivion.

1922: Pacific Coast group starts a new pattern of private regional codes

Following the example set by Herbert Hoover's work for better codes (see p. 81), Pacific Coast building officials formed their own conference, PCBOC, in 1922. The eight standard reports of the Hoover effort became the starting point for its Uniform Building Code. In 1925, the conference hired J.

U. S. CHAMBER OF COMMERCE'S EFFORTS TO PROMOTE CODE UNITY PRODUCE MUCH TALK, LITTLE RESULT

In 1944, the U.S. Chamber of Commerce set up a Construction Industrial Advisory Council under leadership of the late F. Stuart Fitzpatrick, its manager of construction and civic development. CIAC aimed at solving the building-code problem. Some 235 persons attended its first meeting in 1945, giving rise to new hopes for unification. But little developed.

In time, CIAC turned to writing a booklet, Building Codes and Construction Progress, and tapped B. L. Wood, code consultant of the American Iron & Steel Institute, as author, with a review committee of other trade group leaders. In 1951, as a condition of using PCBOC's name on the booklet as a sponsor, PCBOC's President Arthur G. Hoefer asked for revisions. Among other things, he asserted: "Co-operation between building officials' organizations cannot be had as long as industry fosters the 'competitive spirit' thus encouraging jurisdictional and organiza-
tional rivalry." And he complained that model code groups were unequally represented on the Joint Committee on Unification of Building Codes (which the chamber later propped up with $20,000). Revisions were not made, and relationships deteriorated.

On paper at least, CIAC lives on. Only last spring, it issued another manifesto asserting that the remedy for today's code chaos is wider adoption of one of the four proprietary codes because it "promotes uniformity."
Everett Mackie, chief building inspector of Long Beach, as its first full-time manager. Mackie guided publication of the first *Uniform Building Code* in 1927. In 1929 he was hired by the National Lumber Manufacturers Association to represent it on the west coast while he rented office space from PCBoc. Under pressure from other industry members, Mackie left PCBoc offices after producing its 1930 code. Both that edition and the 1933 edition were considered pro-lumber by other industry lobbies, but lumber dominated western building and UBC’s authors felt no particular concern.

I took over publication of the code in 1937 and suggested that PCBoc form a study committee with all industries represented. Some ground was gained but lumber industry pressure was enough to keep most of the coveted edge wood had in 1930; light steel was kept out of the 1937 code. But by 1940 we opened up the code to light steel and glass block.

1939: Rival code group considers, then rejects use of Pacific Coast Code

By 1939, the Pacific Coast group’s *Uniform Building Code* had penetrated the east of the United States: There were no less than 50 adoptions of the UBC in 18 eastern states. Still with the objective of a national uniform code in mind, the west coast group under President L. Harold (Pete) Anderson (now a vice president of Pacific Gas & Electric Co.) offered its code to the Building Officials Conference of America, to be maintained jointly by the two groups through a Uniform Building Code Association.

BOCA, which had been formed in 1915 but had no code of its own, at first reacted favorably to the proposal. In a matter of days, BOCA changed its attitude, turned thumbs down on the proposal. Why? According to BOCA’s late president, Louis Clousing, BOCA board members listened to a 24-hour barrage of bull session comment from industry representatives. Samples: “Why don’t you have your own code?” “You are the national organization. Tell them to stay in their own backyard.”

To PCBoc members, the same interests said: “Why do you want to cooperate with BOCA? They have nothing. You have a code—and research. Why share it with BOCA?”

1944: a second try at code uniformity is rejected by one of two rivals

By 1944, the *Uniform Building Code* had been adopted by 60 major cities in the East, Midwest, and South. PCBoc again sounded out BOCA anent cooperation, noting in a resolution that the two groups “have identical aims.” In an initial reply, BOCA’s president, the late Walker S. Lee, said that the matter was being referred to BOCA’s executive board. We took this to be encouraging and promptly set about organizing a Uni-

form Building Code Association which could handle joint work. But Lee’s final letter reporting the action of his board was a strongly worded reiteration that BOCA was the parent organization and the west coast group was exceeding its prerogative in assuming equality as a national organization. (BOCA had been formed in 1915, PCBoc in 1922; but at this time BOCA had no code.)

1945: a first effort at one code under ASA meets defeat at the hands of industry

The West Coast code group next approached the American Standards Association in 1945 with a plan for code uniformity. ASA would compile and publish industry construction standards for adoption by reference (i.e. without local amendment).

Building-code requirements would be set by PCBoc’s *Uniform Building Code* (then the only building official code in the U.S.)—but it would refer to ASA standards throughout.

I presented this plan Feb. 8 and 9, 1945 to ASA and the National Bureau of Standards’ Building Code Correlating Committee. But ASA action hinges on a consensus of participating industries. NFbu, plus representatives of the American Iron & Steel Institute, the National Lumber Manufacturers Assn., and the Gypsum Assn., dissented. So no action was taken.

1946: a three-way try for one code, including the south, again fizzles out

In 1946, the first edition of the Southern Standard Building Code was published and I was invited to a meeting in New Orleans to lead a discussion on cooperation between the southern group and the west coast group. The climate seemed good: the Southern Building Code Congress had been formed in September 1940 and had used the west coast’s code as a basis for its own code, published in 1945. In 1946 there were only 40 municipal members in SBCC. The discussions between the southern group and west coast representatives settled on the possibility of a joint meeting of the two groups sometime in the near future, a meeting to which BOCA would be invited.

Before more action was taken SBCC leaders yielded to the suggestion that the South should pursue code progress alone. Shortly after that, an item appeared in a southern lumber journal asking for strong backing by industry groups for “competitive codes” so no one code group could take over.

1948: Officials form a coordinating council for everything but code unification

The Housing Act of 1948 triggered another effort at coordination. The federal government, for the first time since Herbert Hoover had been Secretary of Commerce, took interest in code

continued
standardization Title III of the 1948 law charged the housing agency to “undertake technical research and studies to develop and promote acceptance and application of improved and standardized building codes and regulations and methods for more uniform administration thereof, and standardized dimensions and methods for the assembly of homebuilding materials and equipment.” In 1948, Leonard G. Haeger, who later became technical chief of the National Association of Home Builders, was named director of a new HIFFA division of standardized codes charged with carrying out the Congressional mandate.

This had the effect of prodding BOCA into new arrangements with PCBOC to forestall a federal building code. At the time, BOCA had yet to publish a building code while PCBOC’s was accepted by several hundred cities.

PCBOC’s G. E. (Gil) Morris, superintendent of buildings and general manager of the Department of Building and Safety in Los Angeles, a member of PCBOC’s executive board, represented the west coast group in exploratory talks with BOCA.

The plan that the PCBOC headquarters staff wanted Morris to present would: 1) set up the American Society of Building Officials as the coordinating council; 2) alternate the presidency among participating groups—(the southern group might join them), 3) promote welfare and prestige of building officials; 4) present a united front to industry; 5) encourage uniformity in building codes; 6) provide a publishing facility to serve both, or all three groups.

Morris’s chief contribution was to eliminate point five—unification of building codes. The plan without point five was ratified by BOCA and PCBOC in 1948. I was convinced that the one thing that could make ASBO work—uniformity—had been eliminated. Time records the result. ASBO was born with no teeth and after eight years of talk it died in 1956. Accomplishment: zero.

1950: with industry-financing, BOCA promulgates a new model code

The first edition of BOCA’s Basic Building Code appeared in 1950 (an abridged version of it for small towns was printed in 1948). The drafting job was heavily financed by industry. Through BOCA’s Building Officials Foundation, industry poured $135,000 into BOCA between 1945 and 1951 (Forum, June ‘51).

At BOCA’s 1951 convention, President Joseph Wolff, husky ex-homebuilder who headed Detroit’s building department, suggested that BOCA and PCBOC set up a joint organization to approve new building materials, which would save manufacturers the expense of winning two approvals. From the convention floors, PCBOC’s Gil Morris replied: “I don’t see why not. Let’s try.” Nothing came of the idea, however. And industry contributions to BOF gradually dwindled.

1950’s: a joint committee tries to devise a uniform code, but fails despite HHFA help

In February 1949, the Fire Underwriters—who had been left out of ASBO—started their own move for code uniformity with the founding of the Joint Committee on Unification of Building Codes (now called the Joint Committee on Building Codes). They invited interested code groups to join in taking over the unification function which ASBO failed to write into its aims.

Right from the start things got snarled. Most code groups joined because they couldn’t very well ignore unification when the government was threatening to do something about it if they didn’t, and they couldn’t ignore a powerful group like the Fire Underwriters. But they didn’t like it. In December 1951, PCBOC President Arthur G. Hoefer wrote his executive board that ASBO not JCBO, should and could handle unification. The late Albert H. Baum, 1951 president of BOCA, was named head of JCBO and at first BOCA had four members seated, while PCBOC only had one. The presence of HIFFA and the insurance interests on JCBO didn’t make either code group happy. Its composition didn’t make the Southern Building Code Congress happy, either. At a Washington code conference in early 1952, SBCC’s executive director, the late Marion Clement, observed: “We haven’t committed ourselves to it because we figured we’d stand to lose more than we’ll gain. The committee is stacked against us.” One result: The committee dropped “unification” from its name (H&H, June ’52).

By 1953, the JCBC reported it had written drafts of code sections on definitions, types of construction, design loads, use and occupancy classifications, and requirements for steel construction. But untackled were some of building codes’ most controversial items: fire-resistance ratings, height and area limits, wood and masonry construction. That year, the U.S. Chamber of Commerce propped up JCBC work with a $10,000-a-year grant for two years, mainly to cover travel expenses of representatives of the regional code groups to its meetings.

This was high tide for JCBC’s effort. By the end of 1961, it had met 37 times; but despite its drafts of elements of a code, no suggested revisions to create uniformity had been submitted to JCBO. In his final report to BOCA last year, Chairman Baum lamented: “The most unfortunate circumstance concerning JCBC is that it holds only two meetings per year. This makes for slow progress . . . The joint committee would be a powerful force in combating efforts toward a federal code, but the committee would have to meet oftener and be better financed.”
1958: A new coordinating council forms but without plans to strive for code unity

By this time, ASBO was dead, JCBC was moribund. BOCA's Al Baum proposed to the 1958 meeting of ICBO (it changed its name from PCBOC in 1956) that a National Coordinating Council of Building Officials Organizations be created to boost the welfare of the building official. Nancyboo, as the NCCBOO came to be known, was a program without a platform. It had no provision for code unification, and Baum's plans for it were in constant revision from 1958 to 1963, mostly to court the Southern Building Code Congress. SBCC has since 1946 resisted any attempts to lure it to a joint organization. Southern refused to join ASBO or JCBC. Nancyboo got SBCC by stipulating that none of the members would institute code promotion in jurisdictions which had already adopted one of the model codes. But the code groups don't live by Nancyboo's treaty: They are still battling in the other groups' strongholds.

In sum, building officials have tried and failed to achieve code unity. Building officials' ability to perform their code function efficiently and in proportion to the power and responsibility they hold has yet to be proved. The conflicting interests of other elements of the building industry disqualify other private arbiters. Building officials are left as a group with a possibility for dispassionate judgment. But building officials for 15 years have let the opportunity for leadership elude their grasp. Instead, they have let themselves be divided and manipulated.

In truth, under pressures of work, the demands of vested interests and the lack of money, most building officials have little motivation to work for sensible codes or code unification. The proprietary code groups face a constant struggle to find enough money to keep the codes up to date with new standards and better products. The biggest group, in one recent count, had just over $300,000 a year gross income. Another had only $77,000 a year and another only $50,000. So only one of them had as much to spend, in keeping up-to-date, as New York State's code with its $275,000 yearly budget.

Clearly housing and the public must look elsewhere for a solution to the code problem.
L-SHAPED SWIMMING POOL wraps around glass-walled living room on two sides. Entry court is between the far end of the living room and two-story wing.
This opulent house, designed by celebrated Architect William L. Pereira for his own family, speaks for itself. It belongs to no narrow school of architecture. "I decry the chains of idiom," says Pereira. His stunning composition in Philippine mahogany and glass, a blend of contemporary and classical, is only the third or fourth house—he isn't sure which—to spring from Pereira's creative drawing board. As befits one of the nation's busiest industrial architects (who is also gaining fame as a land planner), his treatment of the site is as dramatic as the house itself. And although house and lot cost nearly $250,000, they show design and planning principles that can be used in much more moderately priced homes. For example:

Pereira has made the most of a relatively small lot (17,000 sq. ft.) in Los Angeles. A 7' perimeter wall yields privacy. Terraces and gravel surfacing make the whole site an outdoor living area, and cut upkeep. The plan, though large (4,500 sq. ft.) is simple and well zoned. Many rooms serve dual purposes.

continued
LIVING ROOM has sunken area which extends through glass doors to poolside terrace (see p. 86). The ceiling, like all wood in the house, is natural mahogany.
TWO-ZONE KITCHEN is divided by a stub wall with countertop range. Main cooking area is in the rear, eating area in foreground.

SUNKEN BATHTUB in the master bathroom is flanked by a vanity with undercounter storage. Tub, vanity, wall at left, and dressing table are surfaced with mosaic tile. Glass wall faces a private garden.

Many saleable design ideas in the merchant-built housing market originate in top custom houses. So the ideas at right—in Architect William Pereira’s own home—are well worth study by all housing professionals.

BEDROOM BUILT-INS—mahogany to match paneling and louvered doors—include drawers in foot of the bed, night tables flanking the bed, and desk. This is study-bedroom atop the master bedroom suite.

BATHROOM BUILT-INS—ceiling-high closet and under-counter storage—match decor in adjacent study-bedroom, left.

DUAL-PURPOSE BUILT INS also form a wall across the rear of the living room, are set in four 21” x 42” bays, two of which are shown here. Bay at left is a bar; bay at right is a music center with hi-fi and organ. Left door leads to the dining room, right door to an inner patio with peaked plastic roof, visible through clerestory.
Knowing how to talk about acoustics
is merely the beginning of knowing . . .

How to sell a sound-conditioned house—easily

Anybody who has ever tried to sell a sound-conditioned house will say it is not an easy job. He will probably say that he had to go back to school and learn about selling all over again—learn about a very special kind of selling for putting across the very special sales appeal of sound conditioning.

That’s because a builder and his salesmen are up against it when they can’t sell what most prospects can’t easily comprehend and, in most cases, can’t even see. Once a house is built, sound conditioning is the most hidden “hidden value” of all.

Still, sound conditioning is becoming as important a new promotion idea as promoting air conditioning was ten years ago. And anybody who had to go back to school to learn how to sell sound conditioning will surely say it was worth the effort.

Says St. Petersburg Builder Charles Cheezem: “Sound conditioning was the main promotion theme for our model in the St. Petersburg Parade of Homes last April. Our sound-conditioned house was the first one to sell, out of 16 exceptionally fine houses in the Parade. In one week, we sold six more houses from the model, more than any other builder sold. And since then, we have sold 106 houses from the same model—50% to customers who took part or all of our optional sound-conditioning package. Sound conditioning is a hot idea, but it takes technological know-how to build in and a lot of smart selling to put across.”

Says Dallas Builder I. P. (Ike) Jacobs of Fox & Jacobs, first builder to build a sound-conditioned test house (HOUSE, Nov. ’62, June ’63): “The test house was a structural experiment. When it worked, promoting the house became a selling experiment. It was almost as tough to train our men to sell sound conditioning as to learn the building technology for sound conditioning. But our selling experiment worked, too. More than 4,500 people came out to see our Quiet House the first day. There was so much interest we now build all our houses with sound-conditioning features from the Quiet House. And in three months we have sold 114 sound-conditioned houses.”

Says Omaha Builder N. P. Dodge: “Our sound-conditioned house pulled 2,500 people the first Sunday, and for three weeks traffic continued at a level much higher than normal. We expect to sell 25 sound-conditioned houses within six months. That doesn’t sound like much, but by pioneering with sound conditioning, we have enhanced our image as builders oriented to new market needs. Our sound-conditioned house also exposed buyers to our other models, so sales have been better than normal on all of them. But sound conditioning has to be sold in an entirely new way. For example, we have now learned that, except on Sunday, it’s best to demonstrate the sound-conditioned house by appointment only.”
To sell sound conditioning easily, demonstrate it authoritatively

Thousands of prospects came to see the sound-conditioned houses built by Charles Cheezem, Fox & Jacobs, and N. P. Dodge because of promises made in the builders’ advertisements. And many prospects became customers because specially trained salesmen demonstrated that every word in the ads was true.

For all three builders, the problem of sound-conditioning technology was largely solved (see p. 93). But the problem of proving that a house was sound-conditioned—and demonstrating the benefits—had to be tackled, and tackled hard.

*Item:* Fox & Jacobs wanted to advertise that “noise almost disappears” and that “sound conditioning will some day be as much of a necessity as air conditioning.” So Ike Jacobs sent 14 top salesmen to a psychologist to explore what motivations would sell sound conditioning and to develop a sales approach that would find the best buyer response. (For a brief summary of these motivations see next page.)

*Item:* Dodge also wanted to advertise that “noise almost disappears” (and he is quick to acknowledge his gratitude to Fox & Jacobs for the idea) and to promise that “you and your family can enter a new world of peace and quiet.” So he set up special sales meetings—three nights in a row—to explore 1) why sound conditioning is the most needed new concept in housing, from the buyer’s point of view, since air conditioning; 2) what salesmen had to know about the new technology of sound conditioning; 3) how to demonstrate that technology in easy-to-understand terms. For example, when Dodge salesmen demonstrate with cutaway displays of sound-conditioned floor construction, they emphasize *where* and *why* that special construction is located (“featured in the garage ceiling to insure quiet in all bedrooms”) and let the technological features of the cutaway virtually speak for themselves.

*Item:* Cheezem wanted to advertise that his house was “a sound investment.” that it was “designed for quiet, zoned living,” and that it contained very “special sound-proofing features.” For a glimpse of some of the ways Cheezem’s salesmen prove those promises, see below.

The lady never knew she could have what she wanted, until . . .

... one of Charles Cheezem’s best salesmen demonstrated that “yes, indeed, ma’am, your 17-year-old son can turn up the television all he wants while you and your husband tune up all the hi-fidelity records you want.” Salesman Ralph Braden has already demonstrated (opposite) that the house has a sound-deadening acoustical ceiling of millions of tiny bubbles. Here are a few of the many other demonstrations that sold Major and Mrs. Joseph Glass the first sound-conditioned house built by Charles Cheezem, sold it first in St. Petersburg Parade of Homes, and helped sell 106 other models. Braden not only demonstrates the house room by room but also tries to take his prospect into a partly-built house to demonstrate sound conditioning that is hidden after construction.

=". . . SOUND-DEADENED DISHWASHER."

". . . SO SIPHON-JET MEANS QUIET."

=". . . DOUBLE STUDDED, INSULATED."

=". . . GLASS FIBER DUCTS ARE QUIET."

continued
To sell sound-conditioning easily, display it dramatically...

And displays of sound conditioning are even more dramatic when the salesman can either demonstrate them himself or suggest that prospects do so.

Says R. E. Hancock, sales manager for N. P. Dodge: "Our tour of the sound-conditioned house ends in the garage. There, to help salesmen avoid technical terms that most people don't understand, we have cutaways of sound-conditioned walls and floors, a display of acoustical ceilings, and other visual aids that let our salesmen point out the benefits of what we have built in—and point them out in simple, everyday language."

Concurs E. L. Krodel, director of research for Fox & Jacobs: "The benefits of sound conditioning, not its technical aspects, sell homes... Sound conditioning should be synonymous with quality construction and should be displayed and demonstrated as a necessity rather than a luxury."

Sometimes the displays can speak for themselves (see below), but usually they must be demonstrated. Some examples:

In the Fox & Jacobs Quiet House, one display showed a clothes washer in a closet lined with sound-absorbent pegboard. The salesman invited one of many women to turn on the washer and then to shut the closet doors. "Just like a telephone booth in a railroad station," said the salesman, waiting for the woman to reopen the doors. She did just that, and exclaimed, "Goodness... that noise isn't offensive even with the doors open." The display was one of the most popular in the house.

Builder Dodge has a display that compares two overhead garage doors—one with conventional metal rollers, the other with quiet nylon rollers. Says Sales Manager R. E. Hancock: "Nobody wants to push up a garage door, so we tell them they're in for a surprise if they do. They generally do, of course, and if they don't, we do it." Dodge also shows a cutaway of his sound-conditioned wall construction with appropriate labels (e.g. ½" gypsum wall board, ½" soundstop board), but his salesmen quickly jump over the technology to explain how this kind of construction will bring peace and quiet to bedrooms, baths, halls, kitchen, and utility room.

Fox & Jacobs displays are based on what motivates Quiet House buyers

Says Ike Jacobs: "People know that quiet is hard to come by even in the best-managed home. So we display the idea of stopping the noise at the source. For example, in one display [right, center] we line a box with acoustical tile, leave another box in bare wood, then ask customers to drop a metal ball in each to hear the contrast. Another display [right, bottom] lets them ring two door bells to hear the difference between a hollow core door and a solid door."

"In other displays, we appeal to the buyer's desire to shut out noise of the outside world [e.g. traffic, neighbors], relax or sleep while the house works [e.g. quiet disposers, washers], enjoy tranquillity in the midst of active living [e.g. controlling the noise of hi-fis, parties]."
and make the sound-conditioning package easy to buy

Even after an authoritative demonstration and display of the benefits of sound conditioning, questions from customers about extra costs are bound to arise. Here is how three prominent promoters of sound conditioning handle questions about extra costs:

Fox & Jacobs says there is no extra cost: sound-conditioning is standard construction in all R & J houses ($13,000 to $35,000). With only slight modifications (depending on the size and design of the house), Fox & Jacobs now builds in the basic package of its original Quiet House: over-sized, slow-turning circulation fan in the furnace; sound-absorbent lining in return-air plenum; separate air-return systems for acoustically sealed rooms; low-noise-level grilles; sound-absorbent lining in the furnace room; acoustical glass fiber in furnace blower; central exhaust unit in the attic for venting bathrooms; quiet garbage disposer with double trapping; quiet dishwasher; quiet kitchen vent hood; no-slam gasketing for passage doors; sound-absorbing material in washer-dryer area; acoustical ceiling tile in the kitchen, master bath, one bedroom; acoustical doors, with weatherstripping, in master bedrooms and second bath; double-stud walls, with insulation between studs, in bedrooms, baths; electrical boxes and medicine cabinets never back-to-back; silent light switches; fiberglass heating ducts.

N. P. Dodge makes all or any part of his sound-conditioning package an optional extra in any of his models ($18,500 to $24,000). "We may well make some of these features standard, now that we know all the costs and methods involved," says Dodge. "But at the present we are suggesting that customers choose extras from a sound-conditioning package with a total cost of $994.25 in a $22,790 house."

The bulk of the package—$540 worth—is made up of acoustical tile on kitchen, bath, and bedroom-hall ceilings and ½" soundboard and backerboard on garage and furnace-room ceilings and on one or more walls in the bedrooms, living room, kitchen, utility room, hallways, and stairways.

Other items:

1. In the heating system—large blower and trunk lines ($70), canvas-duct connectors on furnace ($12), individual cold-air returns in bedrooms ($35), trunk-line insulation ($45).
2. In plumbing—quiet disposal with double trap ($65.25), cast-iron sink ($18), 17 air-cushion chambers ($17), two quiet toilets ($5), cushioned piping brackets ($15).
3. In kitchen—roof-mounted exhaust fan with grille and hood and three-speed switch ($40).
4. In garage—nylon rollers for overhead doors ($5).

Charles Cheezem makes some of his sound-conditioning standard and some optional at extra cost. Cheezem's houses (from $24,000 to $40,000) now include these standard sound-conditioning features: sound-conditioned dishwasher, fiberglass ductwork, siphon-jet toilets; fiberglass partition between garage wall and house. Optional extras—at a total cost of about $850 in a 1,650 sq. ft., $24,000 house—are 1) staggered studs with woven insulation ($205), 2) ceiling of non-hardening acoustical plaster ($100), fiberglass insulation of bathroom walls ($18), 4) sound-proofed disposal ($27), 5) carpeting throughout the house (about $500).

Other builders will soon get help in selling sound conditioning from a new program sponsored by the Insulation Board Institute. Early this year 181 will offer builders a package for building and selling sound-conditioned houses. The package will spell out sound-conditioning standards and set minimum requirements which, if followed by a builder, will let him use 181's insignia of approval.

For more information on sound-conditioning, see these other HOUSE & HOME articles

Quiet House taps a surprising market for sound conditioned homes (June '63). A report on how Fox & Jacobs, Dallas, promoted the first sound-conditioning test house.

New guide for apartment builders: How to stop noise that bedevils the neighbors downstairs (May '63). A detailed report of the first U. S. study of impact noise in housing, FHA's "Impact Noise in Multi-Family Dwellings."

The nagging problem of noise (Feb. '63). How to pick a wall that will reduce a particular type and volume of sound to an acceptable level in a particular apartment living area— and how to do it at reasonable cost.

The Quiet House: a Round Table report on noise control (Nov. '62). Describes the first effort by the housing industry to pinpoint the primary problems of sound conditioning and to suggest some solutions—an effort that led to the Fox & Jacobs test house that has become the national prototype of sound-conditioned houses.

New noise-control system uses lightweight material (Apr. '61). A technological report on a new system of sound conditioning that eliminates the need for solid masonry partitions: glass-fiber batts are placed back to back between studs that have been ripped down the center almost their full length.

Today's good new apartments are as noise-free as most single-family houses (Oct. '60). How to isolate apartments from street noise, how to cut sound transmission between apartments, how to keep hallways from being sound boxes, how to isolate or muffle noise from mechanical equipment.

How to detail party walls to control noise (Oct. '59). Drawings by prominent architects for apartment-house sound conditioning.

How to sell quality sound conditioning (May '59). The role that sound conditioning plays in selling the total concept of "The Quality House."

How to control noise in the house (Apr. '58). How to block noise from the outside of a house, how to cut noise transmission between rooms, how to control noise within a room, and how to quiet noise sources like toilets and appliances.

JANUARY 1964
11 award winners from FHA's first design competition

For many a housing professional, good design that meets all the MPS in FHA's book—and sells as well—may very well be the best of all possible housing worlds. It has been achieved, and the proof lies here and on the next seven pages.

FHA, through its first design award program, has taken a giant step towards using its appraisal process to increase the valuation on well-designed housing—and to decrease it on poorly designed housing.

The awards show, for the first time, formal FHA awareness of the importance of good housing design. The awards also promote what FHA considers to be good design principles and finally begin to carry out the Housing Act goal of encouraging higher housing standards at no increase in housing costs. Three categories of housing were considered: 1) single-family houses, 2) multi-family housing, and 3) housing for the elderly and nursing homes.

Response to the program was immediate and strong: 320 submissions were received, of which 28 (including the 11 on the following pages) were selected for awards by three blue-ribbon juries. All winners were FHA-processed prior to construction but not necessarily FHA-insured. The juries:

Single-family houses:
- Francis D. Lethbridge, AIA
- Robert M. O'Donnell, land planner
- James T. Lendrum, AIA, dean
  School of Architecture, University of Florida
- Carl T. Mitnick, past president, NAHB
- Edith Brazwell Evans, housing consultant

Multi-family housing:
- Norman J. Schlossman, FAIA
- Thomas P. Coogan, past president, NAHB
- Arthur Rubloff, Realtor
- Harold Hauf, AIA
- Paul R. Williams, FAIA
- Carl Feiss, FAIA

Housing for the elderly and nursing homes:
- George E. Kassabaum, AIA
- Leonard G. Haeger, AIA, housing research consultant
- William H. Scheick, AIA, executive director, AIA
- Ralph Rapson, AIA, dean
  School of Architecture, University of Minnesota
- Mother M. Bernadette, geriatric authority

Sums up Assistant FHA Commissioner Richard J. Canavan: "We are naturally pleased with the response and with the high quality of most of the entries. But I'm particularly happy that our winners seem to be doing as good a job on the sales front as they did in esthetics."

FLOOR PLAN shows unfinished space not apparent as such from the street. Two oaths separate adults' and children's bedrooms.
An expandable builder house with sheltered outdoor living

Unfinished space with roughed plumbing adds 384 sq. ft. to this 1,316 sq. ft. house designed by Architect Lawrence S. Higgins for Seattle's Hebb and Narodick Construction Co. Buyers of the Honor Award model can turn the area into a family room, fourth bedroom, and laundry-bath. Like the living room, dining room, and master bedroom, the unfinished space opens to a 9'x29' rear terrace sheltered by a 7'-deep roof—an important amenity in the showery Northwest. Other features of the house, which sells for $17,600 without land, are a large entry hall, good separation (by two baths) of the parents' and children's bedrooms, and careful siting that preserves the character of the wooded, sloping lot.

CAREFUL SITING of the L-shaped house saved most of the mature trees. The curved driveway allows a side-entry carport.

LIVING ROOM is oriented to the rear, has sliding doors opening onto terrace, is a dead-end room to eliminate cross traffic.

REAR TERRACE is mostly under roof, has barbecue facilities built into outside corner of the chimney, convenient for outdoor dining.

continued
Military housing with all the appeals of a good built-for-sale subdivision

This Honor Award project near Sacramento’s McClellan Air Force Base shows what can happen when top architects are turned loose on Capehart housing.

The three and four-bedroom duplexes and detached homes (rentals: $105 to $170) were designed by Architects Jones & Emmons, who also won an Honor Award for an Eichler Homes model (opposite). Skillfully sited on curved streets (land plan, above), the houses offer 1,300 sq. ft. to 1,800 sq. ft. of living space (floor plan, left) plus private porches and patios, air conditioning, master TV antennae, and a full line of appliances (including washer and dryers). Cooperation by the architects, builder (Sun Gold Inc.), and military authorities held the average cost to $16,300 per unit—$200 under the statutory ceiling.
A modestly priced house gains distinction from a dramatically shaped roof

Inside, as well as out, the roof system of this Merit Award house catches the eye because large skylights and glass gable ends flood the interior with light.

The 1,728 sq. ft. house, built for $22,700, also capitalizes on its site—atop a 60' bluff on an island in Puget Sound. A deck jutting out from the living room overlooks the water and a view of Mt. Rainier and the Tacoma Narrows Bridge.

Many architects and builders hesitate to put unusual custom houses through FHA's rules and procedures, even if costs come in below the agency's $25,000 mortgage limit. But Architects Harris, Reed & Wilson, who designed this house, found no problems: "FHA didn't ask for a single change. Everything went smoothly."

Well-zoned builder house wraps around an atrium

Enclosed by the house on all four sides, the atrium is the key to the floor plan. Here is why: 1) It provides a completely private outdoor living area; 2) it separates the children's area (three bedrooms and family room) from the parents' area (master bedroom and study); 3) it separates the entry hall from the living room; and 4) to visitors entering the house, it offers a surprise often lacking in built-for-sale homes. A step gabled roof over the carport and entry is repeated over the living room. The adjacent dining area has a space-defining flat ceiling.

The Honor Award house, near San Rafael, Calif., was designed for Eichler Homes by Architects Jones & Emmons. It has 2,353 sq. ft. of living space, is a fast seller at $30,500.
On a narrow site, apartments face a landscaped court

The peace and privacy of the oasis pictured above gives no hint that it is only a few feet from a major traffic artery. Architect Fred Marburg put parking on the perimeter of this Merit Award project in Santa Clara, Calif., and faced each unit inward to a long, narrow garden court.

Varied setbacks give privacy to the covered patios and balconies, and patios are also partly hidden by careful plantings and wood screens. Sound transmission was cut by floating floors (a layer of soft fibrous material between subfloors and joists), concrete-block walls, and staggered-stud, insulated walls. Rentals range from $105 to $145 monthly, and there has been a continual waiting list for vacancies. Builder: Oscar Liebert.

Urban-renewal townhouses—well screened for privacy

And because this 80-unit townhouse project in Washington, D.C., is next to a nine-story apartment, private outdoor living was the key problem for Architect Chloethiel Smith. Her solution? Place the houses so that a minimum of balconies and terraces face the high-rise building. Results? 100% rentals (at $200 to $280) and an FHA Honor Award.

To avoid the monotony of many red-brick rental projects, Architect Smith varied the balconies and fenestration for different orientations and specified painted brick walls in six light colors. Landscape Architect Dan Kiley laid out open-space planting to screen houses from each other. All units are air conditioned. Builder: HRH Construction Corp.
Covered walks do a dual job in this retirement project

They provide shaded routes from apartments to community buildings—a thoughtful amenity on the desert site in Phoenix—and carry distribution lines of central heating and cooling systems.

The church-sponsored project—an Honor Award winner—was designed by Architects Allan & Olsson to encourage a mixture of social and economic backgrounds. So it offers a wide range of rentals ($102 to $146) and sizes (from efficiency units to two-bedroom, two-bath units). Community buildings house a dining room, chapel, and health and recreation facilities.

No roads cross the site because parking is kept to the borders. Ramps eliminate all steps (all buildings are one story). Builder: The Edward Gray Corp.

A large nursing home divided into four small villages

Together with small-scale design, skillful use of a sloping site, and a location surrounded by single-family subdivisions, the villages provide an active, informal environment yet retain the privacy and seclusion older persons want.

This Honor Award home in Grand Rapids is 100% occupied by 158 residents (at $200 each per month). Its four villages and infirmary are arranged around a dining, recreation, and service core. Each village is made up of four 8-room groups clustered around a modest recreation area. Architects Wold & Bowers blended the buildings with nearby houses by using a low (one-story) silhouette with brick, stone, and wood construction, and adapted them to the slope by setting them on plateaus at two levels. Builder: George Datema & Sons.
Reinforced-concrete building blends into an existing neighborhood

The two-acre site of this high-rise apartment is within a half-mile of downtown Jackson, Mich., in an established residential area of large 40-year-old houses and prominent churches. So a facing of precast aggregate panels, a small exterior scale, and a fieldstone carport enclosure and boundary walls were used to tie in the new building's scale and appearance with the architecture of the surrounding neighborhood.

This Honor Award winner, designed by Architects King & Lewis for the Bentler Construction Co., is the first of two buildings planned for the site. The ground floor is open except for lobbies and storage rooms. End apartments have sliding glass doors opening onto balconies. Rental range: $115 to $295.

High-density apartments flank a sweeping commons

To get the density required for economic use of a redeveloped urban location, Architect I. M. Pei placed these exposed-concrete apartment buildings at either side of the site and left a large, well-organized open area in the center. The spacious feeling is accentuated by raising the apartment floors one story on concrete piers, and leaving the ground level mainly open. The Honor Award project was developed for Builders Webb & Knapp to vary the usual middle-income apartment design and yet keep costs competitive (rentals: $40 to $50 per room). The site is part of Washington's Southwest Redevelopment area near the award-winning townhouses on p. 98.
A combination of a single nine-story building and 14 townhouse-type apartments permitted a density of 40 families per acre and yet left plenty of open space in this Honor Award project on a two-acre riverside site in a Cambridge, Mass. urban-renewal area. Architects Harris & Freeman faced the 66-unit, high-rise building (below right) south to the river and used a skip-stop elevator-and-corridor arrangement so that most apartments have two, and sometimes three, levels. Two penthouse apartments fill the top floor.

The low-rise buildings have common entries serving four apartments. One-bedroom and garden units are on the ground level, beneath two-story, two-bedroom townhouses. Builder: First Realty Co.
Bill Blackfield, NAHB’s new president, has built $250 million worth of houses

Bill (just that; not William) Blackfield is easily described—given enough time and space to explain him.

He is the son of poor immigrants, an ex-football star, has two college degrees, is an aviator, an industrial designer, a mortgage banker, a housing construction expert, a top merchandiser, a millionaire. He is highly verbal (with a quaint fondness for proverbs), highly energetic (a six-footer, weighing 190 up to his 208 dieting level), and highly convinced that homeownership is crucial to our American democratic system.

Of all 40,000 members of the National Association of Home Builders, none is more enthusiastic about NAHB than its new (and 23rd) president. Blackfield’s enthusiasm is understandable: at 49, he has made his mint of money building 21,000+ houses — more units than any other NAHB president — and he feels that much of his success is based on what he learned from 17 years’ membership in the organization.

Says Blackfield: “I’ve got a lot out of NAHB, and I think I have an obligation to plow some of it back into the association to help other builders. This is a great establishment. Our headquarters has the finest housing brains in the country. NAHB offers tremendous services to its members—if they will only use them.”

Blackfield has devoted much time—and no little money—to association work the past nine years. He was president of his local chapter in the San Francisco Bay area, has been a regional and national officer for seven years, and has served on nearly every NAHB committee. He will devote nearly full time to NAHB this year.

“I’m a damn good businessman,” he says, “and I’m going to run NAHB in business-like fashion.”

Whether this is braggadocio or plain sense can be judged by Bill’s background.

Blackfield’s parents emigrated from Rumania to California

Former Prince Carol of Rumania deserves some thanks from the U.S. home-building industry for encouraging Bill’s father to quit Rumania. Says Bill:

“For centuries my family were bootmakers to the royal family, and my father was in Carol’s regiment. But just about every other day my father, just a teenager, would desert to visit my mother, and finally Carol told him he might just as well desert for good—and get out before Europe flared into a terrible war which Carol could see coming. Our family name was Schwartzfeldt, which means Blackfield in English.”

David and Mina Blackfield settled in Stockton, Calif., where Bill was born in 1914. He went to Stockton schools, then to College of the Pacific (where he played football under Coach Amos Alonzo Stagg) and later to the University of California in Berkeley.

“All immigrants, from any country, want their sons to be doctors or lawyers,” Bill says, “but I wanted to be an engineer. My parents equated this with my wanting to be a ditch-digger.”

He got his engineering degree—and a law degree as well—from California. He never has practiced law, but he put the engineering to use with a heavy construction company, Bechtel Corp. He was a field engineer and then designer for Bechtel, helped build air bases in the Pacific, and after Pearl Harbor had charge of building a wartime shipyard in Sausalito.

Blackfield left Bechtel in 1943 to design modernized plants for a chain of bakeries in northern California. In 1944, he decided to try his hand at homebuilding.

“The reason seems strange now,” Bill says, “but I had heard the saying that if you ever get fired after you reach 40 you can’t get a job again. I didn’t want that to happen to me. So I thought I would try to become my own boss.”

He lost money on his first house but was soon off and running

Bill started out with a $300 bankroll and got his first custom house contract on D Day in 1944. Three months later he was $1,950 in the red because the buyer found a loophole in the law to duck out of part of the payment.

In 1945, he found the key to selling new houses in Berkeley. At that time, builders offered to build only on a cost-plus basis, and Blackfield saw there was a real demand for fixed-price offers. He worked out a deal with Realtor Harman Bennett, who had listings on many vacant lots. Bill advertised firm prices for “houses on your lots,” and this attracted prospects...
who then asked where to get the lots. He sent them to Bennett. They paid cash for the lots, and then their lots sufficed as the down payments needed for FHA loans. Bennett got 10% fees from lot sellers and 5% fees from Blackfield for helping make the sales. And in 18 months Bill had built 80 houses in Berkeley at $14,000 to $22,000.

His next venture went sour. Says Bill: “I built three models, the first I’d done speculatively. This happened in a lull in Blackfield, there comes a banker HHA, advised Smith (later to become NAHB’s 1955 president). Bill did, and he’s been in the association ever since.

Into each builder’s life, says Blackfield, there comes a banker

And when he comes, he adds, welcome him. Blackfield became a tract builder simply because F. Edward Readey, a Bank of America vice president, suggested it and extended enough credit to let Blackfield acquire the land he needed. Says Bill: “Readey is the father of 80% of the big builders in the Bay area today. And Bank of America has grown big because it has helped the little businessman. The best thing a builder can do is make a partner of his banker—let him help as much as he can.”

This first large Blackfield-built project was for 175 houses priced at $11,750 in 1948. He then shifted to the $7,000 price range, and the $3,790 he had pioneered in 1947 was first in Hawaii to introduce roof trusses. He assembles components in shop-on-site, uses tilt-up wall construction, keeps track of details on each job with elaborate multi-colored progress charts.

He is a hard worker. Even today, he gets to the job by 6:20 a.m., checks and often revises the day’s schedule. Weekends he works on selling. Says he: “It’s better to hear from the buyer rather than your salesman why a house isn’t selling.”

He is a hard but fair taskmaster. “If a man makes a mistake in good conscience, I’ll back him,” he explains. “If I didn’t he would be afraid to make decisions.” He has a staff of 35 in Honolulu, with his “right arm,” Executive Vice President Charles R. Short, in command when he is away. Bill is well aware that many NAHB presidents have suffered business reverses while in office; he expects no problems because “I’ve planned four years ahead for this.”

As NAHB chief, Blackfield’s goals will be limited to the possible

He knows that one year is a short time to accomplish major goals, so he says he will ignore some pets of his own in favor of carrying out necessarily unfinished business of ex-President W. Evans Buchanan and NAHB’s directors.

He will continue to support the TAMAP and other research studies, continue Buchanan’s muddy-shoe tours with producers and the fledgling Conference of Building & Allied Organizations, an NAHB-sponsored effort to get housing trade associations together periodically to exchange views and plan co-operative efforts.

Emphasis will be put on reviving moribund local chapters. Bill expects to put the other three top association elected officers in charge of three geographical areas, each with four regional associations. And, says Bill: “We will start asking local executive officers for advice on what we can do for them, rather than tell them what they can do for us.”

Bill married Cecilia Malik on Christmas Day, 1941. They have three children: Leland, 20; Pamela, 17, and Karen, 15, all in private schools in Honolulu. Bill owns a 50’ power boat in which he fishes. He likes piloting planes, but flies little since giving up his own ten-seat DeHaviland Dove after moving from California to Hawaii.

He used to play golf but gave that up because it took so much time from his No. 1 hobby—his work, of course.

—Robert W. Murray Jr.
Others have tried it before. Now two builders have produced the ...

First competitively-priced all-steel houses

The scene above is at a Pennsylvania subdivision where two builders have sold 100 steel-framed houses with porcelain-enamed curtain walls for as little as $8.20 a square foot with land.

The builders — brothers Gershen and Raymond Weiner of Coplay, Pa. (an Allentown suburb) — use an average of nine tons of steel per house (vs. two tons of steel in a wood-framed house). Their houses are the first built-for-sale, porcelain-enamed steel models since Lustron’s ill-fated post-war venture. Lustron, a home manufacturer, sold about 3,200 houses from 1947 to 1949, then went broke owing the Reconstruction Finance Corp. $37 million. Reasons for Lustron’s failure have never been pinned down. But no one blames the material.

In any case, the Weiners face neither pricing nor distribution problems. And their construction system is far ahead of Lustron’s, which, in large part, simply adapted steel components to conventional wood technology.

At their 329-home Highlands subdivision, the Weiners offer three models on $2,100 improved lots: a 1,020 sq. ft. one-story with finished basement for $12,290; a 1,644 sq. ft. split-entry for $13,490; and a 1,660 sq. ft. split-level for $15,490. FHA terms: as low as $400 down and $70.75 a month.

In the Weiners’ structural system, six steel columns support the roof, which is steel deck on steel trusses. Walls, which carry no load, are sandwich panels with porcelain-enamed-steel outer skins, 1½” urethane cores, and galvanized-steel inner skins. Panel joints are exposed on the outside but taped and sealed with joint cement on the inside. Baseboard raceways carry wiring.

The houses also have baseboard electric heat. The wall panels’ urethane cores insulate well enough, so the local utility guarantees annual heating bills at $179, will refund anything over that total.

The Weiners claim they save about 20% on steel trusses and bar joists by making them (instead of buying them) in their shop, a remodeled truck garage equipped with jig tables and welding and cutting tools. Panels are also shop-made. The builders buy enameled and galvanized skins, then froth urethane between them.

It took the Weiners only two months to get an FHA bulletin on their system in February 1962. Says Ray Weiner: “We think we got it that fast because the houses are fire-resistant, termite-proof, and able to withstand 180 mph. winds. Later we were delayed by slow deliveries of materials like enameled steel, so now we’re just finishing houses sold a year ago.”

When they finish their Highlands houses, the Weiners expect to manufacture steel houses for other builders. Plans call for a $7,500 package that will let a builder make a profit on a 1,000 sq. ft. house priced at $12,000 on an improved lot.
WALL SECTION shows how curtain-wall sandwich panels are simply held in anchoring channels at bottom and by soffit and clips at top. Big span rail at top is an open-web joist that carries the roof-load—from trusses—to steel tube columns at corners and in center of house (photo opposite).

CROSS SECTION of the house shows how little space is taken up by the 1¾"-thick sandwich panels. Steel trusses and floor joists are set at 4' centers (joist at stairwell is broken). Steel roof deck is spot-welded to trusses; flooring is fastened to sleepers power-nailed to steel joists.

ELEVATIONS OF RANCH HOUSE show variety of panel sizes used—from four to six sizes for each house and a total of 15 different sizes throughout the project. Nonstructural panels simply enclose the houses. So the builders dimensioned them to fit each floor plan.

continued
Field labor in one of the Weiners' new steel houses comes to only 400 man-hours

On the first 100 houses, 24 field and shop workers—all on the builders' payroll—have done everything from prefabricating components and pouring foundations to installing kitchen hardware. All workers are non-union, but their wage rates average a respectable $2.63 an hour.

Houses get built fast because:

1. Some crews switch back and forth between shop and field. When shop work gets ahead of field work, the five men who prefab steel structural components join the field-erection crew. And a plumber and one helper prefab plumbing trees in the shop on wet days, then install them in the field on dry days.

2. The simple construction system speeds field labor. Six men can erect columns and roofs for eight houses in one day, and five men can close in a house (photos above) in two hours.

3. Shop-built jigs and fixtures speed prefabrication. Six big jig tables are used to make steel trusses and floor joists and to weld plates to columns. And copper water-supply trees and cast-iron waste trees are assembled in wooden jigs.

The promise of low maintenance sells these steel houses to conservative buyers

“Our buyers don’t take too quickly to new ideas,” says Gershon Weiner. “But they do appreciate the major practical benefits of our construction—virtually indestructible houses, lifetime exterior finishes, and a fire insurance rate of only $23 a year.

So our merchandising pushes these benefits hard.”

Buyers also appreciate 1) the extra living space gained from thin exterior walls (detail, p. 105) and thin partitions (2½” gypsum sandwich panels with wood-spiral cores); 2) clear-span space in base- ments (but with exposed joists); 3) ceiling-high steel closet doors; 4) 6” ceiling insulation; 5) curbs, gutters, and city sewage and water.
You sell homes faster, sell out apartments easier when you install economical WILSON Electralume Ceilings in Kitchens • Baths • Family Rooms

When you examine the advantages of Wilson Electralume Ceilings it's easy to see why they are the preferred illuminated ceilings for high rise apartments, garden apartments, townhouses and private homes.

Only Wilson offers a wide selection of distinctive light diffusers such as world famous “Circlgrid” non-burning vinyl louvers, Demicel louvers and decorative Americana diffusers in a variety of contemporary patterns. Only Wilson offers Lumatrax suspension system, designed expressly for lighting . . . and Wilson's new snap-on assembly clips enable any worker to install Lumatrax quickly and easily.

Wilson Electralume Ceilings are designed and priced for the apartment and housing industry, whether the need is for wall-to-wall ceilings or handsome recessed sectional ceilings. Electralume Ceilings can be adapted quickly to suit your specifications.

To add instant sales appeal at minimum cost, install an attractive Electralume Ceiling in the kitchen, bath, family room, dressing room, foyer or hallways of the apartment or housing project you're now doing.

Remember, Wilson Electralume Ceilings are the hottest new selling feature you can offer. Write TODAY for descriptive literature, prices and prompt delivery information.

All Wilson products are fully guaranteed for 5 years.

New Packaged Electralume Kits —
Now Wilson provides handy lighting kits, including the diffusers and Lumatrax complete ready to install. Kits are assembled on the floor quickly and raised into the rough opening.

Standard Kit Sizes:
2 x 2 2 x 6 4 x 6 6 x 6
2 x 4 4 x 4 4 x 8 6 x 8

Special sizes available to suit your specification.

J.J. WILSON Lighting
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Specialists in Illuminated Ceilings
Representatives in all principal cities
98 years Experience in the Lighting industry

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Residential Lighting Division
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Please send literature on Wilson Electralume Ceilings and the name of your nearby Wilson representative.

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COMPANY
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CITY
STATE

☐ I am interested in packaged Electralume Ceiling Kits.
Size ________

JANUARY 1964
MASONITE’S
"KEY TO BETTER LIVING"
CONTEST

makes your model
(lines prospects)
Join with Masonite in this biggest new home promotion ever. The Key to Better Living Contest offers three built-in features to bring interested prospects streaming your way.

1. Contestants must visit your model homes for registration forms. You get to see and speak to every one of these potential home buyers.

2. Contest registration forms are worded to make contestants carefully consider the features in your homes. The key completion sentence: "Better living begins in a new home of my own because..." helps create a selling atmosphere for you and for the home-building industry.

3. Heavy advertising on national TV and in local newspapers keeps bringing visitors your way...eager to win any of 750 prizes, including a new home.

HOW THE CONTEST WORKS

You build one or more model homes using Masonite siding and interior paneling (Royalcote, Marbletone, genuine Peg-Board). You get registration forms, literature, signs, ad mats—a complete package for on-site promotion and local advertising.

Masonite backs you with heavy television schedules on NBC's "Today," "Tonight" and "Sunday" shows as well as local newspaper advertising. You also get special displays and literature to distribute to lending institutions and lumber dealers, to direct prospects to your model homes.

That's not all. Masonite pays up to $25,000 toward purchase of a new home for the first-prize winner. 749 other prizes include player pianos, home power-tool workshops, and home entertainment centers (TV/radio/stereo hi-fi).

MORE BENEFITS

In addition to answering the contest completion question, visitors to your homes fill out an important personal data form. You learn about them, their families, their likes and dislikes in home construction...a ready-made follow-up file.

Your homes benefit from association with nationally advertised and accepted Masonite hardboards. Masonite backs its products with the biggest campaign of any hardboard manufacturer.

You get on-site construction savings. X-ninety sidings offer unmatched workability, take any finish and are extremely dent-resistant. Or use new prefinished Colorlok to cut cost further. Of course, Masonite interior panels are prefinished, too. Just nail them up and you're done.

There you have it—five months of solid selling (April 1-August 31) with Masonite's Key to Better Living Contest. The new home promotion with more excitement, publicity, and builder benefits than any event to date. Make plans now. Call your Masonite representative for complete details. Or write for free brochure outlining the entire program.

MASONITE shows the way!

Masonite, X-ninety and Colorlok are registered trademarks of Masonite Corporation.
VOLUME BUILDERS! SEE WILL DO TO HELP BOOST

A NATIONALLY-ADVERTISED SHOWING OF NEW WESTINGHOUSE-EQUIPPED HOMES AND APARTMENTS!

A full-color Westinghouse spread in Life Magazine (out June 2)—with additional pages featuring homes and apartments of co-operating builders! (Keep reading!)

YOUR MODEL HOME... YOUR APARTMENT... HEADQUARTERS FOR A SENSATIONAL CONTEST!

In addition to selling Open House '64, the Life spectacular will promote a big, nationwide contest. Contestants pick up their entry blanks at your model home or apartment!
WHAT WESTINGHOUSE
YOUR SALES!

YOUR MODEL HOME...
YOUR APARTMENT...
PICTURED & DESCRIBED
IN LIFE MAGAZINE!

An artist's rendering of your model home or apartment will be used in the Life ad. It will be returned to you for use in local tie-in advertising and promotion. (There's more!)

ALL THIS—PLUS LOCAL MERCHANDISING ASSISTANCE TO ENABLE YOU TO TAKE FULL ADVANTAGE OF THE WESTINGHOUSE OPEN HOUSE '64 PROMOTION! CLOSING DATE FOR YOUR SPACE IN LIFE MAGAZINE IS MARCH 13th! THERE'S NO TIME TO WASTE! CONTACT YOUR NEARBY WESTINGHOUSE RESIDENTIAL SALES MANAGER RIGHT AWAY! HE'S WAITING FOR YOUR CALL!

You can be sure...if it's Westinghouse

WESTINGHOUSE ELECTRIC CORPORATION, PITTSBURGH 30, PA.
Mrs. America wants in her New Home!

OFF-THE-FLOOR CLOSETS

are fast becoming a "demand item" with the ladies—with good reason.

This type of fixture means the end of back-breaking, time-consuming cleaning and maintenance of bathroom floors. There are no cracks or crevices around base of closet into which dirt, moisture or cleaning solvents can gather. Floors can be designed to be clean, bright, beautiful and sanitary—and can be kept that way with ease!

These are features you can sell—because they eliminate work for the housewife . . . every day for a lifetime!

The first feature that women want in new homes, according to surveys, is a modern kitchen. Here, the second, a modern bathroom.

THE 2nd FEATURE*

and the 1st feature you want to meet all installation requirements

JOSAM RESIDENTIAL CLOSET CARRIERS

OFF-THE-FLOOR CLOSETS

are fast becoming a "demand item" with the ladies—with good reason.

This type of fixture means the end of back-breaking, time-consuming cleaning and maintenance of bathroom floors. There are no cracks or crevices around base of closet into which dirt, moisture or cleaning solvents can gather. Floors can be designed to be clean, bright, beautiful and sanitary—and can be kept that way with ease!

These are features you can sell—because they eliminate work for the housewife ... every day for a lifetime!

The first feature that women want in new homes, according to surveys, is a modern kitchen—the second, a modern bathroom.

JOSAM MANUFACTURING CO.

Michigan City, Indiana

JOSAM PRODUCTS ARE SOLD THROUGH PLUMBING SUPPLY WHOLESALERS

OB-TH-FLOOR CLOSETS

are fast becoming a "demand item" with the ladies—with good reason.

This type of fixture means the end of back-breaking, time-consuming cleaning and maintenance of bathroom floors. There are no cracks or crevices around base of closet into which dirt, moisture or cleaning solvents can gather. Floors can be designed to be clean, bright, beautiful and sanitary—and can be kept that way with ease!

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BOOKS

PATIO ROW HOUSES are envisaged by Chermayef and Alexander as an optimum arrangement of high-density living space. Each house would include a series of inner courts separating children from parents and family living.

2 architects + 1 computer = new design criteria


Urban disintegration and sprawling suburbs are easy and common targets for critical attack. What the living conditions of present-day cities and suburbs do to their citizens—and what they do to the last vestiges of natural surroundings—is worthy of de­ crying. Seldom, however, do the detractors, however impassioned their cries, produce counter-sug­ gestions that are practical or which make economic sense. Architect-teacher Serge Cher­ mayef and Architect-mathematician Christopher Alexander de­ develop a thesis in this book (after the analytical outrage chapters) that concerns itself with two sets of basic requirements for a dwelling. The first is a list of 33 items involved in grouping dwelling units. These range all the way from "efficient parking" through such workaday prob­ lems as "garbage collection" and "separation of children and pets from moving vehicles."

The second is a list of six questions about the individual units. These are: Is there a buf­ fer zone at the entry? Is there a separate entry for the children? Is there a buffer-zone between parents’ and childrens’ private areas? Is there a lock to the parents’ area inhibiting children from entering? Can the living room be isolated from the rest of the house? Are outdoor spaces private and differentiated for the various users? With these questions in mind, the authors examine 13 cluster plans and 17 good house plans (using IBM machinery) for space standards essential for the happy growth of individual personality, as well as for optimum inter­ relationships of these spaces.

Results of the studies show, says the authors, that the 33 basic grouping factors fit into seven interrelated groupings. And, they claim, the optimum grouping plan is for 20 townhouses per clus­ ter, with 3,100 sq. ft. of land per unit, and 14 units (51 persons) per acre. (Such a density—32,000 persons per sq. mi.—is roughly the density of Brooklyn.) For a townhouse that meets the test of six questions for livability of individual units, the one shown above with two interior courts is offered as entirely satisfactory.

This book deserves close study because it analyses human needs and makes them crystal clear.

And it is a laudable effort by two architects to prick the balloon paraded by so many architectural educators. Says Cher­ mayef: "The biggest obstacle to improved design standards is the obsolescence of the designers themselves . . . In futile con­ servation [architectural schools] maintain the tradition of trying to transform average students into universal men of the highest order—to graduate an annual horde of Leonards. This makes pretentious pseudo-artists out of fools and inhibits our best tal­ ent because it cannot be con­ veniently pigeonholed in a con­ ventional manner."—JAN WHITE
ANSWER:
GM-DELCO'S NEW PRE-CHARGED UNIT THAT FLUSH-MOUNTS INTO ANY OUTSIDE WALL!

QUESTION:
WHERE CAN I FIND CENTRAL AIR CONDITIONING SPECIALLY DESIGNED FOR SMALLER APARTMENTS?

A QUICK-CONNECT SPLIT SYSTEM WITH 19,000 BTUH CAPACITY TO AIR CONDITION A 4-5 ROOM APARTMENT

IN-WALL INSTALLATION
The condensing unit is designed for easy mounting in any outside wall, under windows, wherever there's free space available. The condenser unit measures only 24" high, 30" wide, 16" deep. Both air intake and discharge outlet are on the same side of unit. The cabinet is thoroughly insulated. Service access panel is quickly removed to expose all parts for inspection and service, if necessary.

FREE-STANDING INSTALLATION
At ground level, the condensing unit may be installed as close as three inches from the wall. The evaporator coil is designed for either vertical or horizontal air flow, and may be installed in the plenum above a high- or low-boy furnace, or in a horizontal duct run. Refrigerant tubing is completely charged and fitted with quick-connect couplings to speed up installation, reduce costs.

WHERE DO I GET MORE INFORMATION?
Send off a quick letter to Delco Appliance Division, General Motors Corporation, Dept. NB-3, Rochester, N. Y. 14601

THE NAME THAT INSPIRES RESPECT...

GM Delco 365 CONDITIONAIR

DELCO APPLIANCE DIVISION • GENERAL MOTORS CORPORATION • ROCHESTER, NEW YORK

JANUARY 1964
NEW electric set-in ranges with oven unit that sets between cabinets. Cooktop fits in standard cutout. No moldings or trim kits needed.

NEW off-the-floor electric set-in model that is counter-top hung, no bracing needed.

NEW eye-level electric Connoisseur ranges in 30-inch size. Gas models in 30-inch and 39-inch sizes. Single or double ovens.

Look at this versatile

Whether you build ten homes, 500 homes or huge high-rise apartments, only the RCA WHIRLPOOL brand offers you such a wide selection of both gas and electric ranges.

New eye-level models... set-ins, built-ins, free-standing ranges to fit any market, floor plan or budget.

Builders from coast to coast tell us they like the many benefits of one-source ordering for a complete line of gas and electric appliances. It means less paper work. You deal with one man instead of three or four or more...
NEW gas or electric built-in range tops with matching 24 or 30-inch ovens. New 24-inch and 30-inch electric double-oven models. All gas built-in ovens feature exclusive Blanket-O-Flame® burner. Available in brushed chrome or colors.

**NEW**

**RCA Whirlpool**

**GAS AND ELECTRIC RANGES FOR '64**

**selection...and all from one source!**

place one order, pay one invoice. You get better color and design coordination.

The RCA WHIRLPOOL brand is well known nationally, backed by millions of advertising dollars year after year. It's recognized immediately for quality and dependability.

It'll take only a few minutes for your local RCA WHIRLPOOL distributor to tell you how this unique "package plan" can add that extra touch of value to your homes and apartments... call him today for complete details.
"BEST HOMES FOR THE MONEY"
USE CAST IRON WATER MAINS

(78% of award-winning builders specify Cast Iron Pipe)

PALATINE, ILLINOIS
Price: $31,950 with land • Living Area: 2120 sq. ft. • Builder: W. L. Lee and Co., Inc. • Architect: James Viger, A.I.A.

WHAT THE JUDGES SAID: "The second-floor playroom really caught our eye. It could double as a nursery, den, sewing room or an old-fashioned sitting room. The facade is cleanly executed and in balance. The house is well built and will last many a decade in Illinois weather."

INCLUDED IN THIS HOUSE: built-in range and oven; nylon carpeting in living room, dining room, second-floor hall and bedrooms; storm and screen windows; full basement; 40-gal., glass-lined hot-water heater, fireplace, patio and slate foyer.

THE PLAN: Very easy to live with, this plan features a dead-end living room and a separate dining room that is really separate. There's good access from side yard to the garage and from garage to kitchen.

78% of the successful builders publicized by American Home magazine specify cast iron water mains. They appreciate cast iron's natural strength and durability. Qualities that help cast iron pipe stand up to internal pressure, external loads, adverse soil conditions and temperature extremes. Qualities that assure dependable water delivery—for the life of the home and beyond.

"Best homes for the money" is the way American Home describes these houses. Cast iron pipe supports the claim—with dollar-for-dollar benefits unmatched by substitute pipe materials.

To help you in your work, the Cast Iron Pipe Research Association offers the free booklet, "Tract Development... helpful ideas from important magazine articles." Includes eleven articles from seven magazines—written by experts and chosen for their pertinence to your problems. Send for your copy today.

CAST IRON PIPE
THE NAME OF PIPE THAT LASTS OVER 100 YEARS
CAST IRON PIPE RESEARCH ASSOCIATION
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3440-H Prudential Plaza, Chicago 1, Illinois
Please send me the free booklet "TRACT DEVELOPMENT... helpful ideas from important magazine articles."

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116
HOUSE & HOME
“U.S. Steel Homes apartments go up 25% faster,” say Grant-Holladay

“The U. S. Steel Homes steel framed panel building system is one of the finest and most quickly erected systems we have ever used,” say Grant-Holladay Builders, Fairborn, Ohio. “Our erection and closing time was cut by almost 25% in our Fairborn apartment project, so each building was occupied faster, and our financing charges were considerably reduced. Over 50 units are already occupied, and the balance is very nearly ready.”

From the basic models of U. S. Steel Homes apartments, you can build an almost endless variety of combinations—and all USS Homes apartments, as well as single-family homes and town houses, are framed with our exclusive steel structural system for great dimensional stability. All models have been carefully designed for convenient living, minimum maintenance, maximum comfort. All components are top-quality, rigidly inspected through every step of the factory manufacturing operation.

U. S. Steel Homes Dealers have more than a complete range of quality products to sell. Advertising and marketing aid, help in planning building programs, FHA and VA procedures and submissions, sales training and sales literature are also available. For more information on how you can become a profitable U. S. Steel Homes Dealer, call or write U. S. Steel Homes, 2549 Charlestown Road, New Albany, Indiana 47150. USS is a registered trademark.

United States Steel Homes
Division of
United States Steel

JANUARY 1964

117
Roper's exclusive 3-point builder program—

See what's in it for you! More salespower for your homes— that's what. Now that Roper's famous 4-generation quality reputation is available to builders in an exciting new line... plus an exclusive merchandising kit and incentive plan... you've got the hottest selling package working for you in the builder field.

The newest, most complete line of interchangeable gas and electric ranges available. Now you can give prospects the widest choice of quality gas or electric, because Roper models are completely interchangeable—size for size, shape for shape. With all of today's most-wanted features.

Exclusive "Build-the-Builder" Plan. The most complete, most usable merchandising kit ever developed for builders. Great traffic builder. Great help for clinching sales.

"Millionaire Vacations" to Nassau—an exclusive Distributor-Builder incentive plan. Offers free Delta Jet Dream Vacations to this island paradise. Call your Roper distributor for details.

Roper Charm II—the only double-oven gas range with eye-level broiler. 30-inch width.
smash hit of the NAHB show!

These Builder-Distributors can tell you about scene-stealing Roper! Call today, or contact Roper direct.

ALABAMA
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Buckley Supply Co., Inc.

ARIZONA, Phoenix
Brewer-Jones

ARKANSAS
North Little Rock

CALIFORNIA, Fresno

CONNECTICUT
East Hartford
Rosklns Dlst., Inc.

DIST. OF COLUMBIA
Washington

FLORIDA, Miami

INDIANA, Fort Wayne

IOWA, Davenport

ARKANSAS
North Little Rock

CALIFORNIA, Fresno

CONNECTICUT
East Hartford

DIST. OF COLUMBIA
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KANSAS

LOUISIANA
Kenton Prop

MASSACHUSETTS
Cambridge

MINNESOTA
Minneapolis

NEW MEXICO
Albuquerque

OKLAHOMA
Oklahoma City

RHODE ISLAND

SOUTH CAROLINA
Charleston

TEXAS, Austin

VIRGINIA, Lynchburg

VIRGINIA, Richmond

WISCONSIN, Madison

A few protected distributor franchises are still available. Contact Roper.

January 1964
Here's what makes the real difference in shelf hardware!

For open wall shelving, K-V No. 80 Standard (18" to 144" lengths, 1" adjustment). K-V No. 180 Brackets (4" to 20" lengths).

It's K-V's patented Spring-Lock Backplate—one tap and it can hold forever!

Only K-V has it! Just fit the No. 180 Bracket into the slotted No. 80 Standard and tap it down. The patented spring action then extends the full length of the backplate, gripping the standard so tightly the bracket just can't come loose accidentally. Want to adjust the shelf? Just one light upward tap and it's out again. No complicated mechanism—no screws to adjust. This exclusive K-V feature guarantees strong, sturdy shelving that can't wobble, can't sag.

It's easy to install—and modestly priced. There are three handsome finishes: Satin Anochrome, Satin Brass and Ebony. When you can't build bookshelves in—build them on—with K-V! Ask your K-V distributor, or write for our catalog today.

KNAPE & VOGT MANUFACTURING CO.
Grand Rapids, Michigan

For bookcase or cabinet shelving K-V 255 Standard (24" to 144" lengths, 3/4" adjustment). K-V 256 Support (15/16" long, 9/16" wide). Nickel, zinc or bronze finish.

For open wall shelving, K-V No. 80 Standard (18" to 144" lengths, 1" adjustment). K-V No. 180 Brackets (4" to 20" lengths).
Square now...but will the window slide a year from now?

Construction techniques are important... but your choice of building material can make or break the most careful craftsmanship!

Pre-seasoned lumber from the Western Pine Region, for example, can be the difference between satisfied buyers and costly callbacks. Its quality gives your reputation permanent protection.

When first sawn into lumber, any wood is saturated with natural moisture. As it dries, it shrinks and changes shape. If this seasoning takes place after construction, your reputation and your pocketbook are in danger... from sticking windows and squeaky floors... from cracked walls and nails popping through plaster.

 Protect yourself and your buyers from these problems with pre-seasoned lumber from the member mills of the Western Pine Association. This lumber is scientifically seasoned at the mill to rigid standards before grading and shipping.

WPA pre-seasoning "locks" the lumber into proper shape. It slowly, thoroughly dries the wood cells from within, giving the wood added strength, greater nail-holding power, resistance to decay. Pre-seasoning also lightens the lumber, making it easier to handle.

Inspect upon pre-seasoned lumber from the member mills of the Western Pine Association. Look for the assurance of WPA grade and species marks... your buyers do!

IDAHO WHITE PINE • PONDEROSA PINE
LODGE POLE PINE • SUGAR PINE • LARCH
WHITE FIR • DOUGLAS FIR • ENGELMANN SPRUCE
RED CEDAR • INCENSE CEDAR
WESTERN PINE ASSOCIATION
New beauty in All-Brass Fittings

THE NEW TRITON BY KOHLER

The newest look—the smartest style, the new Triton by Kohler—a tasteful blending of convenience and design that appeals to style-minded home owners. Adds jewel like beauty to lavatories, bathtubs and sinks.

Lines are graceful, sweeping—with no unnecessary frills or curves—making Triton fittings a pleasure to clean and much easier to keep clean.

Triton handles are easy to grip—and turn—even with wet, soapy hands. Smart red and blue insets provide instant identification of hot and cold.

And like all Kohler fittings—the Triton is All-Brass—to keep its new look longer.

KOHLER OF KOHLER
Kohler Co., Established 1873, Kohler, Wisconsin

ENAMELED IRON AND VITREOUS CHINA PLUMBING FIXTURES • ALL-BRASS FITTINGS ELECTRIC PLANTS • AIR-COOLED ENGINES • PRECISION CONTROLS

HOUSE & HOME
For Emperors Only? Nonsense!

(BondWood® Parquet is installed everyday in 800 sq. ft. apartments)

Even in Napoleon's day everyone tried to imitate the leader. And it's no different today... particularly with parquet floors! But no one has yet been able to copy the excellent quality and superb performance of Harris BondWood parquet! Thick, solid hardwood all the way through, BondWood is designed for adhesive installation over concrete or wood. And only the best Appalachian hardwoods are selected for BondWood. For flawless performance and dependability, specify BondWood in apartments, homes, gyms, auditoriums, classrooms and churches.

Finest in flooring since 1898

HARRIS FLOORING

JOHNSON CITY, TENNESSEE
GOOD NEWS FOR HOME BUILDERS!

FLOAT-AWAY CLOSET SYSTEMS LOWER COSTS—
TOP QUALITY DOORS NOW AVAILABLE AT LOWER PRICES

New automation production technique reduces price to you—yet gives you same high quality styling, construction, famous Float-Away exclusives!

FLOAT-AWAY DOOR COMPANY
1173 ZONOLITE ROAD, N. E.
DEPT. H-164 ATLANTA 6, GEORGIA

BUILDING MATERIAL DEALERS
HOME MANUFACTURERS
TRAILER MANUFACTURERS

WIRE COLLECT OR WRITE FOR MORE DETAILS ON FLOAT-AWAY'S NEW LOWER PRICE OFFER
**NEW PRODUCTS**

**Heating and cooling**

**Horizontal furnace** comes in ten models, is part of the 1964 Airtemp line. Horizontal series can be equipped with high-velocity air-flow blowers to make it easier to add central air conditioning later. Chrysler Airtemp, Dayton. *(For details, check No. 1 on coupon, p. 139)*

**Heating-cooling system** is compact and easy to install because the heat exhaust unit and cooling coil are split and tubing is precharged. Two Flex-O-Metic models: 2-ton cooling and 24,000 BTU; 3 tons and 34,000 BTU. York Corp., York, Pa. *(For details, check No. 2 on p. 139)*

**Finned-tube baseboard** has 6% more capacity, is 1½" lower than previous model. There is no grille; air enters at floor line, passes over heating unit, flows out the top. The face of the baseboard also acts as a radiant panel. Bryant, Indianapolis. *(For details, check No. 3 on p. 139)*

**Central air conditioner** has spine-fin coil for high-efficiency cooling. Vertical airflow discharges heat upwards. Two models: 22,000 BTU (22¾"x 22¾"x 29¾") and 34,000 BTU (22¾"x 22¾"x 37¾"). General Electric, Tyler, Tex. *(For details, check No. 4 on p. 139)*

**Gas-fired upflow furnace** in gray steel casing has a green enamel accent panel with chrome trim, looks like a modern appliance. New Luxaire models are rated from 75,000 to 200,000 BTU, take up to 6 tons of cooling. C. A. Olsen Mfg., Cleveland. *(For details, check No. 5 on p. 139)*

**Electric wall heater** is surface mounted where there is little space but a large volume of air to heat. Capacities: 750 to 3,000 watts. Tapered units are 3" deep at center, 20" high, 24" to 60" wide. Federal Pacific Electric, Newark, N.J. *(For details, check No. 6 on p. 139)*

**Heater-fan-light** has two-motor system so heater and fan can operate alone or in combination. Compact unit includes 1,500-watt forced-fan heater and 60 cfm vent fan. Aluminum grille is 14" x 14", extends 1½" from the ceiling. Broan, Hartford, Wis. *(For details, check No. 7 on p. 139)*

**Compact humidifier** can evaporate 7½ gal. of water per 24 operating hours. The V-7 Vapor Wheel is installed on a forced or a gravity warm-air furnace with the blower in the plenum. It is 11" wide, 10½" high. Lau Blower Co., Dayton. *(For details, check No. 8 on p. 139)*

**Dehumidifier control** has a 1-mil-thick, 12" long nylon sensor wound four times around the inside of the plastic-covered steel case. Wall-mounted control can be set to hold humidity level within a 20% to 80% range. Honeywell, Minneapolis. *(For details, check No. 9 on p. 139)*

*New products continue on p. 129*
Now from FORD! 3 new

New durability, new economy, and new performance—now available in Ford 600 through 800 Series trucks!

Ford's new High Displacement V-8's are designed for more durability, economy and performance! Higher displacements provide added power to maintain highway speeds at part-throttle ... plus the reserve to reduce downshifting. You get better average road speeds, faster trips, and increased income per hour. More part-throttle operation and less shifting mean longer engine life ... lower running costs. And Ford's proven Perma-Tuned transistorized ignition system is available to cut maintenance expense even further ... improve performance and operating economy.

186 horsepower ... 300 lbs-ft torque Two-venturi carburetor with thermo-controlled air induction system cuts warm-up time, gives better fuel economy. Positive crankcase ventilation cuts sludge formation, prolongs engine life. Deep-skirt block gives extra rigidity and excellent crankshaft support.

203 horsepower ... 330 lbs-ft torque Two-venturi carburetor with thermo-controlled air induction system for economy. New 13-in. heavy-duty clutch has high torque capacity, lasts longer. Scroll-type water pump delivers a full 100 gallons per minute, yet takes less horsepower.

235 horsepower ... 372 lbs-ft torque Four-venturi carburetor and thermo-controlled air induction provide maximum power with economy. Rotor-type oil pump is about twice as durable as gear-type pumps and is more effective at idle. Pistons have a special top ring carrier that can double piston and ring life.
High Displacement V-8's

105" BBC F-SERIES Dependable Ford F-600 thru 750 Series conventional trucks are low-cost workhorses that can handle most jobs economically and effectively. Max. GVW's to 25,500 lb., GCW's to 50,000 lb.*

102" BBC F-800 Designed for extra high-miles or severe off-road service, the Ford F-800 features a sturdier frame, plus independently mounted cab and front-end sheet-metal for maximum life. Short 28-inch bumper-to-axle dimension allows greater payloads in bridge-formula states. Max. GVW 27,500 lb., GCW 50,000 lb.*

89" BBC N-SERIES Modern Ford short-BBC N-Series conventional measure only 89 inches from bumper to back of cab for increased load-space, better weight distribution and greater payloads. Short BBC allows trucks to handle one-foot longer bodies within the same overall length and transfer more weight to the front axle. N-Series tractors can haul 40-foot square-nose trailers in 50-foot limit states. Wide-track front axle and narrow fender width (85 in.) give time-saving maneuverability. Max. GVW's 23,000 to 25,500 lb., GCW's to 50,000 lb.*

82½" BBC C-SERIES America's most popular tilt-cab trucks, C-Series Fords have a short 82½-inch BBC dimension that permits longer bodies or trailers. Set-back front-axle design allows higher front axle loadings...greater payloads. Cabs are big, roomy and comfortable...easy to enter and leave...a great favorite with drivers. Cab tilts in seconds for rapid engine accessibility. Max. GVW's 23,000 to 27,500 lb., GCW's to 50,000 lb.*

* Max. ratings for series offering the new Ford High Displacement V-8 engines. Many other series with modern Ford gasoline or Diesel engines are also available to meet virtually any trucking need.

FORD TRUCKS For Outstanding Reliability & Durability

JANUARY 1964
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It's through-the-wall cooling that gives your apartment an architectural plus...these distinctive grilles which conceal Luxaire condensing units.

Your mason makes them with standard masonry practices because Luxaire provides a frame that makes it simple. It's Luxaire's centrifugal blower that makes concealment practical.

There are 1154 other ways the Luxaire comfort idea can help you add value to the dwellings you build without adding cost. Many of them are covered in our "Apartments" Brochure. You can get a copy from your local Luxaire representative or direct from

The C. A. Olsen Manufacturing Company, Elyria, Ohio
**NEW PRODUCTS**

**Kitchens**

**Eye-level refrigerator** breaks away from traditional box design. A 6.7 cu. ft. freezer drawer fits below the 40" counter; the upper refrigerator holds 8.3 cu. ft. The Americana comes in coppertone or white. General Electric, Louisville. (For details, check No. 10 on p. 139)

**Refrigerator-freezer** has a 11.2 cu. ft. fresh food section on the right slide, a 7.5 cu. ft. freezer on the left. Each section of the Imperial Duplex has storage in its door, slide-out shelves and baskets, and automatic defrost. Admiral, Chicago. For details, check No. 11 on p. 139

**Free-standing range** comes in gas or electric models, in seven finishes with a polished metal top and trim. Removable oven door has a decorated glass panel. Automatic controls are mounted in front. Preway Inc., Wisconsin Rapids, Wis. For details, check No. 15 on p. 139

**Slip-in range** needs no framing or cutouts. It hangs from the countertop by a chrome trim piece which provides a fast bond. Glass oven door opens to the side. Oven controls are set on an angled panel in front. Tappan, Mansfield, Ohio. For details, check No. 16 on p. 139

**Built-in oven** has a control panel in which decorative tiles can be inserted on either side of the oven clock. Ceramic tiles come in 27 patterns and colors. Decoramic panel is available on all luxury and economy models. Gray & Dudley, Nashville. For details, check No. 13 on p. 139

**Luminous-front vent hood** comes in one ducted (above) and two ductless models. Versa-Duct offers a choice of top or back outlets for 33⁄4"x10" ducts. It delivers air in excess of FHA requirements, says its maker. Leigh, Coopersville, Mich. For details, check No. 12 on p. 139

**30" electric oven-range** has a 26"-wide oven. Oven walls are removable, have a washable surface. A self-contained vent system takes steam and odor through fiberglass and charcoal filters, returns clean air to the kitchen. Hotpoint, Chicago. For details, check No. 14 on p. 139

**Double oven and range** has a self-contained venting system that works for both oven and surface units. Because there is no need for a hood, the Imperial can fit in the wall cabinet space often used by a hood. Jenn-Air, Indianapolis. (For details, check No. 17 on p. 139)

**New products continue on p. 132**
"We've built 1028 homes with Insulite Primed Siding since '58 and never had a callback!"

says Jerald Katleman, President, Park Forest Homes, Inc., Park Forest, Ill.

"This just has to be one of the best building materials on the market today," says Mr. Katleman, developer of famous Park Forest, one of the nation's first completely planned communities.

"Look at it this way," Mr. Katleman continues. "Soon after Insulite Primed Siding was introduced, we switched. And we've never had a siding callback for any reason. That covers more than a thousand homes in more than 5 years."

"We've found that Insulite doesn't warp, twist or buckle. Joints stay butted. The weather drip edge helps keep sidewalls clean and dry. And with that deep factory priming, we get a beautiful paint job with just one finish coat.

"Of course, there are other reasons why we standardized on Insulite. It saws and nails like wood. Yet it goes up faster and easier than wood shakes or conventional wood siding.

"Our prices range from $18,950 to $28,000 and we use all three styles of Insulite to get the extra design versatility and curb appeal that helps us sell homes."

Mr. Katleman is typical of the thousands of builders across the country who have already found that Insulite offers everything they want in a primed siding... design versatility; fast, easy installation; the selling power of lasting beauty and value; plus demonstrated performance.

So why gamble on an untried siding? Next time get Insulite... the Primed Siding performance-proved on more than 450,000 homes coast to coast. Ask your dealer about it. Or write direct to Insulite, Minneapolis 2, Minnesota.

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So why gamble on an untried siding? Next time get Insulite... the Primed Siding performance-proved on more than 450,000 homes coast to coast. Ask your dealer about it. Or write direct to Insulite, Minneapolis 2, Minnesota.
Completely Planned Community. Shown here checking the progress of Park Forest... one of the nation's first completely planned communities... are (left) Mr. Jerald Katleman, President of Park Forest Homes, Inc., and Mr. Fred Peterman, Director of Sales. Located on 3,000 acres, 27 miles south of Chicago's loop, Park Forest began in 1948 with the first of 3,000 rental units. This was followed by the first completely integrated mall shopping centers. Then, in 1951, new home construction started. To date, Park Forest Homes, Inc. has built and sold 5,300 homes. The community now has a population of 31,000... and includes 70 stores in four shopping centers, 14 elementary schools, two high schools, 12 churches, 21 parks and recreation areas, and a unique four-year liberal arts college. The bold concept of this new community planned back in 1944... and carried through by one company... today has become a thriving, balanced community.
Tools and equipment

Ladder leveler fastens to one leg of wood or aluminum ladders, leveling them on uneven surfaces. The unit slips on the leg, and height is adjusted by an operating handle. The leveling range is 12". C. W. Lind Co., Minneapolis.
For details, check No. 20 on p. 139

Roofing elevator has a continuous chain belt and will lift six packages to a roof per minute. The Ken-Do elevator weighs 110 lb., is 14' high, and is run by a ½-h.p. 110-volt electric motor. Easy-Way Products, Ponca City, Okla.
For details, check No. 21 on p. 139

Adjustable legs turn a standard extension ladder into a self-supporting unit. Telescoping legs adjust from 13' to 25', hold ladders up to 36' long on rubber feet. Steady/Rest has safety chain at the bottom. Machen Products, Toledo.
For details, check No. 22 on p. 139

Stainless-steel nail is designed for rust-proof fastening of redwood and cedar siding, and for siding with Tedlar PVF film finish. Annular ring nails come 1½" or 2½" long, plain or colored. Independent Nail Corp., Bridgewater, Mass.
For details, check No. 25 on p. 139

Purlin bracket attaches purlins to rafters without overlap, allowing straight-line installation with minimum waste of lumber. Bracket fits all 2x timbers, is made of galvanized steel punched for ½" nails. National Manufacturing, Sterling, Ill.
For details, check No. 26 on p. 139

Hardware

Decorative door knob, part of new Lotus Knob series, is designed for cabinet and furniture doors, and to match Lotus lock set by Schlage, which has licensed this manufacturer to produce this knob style. Ajax Hardware, City of Industry, Calif.
For details, check No. 24 on p. 139

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For details, check No. 26 on p. 139

Colonial Hardware for storm doors has etched black finish. One-door package includes lockset with lock, three strap hinges, hydraulic door closer, and a spring chain door protector. Dexter Lock Division, Grand Rapids, Mich.
For details, check No. 27 on p. 139
**NEW PRODUCTS**

**Baths**

One-piece lavatory has a rolled edge that eliminates the need for a separate metal rim. A tube of silicone adhesive and a counter template come with each package. Whirlpool lavatories are 18" in diameter, come in 50 colors. Case, Robinson, Ill.

For details, check No. 28 on p. 139

Plastic waste parts for bath tubs are made of DuPont Delrin, are unaffected by solvents or acids. Available parts include waste shoes, tees, and overflows for trip lever and chain wastes. The parts fit any bathtub. A.H. Voss, Los Angeles.

For details, check No. 29 on p. 139

Plastic medicine cabinets have boxes of molded styrene, frames of extruded aluminum, and sliding mirror doors mounted on rollers. Vanity Fair cabinets come in three styles and six decorator colors. Designware Industries, Minneapolis.

For details, check No. 30 on p. 139

One-piece lavatory trim of Franciscan Hermosa tile is designed for fast installation of oval lavatories. The piece is a 6"x12" bullnose, scored, precut, and ready for grout. International Pipe & Ceramics Corp., Los Angeles.

For details, check No. 31 on p. 139

**Windows and doors**

Radio control kit contains all parts necessary to convert electrically operated garage doors to remote control. Car transmitter (left) can clip on a sun visor, runs on a 22½-volt battery, has a range of 125'. Alliance Manufacturing, Alliance, Ohio.

For details, check No. 32 on p. 139

Stainless-steel facing is applied to the weather side of this company's aluminum storm windows for extra protection. Glass tilts out of frame for easy washing. Triple-tracked units have burglar-proof hidden locks. Allied National Products, Chicago.

For details, check No. 33 on p. 139

Remote control unit for electric garage-door openers can be carried in the car or a purse. Auto-Mate systems also include circuits that turn on garage lights when the automatic opener is actuated. Overhead Door, New Hartford, Ind. (For details, check No. 34 on p. 139)

Interchangeable panels let builders offer 1,500 design combinations in Custom-line entrance doors. The doors are available in 2'8"x6'8", 3'x6'x8", and 3'x7' sizes. All are 1¾" thick. Morgan Co., Oshkosh, Wis. (For details, check No. 36 on p. 139)

New products continue on p. 134
NEW PRODUCTS

start on p. 125

Miscellany

Trash storage enclosure can hold from two to five standard trash cans, has an easy-to-open roll-up door. Trashmaster galvanized steel units come with prime coat, ready for finish painting. J. C. Wilson Corp., Norfolk, Va. (For details, check No. 37 on p. 139)

Liquid mulch, when sprayed on freshly seeded soil, forms a film that holds seeds, binds soil, resists erosion. Soil Gard is an elastometric emulsion concentrate. Users dilute it with water. Miller Chemical & Fertilizer, Baltimore. (For details, check No. 38 on p. 139)

Aluminum solar screen can be used either as a sun fence or an awning, is offered in 30 colors and patterns. The screens have Flexatolm finish which is bonded against peeling, cracking, or chipping. Bridgeport Brass, Bridgeport, Conn. For details, check No. 39 on p. 139

Warm-air fireplaces are offered in giant size, 76" wide, 80" high, and 28" deep. Steel Heat-saver units have built-in dampers and controls, are designed for large homes, lobbies, and reception rooms. Donely Brothers, Cleveland. For details, check No. 40 on p. 139

Wall finish system includes wallboard of glass-reinforced gypsum and a hard-finish covering coat troweled on by hand. Dens-Cote dries in a few hours, can then receive paint or wallpaper. Bestwall Gypsum, Ardmore, Pa. For details, check No. 41 on p. 139

Office equipment

Electronic phone answerer records messages when phones are unattended, plays them back over the phone when given a code signal. The unit is portable, easy to install, and can be shifted from office to office. Phonomatic, Los Angeles. For details, check No. 42 on p. 139

Automatic typewriter, fed by a card-sized folded tape, will type repetitive data at 100 words per minute. The unit also includes a device which punches the tape as the original is typed manually on the machine. Royal McBee, New York City. For details, check No. 43 on p. 139

Portable drawing board, brief-case sized, is offered in a case that includes a protractor, a T-square, a ruler, angles, and compartments for keeping pencils, pens, paper, and other drawing accessories. Koh-I-nor Inc., Bloomsbury, N.J. For details, check No. 44 on p. 139

Automatic copier has dial control which can be set to produce any desired number of copies. Dial-A-Copy is roll, not sheet-fed, thus saving operator’s time. Retail price: $1195. American Photocopy Equipment, Evanston, Ill. For details, check No. 45 on p. 139
Swimming pool cover unrolls over the pool like a window shade and locks to protect against accidents and airborne dirt. Electric V4-hp. motor is mounted below deck at the deep end; anodized aluminum channels are recessed in pool side walls. Vinyl-coated nylon cover comes 16' x 32', 18' x 36', and 20' x 40'. Cover Pools Inc., Salt Lake City. For details, check No. 46 on p. 139

Truss connector plate has a structural rating of 166 lb. per sq. in. Atlas Clinchplates cut inventory: 16-piece set of five plate sizes will handle all standard engineered trusses pitched from 3/12 to 7/12. 62¢ per set. Struct-Omatic, Chicago. For details, check No. 47 on p. 139

Roof-mounted fan pulls hot air out of the attic to reduce the air conditioning load or just to clear the attic of stifling air. Mounts in 16"x16" opening formed by roof rafters. Motor is 1/30 hp., fan blades are 16". Dayton Electric, Chicago. For details, check No. 48 on p. 139

Gable-end vent has adjustable base that telescopes to fit any roof pitch from 2/12 to 9/12. Vari-pitch louver has aluminum frame and screens. Comes in eight sizes with maximum base lengths from 41½" to 109". Louver Mfg., Minneapolis. For details, check No. 49 on p. 139

Truss-system plate for trusses shipped flat is engineered for 16' to 32' spans and slopes from 3/12 to 7/12. Nail holes are pre-punched for special nails which are 1½" long, .313" in diameter. Timber Engineering Co., Washington, D. C. For details, check No. 50 on p. 139

Cutting and fitting baseboard radiation on the job is time-consuming and costly. Many dollars can be saved by asking your heating contractor to purchase baseboard cut at the factory to the exact lengths he needs for each wall. Edwards Engineering Corp. offers custom-cut baseboard at no extra charge. You will find that installation time will be cut by about half. Illustrations show factory-cut 18 foot baseboard for living rooms, 6½ foot length for bathroom. Stock lengths are available from 2 to 20 feet.

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135
12-page book gives design data for stressed-skin plywood panels

Published by the Douglas Fir Plywood Assn. (Tacoma), the booklet is written for architects, engineers, and fabricators. It gives complete technical data on 30 stressed-skin roof and floor panels, including:

- Load-span tables for panels with either plastered or unplastered bottom skins.
- Section capacities of panels with either gusseted or scarfed skin joints.
- Connection details for panel edge and end connections (drawings above).

For copy, check No. P1 on the coupon, p. 139

Design sheets illustrate new line of colonial door and window trim

Purpose of the new line, according to Caradco (Dubuque, Iowa), is to provide builders and architects with matching window and door accessories that are architecturally correct yet low in cost. As shown in typical drawings above, accessories include door and window pediments, window spandrels, slatted shutters for both doors and windows, and entrance door frames, Caradco says they will be available for all sizes of its colonial doors and windows.

For copy, check No. P2 on the coupon, p. 139

For copies of the free literature, check the indicated number on the coupon, page 139.

Catalogs

Metal doors and windows. 20 pages on steel doors and windows, 8 pages on aluminum windows. Descriptions and illustrations, sections and detail drawings, glazing and installation data, glass schedules and muntin variations, specs, types, and sizes. Also steel door frames, door hardware, and folding closet doors. Ceco Steel, Chicago. (Check No. P3)

Lighting. 70 pages. Ceiling and wall fixtures in contemporary, traditional, provincial, and early American styles. Recessed units, fluorescents, luminous ceilings, outdoor lights. Virden Co., Cleveland. (Check No. P4)


5 stainless-steel sinks. 84 models. Photos, sizes, and finishes. Jenson-Thoren, Addison, Ill. (Check No. P6)

Plumbing fixtures. 24 pages. Photos of model bathrooms. Tubs and toilets; sinks for kitchens, lavatories, and bathrooms. Fittings, Kohler, Kohler, Wis. (Check No. P7)

Automatic heating-cooling controls. 8 pages. Illustrations, ratings, and specs on residential heating and cooling controls. General Electric, Schenectady, N. Y. (Check No. P8)

Hardwood paneling. 8 pages. Finishes and specs. Georgia-Pacific, Portland, Ore. (Check No. P9)

Resilient flooring. 12 pages. Color pictures of each of Azrock's vinyl-asbestos and asphalt tiles. Sizes and recommended uses, light-reflectance values, and specs. Azrock, San Antonio. (Check No. P10)

Wood windows and doors. 32 pages. Photos, construction features of many window types and door styles. Woodco Corp., North Bergen, N. J. (Check No. P11)

Technical literature

Roofing materials. 8 pages. Basic summary of types and application methods. Charts show in-place costs, durability and maintenance sizes, weights, fire ratings and slope recommendations for 13 kinds of roofing. Also covered: porches, and sun decks, gutters and downspouts, and problem roofs. Small Homes Council-Building Research Council, Urbana, Ill. (Check No. P12)


Glass for construction. 36 pages. Uses, qualities, and specs on all types of glass, including complete data on insulation glass. Also shows wired and patterned glass panels. Libbey- Owens-Ford, Toledo. (Check No. P14)

EMSR structural lumber. 8 pages. Charts show strength in relation to elasticity for electro-mechanical stress-rated rafter and floor, roof, and ceiling joists. Pothatch Forests, Lewiston, Idaho. (Check No. P15)

Translucent plastic panels reinforced with fiberglass and nylon. 8 pages. Weights, sizes, colors, shapes, loading strength, and heat and light transmission values on Filon panels. Construction details. Filon Corp., Hawthorne, Calif. (Check No. P16)

Asbestos-cement pipe for pressure and nonpressure sewer line. 12 pages. Weights and sizes, hydrosatic flexural and crushing strength, flow con-
needed for years... to prevent perplexing predicaments in the bathroom... and here it is

Conceal-A-Roll

A new bathroom convenience. Just a cover-opening away is the spare...insurance against embarrassment. Closed it's one of the most attractive accessories a modern bathroom can have. Beautifully chromed and precisely made in every detail, it combines a new and original idea with Hall-Mack's fine styling.

The smoothly operating door which conceals the extra roll is a sparkling, chrome plated brass panel — compact and flush with the wall—that blends pleasingly with any decor.

For new homes or remodeling, you're sure to make friends and influence new customers when you specify, sell or install built-in features by Hall-Mack—especially Conceal-A-Roll with the "spare" compartment that solves a delicate problem.

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Buyers prefer the advantages of modern Gas heat... and Gas offers these extra advantages to builders, too!

Every day 4 times as many buyers select homes with Gas heat—as all other heating systems combined!

They know it's quieter, cleaner, more economical heating. They've been pre-sold on it. And you can give them dozens of other arguments for Gas heating, too. For example, Gas heat is flexible. You can offer its quiet, clean, economical advantages either as hydronic heat, hot water or steam, or as a circulating, filtered warm air system.

You can adapt Gas heat to every buyer's needs, too, whether he wants central heating or individual room heaters. With a Gas warm air system it's even possible to use the same ductwork for Gas air-conditioning—at the time of installation, or as a later "add-on."

And long after Gas helps you make the sale, you'll have another reason to thank it. There are fewer moving parts in a Gas system—less to go wrong. Which means more satisfied customers, fewer call-backs.

One-stop shopping at the A.G.A. Unified Gas Exhibit—Booths 1324 to 1329 and 1423 to 1432.
More product bulletins

SHATTERPROOF GLAZING PANELS. 4 pages. Fiber-glass reinforced plastic lights compared to window glass. Glidden Co., Cleveland. (Check No. P34 below)

SUN SCREENS. 4 pages. Photos of residential and commercial installations. Stauffer Chemical, Los Angeles. (Check No. P35 below)

46.  • Cover Pools swimming pool cover
45.  • Conco portable air compressor
44.  • Kohinor portable drawing board
43.  • Royal McBee automatic typewriter
42.  • Phonomatic electric phone answerer
41.  • Bestwall Gypsum wall finish system
40.  • Doncly warm-air fireplace
39.  • Bridgeport Brass aluminum solar screen
38.  • Miller Chemical liquid mulch
37.  • Wilson trash storage enclosure
36.  • Morgan interchangeable door panels
35.  • Struc-Omatic truss connector plate
34.  • Clute & Quickstone non-heat control
33.  • Allied National stainless-steel facing
32.  • Orangeburg sewer pipe bulletin
31.  • Interpace one-piece lavatory trim
30.  • Designware plastic medicine cabinet
29.  • Voss plastic waste parts
28.  • Case one-piece lavatory
27.  • Dexter Lock colonial hardware
26.  • National Mfg. purlin bracket
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24.  • J-M asbestos-cement pipe data
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22.  • Moen faucets
21.  • Easy-Way rolling elevator
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19.  • Side-O-Matic telescoping boom loader
18.  • International harvester revolving crane
17.  • Multi-Aire double oven-range
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15.  • Prcway freestanding range
14.  • Holpoint 30" electric oven-range
13.  • Gray & Dudley built-in oven
12.  • Leigh luminous-front vent hood
11.  • Admiral refrigerator-freezer
10.  • Owens-Corning fiberglass
9.  • Honeywell dehumidifier
8.  • Lau compact humidifier
7.  • G.E. eye-level refrigerator
6.  • Goldblatt lightweight stilts
5.  • Olsen upflow furnace
4.  • Federal Pacific wall heater
3.  • Crown-Zellerbach overlaid plywood
2.  • Caradco colonial door and window trim
1.  • Chrysler Airtemp horizontal furnace

For more information circle the numbers below (they are keyed to the items described on the New Products and Publications pages) and send the coupon to: HOUSE & HOME, Rm. 1160, Time & Life Building, Rockefeller Center, New York 20.

Note: HOUSE & HOME's servicing of this coupon expires Apr. 30, 1964. If you contact manufacturers directly, it is important that you mention the issue of HOUSE & HOME in which you saw the item.

New products

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Publications

P1.  • DFPA stressed-skin plywood panels
P2.  • Caradco colonial door and window trim
P3.  • Ceeco metal doors and windows
P4.  • Virden lighting catalog
P5.  • MasterBronz Powder coatings
P6.  • Jemson-Thomsen stainless-steel sinks
P7.  • Kohler plumbing fixtures catalog
P8.  • G.E. heating-cooling controls
P9.  • Georgia-Pacific hardwood paneling
P10.  • Arzock resilient flooring catalog
P11.  • Woonco window and door catalog
P12.  • SMC-BRC roofing materials handbook
P13.  • Bell & Gossett zone-heat control
P14.  • Libby-Owens-Ford glass data
P15.  • Potlatch ESMR structural lumber
P16.  • Filon translucent panels booklet
P17.  • J-M asbestos-cement pipe data
P18.  • Master Builders concrete data
P19.  • Bestwall-Certained building materials aid
P20.  • Architectural Fenestration of Wood Bulletin
P21.  • Wilson Lighting illuminated ceilings
P22.  • Motzau Flush Doors bulletin
P23.  • Link-Belt sewage treatment plant
P24.  • Vermiculite Institute insulation
P25.  • Crown-Zellerbach overlaid plywood
P26.  • Kleen wood-frame patio doors
P27.  • Arch Opening Steel Buck bulletin
P28.  • Formica plastic laminated doors
P29.  • Ventroila ventilating fan bulletin
P30.  • Norton door control unit bulletin
P31.  • Orangeburg sewer pipe bulletin
P32.  • Northrop sliding windows
P33.  • Glidden shatterproof window lights
P34.  • Struc-Omatic truss-system plates
P35.  • Stauffer sun screens bulletin
P36.  • Louver Mfg. gable-end vent
P37.  • Dayton Electric roof-mounted fan

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BASEMENTS: WHEN DO THEY MAKE REAL SENSE? Basements can be an abomination; but they can also make some houses more livable and more salable. (March, 1963)

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