November 1953

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**Frank Lloyd Wright**
One small house and one big one by the dean of US architects (below and p. 118)
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Will money or demand be the '54 housing problem?

- NAHB directors, meeting at New Orleans, hear predictions both ways. Meanwhile, mortgage funds loosen slowly

Said HHF Administrator Albert M. Cole last month to NAHB directors at New Orleans: “My judgment is that the possible restriction on the market next year is mortgages, not consumers.”

From the same platform, Mortgage Banker President Brown Whatley prophesied: “Demand will be the controlling factor [in '54]. The mortgage money will be there—at reasonable rates.”

Among the experts, Cole was in a minority. With interest rates softening generally, with price cutting and layoff news back in the papers after a long absence, it was easy to see a good chance for surplus mortgage money toward the end of next year. Vice President Norman Lencske of Prudential announced that Prude would have 20% more funds for mortgages in '54 than this year. He told builders: “The time may come next year or the year after when we will be as hungry [to buy mortgages] as we were a couple of years ago when you fellows tried to charge us 4% to get a mortgage on our books. Then the shoe will be on the other foot.”

Corner turned. The prospect of plenty of mortgage money for VA and FHA loans on the horizon was a long way from the situation at the start of November. The summer mortgage pinch was easing (“We've turned—definitely,” said FHA Commissioner Guy Hollyday), but builders were still finding lenders choosy about what they loaned, still paying many discounts so big they might well violate the spirit if not the letter of the much criticized law against passing on discounts over 2 1/2 points. NAHB President Manny Spiegel renewed his warning that “homebuilders would be foolishly to undertake any major operations without solid assurance that the mortgage credit is available.”

At the start of November, the best signs of what lay ahead in the mortgage market were to be found outside it. Most significant was the easing of money supply and interest rates. Top grade commercial loans (up to six months) sank from 2 1/2% to 2% in New York—the third cut in a month. Treasury 3 1/2% long-term bonds, which had sagged as low as 98 1/432 just after they were issued last spring, bounced back to 104. (The higher the price, the lower the net interest yield.) Every notch that interest rates went down, VA and FHA loans with their politically-frozen 4 1/2% rate grew a notch more attractive.

Flexibility at work. The easing in money was the result of deliberate administration policy. The honest money policy brought to Washington by the Republicans, overlaid on the restrictive policy that the Federal Reserve had been following for two years, produced the credit pinch that began last spring but reached its peak effect on homebuilding in the third quarter. When the Fed realized the difficulties that lay ahead if the tight money policy were not relaxed, it began pumping money into the credit stream in May. First, the explanation was to meet heavy Treasury cash needs of the latter half of the year. Lately, there has been the additional justification of stimulating business which shows signs of slowing down. Consumer borrowing seemed to be declining. Seasonal demand for business loans was less than usual. Indications pointed to a reduced rate of corporate issues. So when the Treasury floated its Oct. 28 bonds to raise $2 billion in new money to cover deficits, it paid only 2 1/2% for a 7 yr., 10 mo. issue and found the offering oversubscribed five times. That contrasted with a 2 1/2% rate paid by the Treasury on a 3 1/2 yr. issue in September. The difference showed the Treasury's estimate of how much the market had softened since then.

If the spring "hard money" policy hit homebuilding in the third quarter, would its reversal open up the mortgage outlook by mid-winter? It seemed a fair bet it would. Another reassuring item: in picking the maturity length for its Oct. 28 issue, the Treasury deliberately tried not to appeal to insurance companies and savings banks. Reason: to avoid siphoning funds from the mortgage market.

Discount law rapped. NAHB’s sessions produced these other developments:

- Concerned over “constantly rising labor costs” plus union demands to kill Taft-Hartley Act protection against the closed shop, NAHB voted to revive its labor department, give
local associations more aid in dealing with unions. This seemed to put homebuilders on a collision course with the AFL building trades department. The AFL decided a month earlier to begin an organizing drive among small builders.

- The directors adopted a detailed set of recommendations for changes in housing laws and reorganization of government housing activities. Among other things, these urged simplification of FHA titles, lower down payments, elimination of duplication between FHA and VA without combining the two programs outright, and stripping HHFA of its operating functions.

- Both FHA Chief Hollyday and VA's T. B. King criticized the all-but-unworkable law passed last session by Congress ordering VA and FHA to prevent builders from passing discounts on to their customers. Hollyday called it "perfectly terrible." Said King: "I don't think anybody likes the way Sec. 504 is written. I don't think it will stay as written."

- Cole and Hollyday turned aside pleas they urge the President to cut down payments on FHA loans, as he has power to do. Said Hollyday: "When you are trying to get back to a supply and demand economy you mustn't rock the boat," He advised builders to "tighten up your belts because some of you are going by the wayside."

- At the NAHB executive officers council in Biloxi preceding the New Orleans meeting, William Hanna Jr. of Pittsburgh defeated William Gillis, San Francisco, for president.

**HHFA chiefs hear need for better electric wiring**

- Not one builder's house in 20 is adequately wired for electrical living.
- Adequate wiring costs far less during construction than after the house is finished. But in Los Angeles (for example) most home buyers find they cannot use an electric stove without first paying an extra $94 for an electrical outlet.
- No house should have less than a 100-amp. panel board (extra cost: $5).
- With so many more room coolers, electric blankets, and other new appliances, all circuits (not just kitchen circuits) should be three-wire.
- These were among the many telling points made at an adequate wiring breakfast sponsored by House & Home during the NAHB directors' meeting in New Orleans. Present were HHFA Administrator Cole; Veterans' Loan Chief King; NAHB President Spiegel; Executive Director Dickerman and other top officers of NAHB, and more than 100 directors and regional vice presidents; Chairman Howard Stevenson of the Industry Committee on Interior Wiring Design; and a group of top experts on wiring, including John F. Biggi of the Adequate Wiring Bureau, Carl Bredahl of Westinghouse, H. H. Watson of General Electric, and James Cook of Consolidated Edison. During the discussion, blame for inadequate wiring was variously assigned to:

1. The builders—for not realizing the average electrical load has increased 100% since before the war.

2. FHA and VA—for refusing to reflect in valuations the higher cost of better electrical installation or any provision for future electrical needs.

3. Manufacturers—for not developing new ways and equipment to make adequate wiring less expensive.

4. Local codes (and even the National Electrical Code)—for blocking the use of more economical wiring methods.

Among discussion leaders were President Spiegel, Dave Slipher, Earl Smith, Leonard Haeger, John Bonforte, Dale Bellamah, Carl Gellert, Andy Place.

Many speakers pointed out that better wiring is just one of many items in which FHA and VA appraisal practices are blocking the spread of higher standards. FHA's minimum property requirements call for only one circuit for every 500 sq. ft. of house—as if that were any measure of electrical demand. And many offices allow a flat $5 per outlet, regardless of the quality of the parts used or the adequacy of the wiring behind the outlet.

**SIDELIGHTS**

**New problem for code unity**

The impending death of HHFA's research division threatened to slow down the already snail-paced efforts to unify U. S. building codes. HHFA has been providing secretarial work for the poverty-plagued Joint Committee on Building Codes, which for four years has been making slow but consistent progress at reducing the nation's four major regional codes to a single document. For instance, HHFA worked up comparative tables, studied why codes varied widely without any obvious reason.

HHFA Researcher Gilbert M. Barnhart, who was secretary for the joint committee, had been personally influential in persuading the recalcitrant Southern Building Code Congress to join the Joint Committee; SBCC sent observers to its last four meetings. With the end of HHFA research, Barnhart has become head of the redevelopment division's building and housing code section, where he will have to give up working for the joint committee. Last month, the American Standards Association offered to step into the secretarial breach, if no one else would.

**When is an area blighted?**

The diagnosis and cure of urban neighborhood blight have elicited some complicated language. This month in Philadelphia, Executive Director Francis Bealworth of the Friends' Neighborhood Guild put it very simply: "When the daughter is afraid to bring her boy friend to the house, when she begins meeting him downtown, that's an indication that blight is setting in."

**Autos vs. housing (cont'd)**

Even in Canada (where housing starts are up one-third this year from 1952), people are spending more money on automobiles than housing. So said President David Man- sur of the Central Mortgage and Housing Corp. last month. In 1939, he added, 15% of Canada's consumer income went for shelter; today only 13%. Said he: "If a man wants to live in what we consider substandard housing and drive a Cadillac, why worry about it?"

**Hard spots in soft housing**

Even bearish mortgage men like the housing market outlook in spots like Los Angeles. Chief reason: southern California's staggering population growth—a trend pinpointed last month by Los Angeles' claim to have passed Philadelphia to become the nation's third largest city. For the last three years, about 100,000 persons a month have been moving into Los Angeles County. The LA Chamber of Commerce is predicting that Los Angeles will pass Chicago by 1960. By 1970, according to Michigan Professor J. Philip Warnette, California will probably be the nation's most populous state, with 21 million inhabitants against 30 million for New York.

**The new mayor of New York**

Robert F. Wagner Jr., the New Deal· Tammany candidate who was elected mayor of New York this month, is no stranger to housing and its problems. The 44-year-old only son of the late US senator was commissioner of the city's much-criticized department of housing and buildings from December '46 to November '47. From then until 1949 he was chairman of the city planning commission.

Housing figured lightly in the campaign, which also left New York voters apathetic. (Wagner agreed with the other two principal candidates, Republican Harold Riegelman and Liberal Rudolph Hallett that traffic was the city's most difficult problem.) Riegelman charged that while Wagner was building chief, "the number of enforced complaints of housing law violations rose from 30,000 to 92,000, an increase of 140%." Wagner's reply: housing was so scarce then he could not enforce codes because displaced tenants would have had nowhere to go.

A public housing advocate, Wagner would move to New York State for aid now that Congress has throttled down federal tax-supported starts. He urged a $300 million state bond issue for public housing and partial tax exemption for construction of middle income housing by private, non-profit co-ops. His recipe for traffic: a $100 million traffic control program run by a city parking authority with power to build midtown multistory garages.
Public housing wins a reprieve

> General Accounting Office rules that Congress did not mean to shut off 35,946 projects in the pipeline

> HHFA chiefs woo public housers and PHA Chief Slusser says he wants to build one-family units

When Congress limited public housing to 20,000 starts this fiscal year, it whetted speculation over the fate of the other 35,946 approved units in PHA's pipeline. Both public housers and men on Capitol Hill generally agreed the government could not back out of contracts covering the other units. The government had agreed in each case to pay annual contributions as soon as the housing was built and occupied. But since Congress had taken so firm a stand on whittling public housing to a token program, PHA Commissioner Charles Slusser on July 24 ordered all preliminary work halted, including site acquisition and architectural planning.

Still unsure of their legal ground, Slusser and HHF Administrator Albert M. Cole asked the Attorney General for advice. He passed the buck to the General Accounting Office, the agency set up by Congress to exact compliance with its fiscal orders. On Oct. 19, Comptroller General Lindsay Warren wrote Cole there was nothing in the law to halt preliminary work or stop PHA from advancing loans or technical aid. Warren held that Congress sought to halt only "new" public housing contracts, did not intend to abandon the 35,000 left dangling by this year's 20,000 limit. Wrote Warren: "Not only is there absent from the language employed any direction in this respect, but discussions during the legislative proceedings as a whole indicate that the problem of meeting commitments already undertaken was recognized and left for future resolution."

Scylla and Charybdis. Whether they were surprised by Warren's opinion, Cole and Slusser were left on a spot. If they rescinded the July 24 order, they risked legislative anger. But meanwhile, local housing authorities with half-groomed projects were growing restive. Some, like Milwaukee, were caught in the middle of site acquisition by Slusser's order. Mixed with the grumbling were not too friendly warnings that if projects were kept idling much longer, there would be lawsuits. And communities that had incurred legal and architectural expense, most observers felt, would insist they be allowed to proceed or the government would face claims for liquidated damages. Few things would be more apt to goad the big anti-public housing bloc in Congress to a finish fight to kill the program than lawsuits to compel the government to pay out more subsidies. Before making any loans from the limited funds at hand, Cole and Slusser decided to consult Congressional appropriations committee members.

One indication of the possible outcome lay in Chicago, which wanted to build 1,750 units more than the 1,827 Slusser allocated to the city for this year (H&H, Sept. '53, News). Responding to local pressure, Cole and Slusser promised orally to go through with their usual approval of sites for the extra units. Said Chicago Alderman Robert E. Merrism after a trip to Washington: "The understanding is that when, as and if funds are available, Chicago will be reimbursed [for the $2.5 million it would spend for sites]."

Wooing public housers. In word as well as in deed, HHFA chiefs were busy last month reassuring public housers they did not intend to help kill the program. At the annual convention of the National Assn. of Housing Officials in Milwaukee, Cole declared: "There is no intention . . . of curtailing federal help under the authorities given us. . . . I did not oppose the public housing section of the 1949 Act because I object in principle to any kind of program of federal assistance for decent housing for low-income families. We should have an effective program."

Said PHA Chief Slusser: "I am dedicated to the original concept of the 1949 Act . . . of using the funds and credit of the US . . . to remedy the unsafe and unsanitary housing conditions injurious to . . . the citizens of the nation." Elaborating his view of public housing mistakes, which he said he would try to fix, Slusser cited: 1) overprogramming that has caused vacancies in some cities, 2) high-handed action by some local housing authorities in jamming through programs without adequate regard for the views of other local interests.

Slusser said he was "thinking strongly" about trying to bring architects and builders together in a test city to put up single-family public housing homes that would blend into the rest of the community. His inspiration, he said, was seeing good two-bedroom houses priced at $7,000-$7,500. What did public housers think of Cole's pitch? President Ira S. Robbins of the National Housing Conference, public housing's chief lobbyist group, told NAHO Cole had spoken "in clear but unmistakable terms." His counsel: "It's time to get into our shorts and gloves and really start fighting."

Survey of fix-up market offered by Census Bureau

One of the weakest links in building statistics—the lack of information on the size of the fix-up market—may soon get important reinforcing. The Census Bureau offered last month to find out how much money US families spend on repairs and modernization for a piddling $20,000 a year. Method: add that question every three months to its monthly checkup of 25,000 families to find out the number of people working and unemployed. The $20,000 would buy fix-up data for owner-occupied homes, Census officials figured. It would cost more to broaden the inquiry to cover rental housing.

If the Budget Bureau gives necessary approval to spend the money—a big if these days—Census officials would like to start checking the remodeling market in January.

However big this market really is (estimates range from $4.5 billion by the Commerce Dept. to $6.5 billion by the US Chamber of Commerce), the National Retail Lumber Dealers Assn. said it was sure of one thing last month: business was on the rise. In a September survey of 650 of the 26,000 retail dealers, NRLD found 43% reporting an increase this year. Only 11% reported a drop, and 46% experienced no change. The average pickup was 15%. 
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Corporation, said business was running about 50% ahead of last year. In the company year ended last June 30 National produced 12,738 units. For the year ending next June 30, Price raised his last month's prediction (25,000 units) to forecast that production and sales would reach 37,500, a 50% increase. Explanation: National had found an almost untapped market with its two-bedroom Cadet model for $5,500 and a four-bedroom 912 sq. ft. Cadet for $6,100, land included (p. 102). "The only limit on the Cadets we can sell is the number we can produce," said Price. A Houston builder planned to erect 1,000 four-bedroom models, he said, and National was planning new factories in Georgia, Texas and Utah to expand production.

Gen. John J. O'Brien, president of US Steel Homes, said his firm's New Albany, Ind. plant ran at capacity all this year and will turn out 6,500 to 7,000 units. With its new Harrisburg, Pa. plant scheduled for completion next month, US Steel's 1954 output will be 10,000 to 12,000, said the General.

General Manager Edward R. Hwass of Harris-McEwen Corporation's houses division predicted sales for the year ended Oct. 30 were 1,600, averaging almost $12,000 each, compared with 1,300 at $10,000 or less last year. "We have the largest backlog of orders in our history," said Hwass. "It looks as if we'll have to work overtime—six days a week—to keep up with demand in 1954."

W. L. Mainland and George D. Lytle, sales vice president and secretary-treasurer of Modern Homes, Dearborn, said Modern produced about 600 prefabs from $10,000 to $18,000 in 1952. This year they expected to hit 1,000 (p. 158). For 1954 they planned a new plant somewhere in Iowa and will produce a two-bedroom house for $8,000 including plot.

An exception to prefab optimists was President Peter S. Knox Jr. of the Knox Corporation, Thomson, Ga. He estimated his 1953 production would be 1,200—only about two-thirds of 1952-53 output. He said 1954 volume would depend entirely on financing. Knox said his firm could build and sell 10,000 units for $6,600 or less if mortgage money were forthcoming. (But he had not yet found any of the Title I, Sec. 8 mortgage funds that President Price of National and FHMI President William B. F. Hall reported becoming available.)

A committee to study the final retirement of board chairman and former Executive Vice President Morton Bodfish; 2) a bid by the League for a merger or reunion with the National Savings & Loan League. Many would regard the two subjects as one. US League President Charles L. Clements and former President Henry A. Bubb, chairman of a committee to study possibilities of a merger with National, insisted they were unconnected.

Bubb reported: "The retirement of Bodfish was not done for unification... It was over (at executive committee meeting in Chicago Sept. 28-29) before we ever discussed unification." Bubb added: "It is likely that there is a better opportunity now for a merger than previously, since Bodfish has been retired and since [Executive Manager] Oscar Kreutz is out at National." Kreutz left in September to become executive vice president of the St. Petersburg, Fla. First Federal S&L Assn.

Pre-arranged plan. Bubb noted that when Bodfish was upped to board chairman last November the plan was for him to retire as soon as Executive Vice President Norman Strunk, a Bodfish protégé, was ready to run the show. With that now accomplished, said Bubb, the executive committee voted his formal retirement, effective Oct. 1. Clements added that Bodfish wanted to be relieved of his League duties for business and health reasons.

Bodfish became executive vice president of the league in 1931, was made chairman of its executive committee in 1945. But his forceful executive methods and frequent crusades against targets like public housing and Fanny May did not please all members. In 1943, 192 members broke away to establish the National League, now grown to more than 750 members.

Bodfish's departure from the league left only one of housing's principal lobby figures of the last decade still on the national scene: Exec. Vice Pres. Herb Nelson of NAHB. Retired last year was NAHB's Exec. Vice Pres. Frank Cortright, who, with Nelson and Bodfish fought for private real estate principles with such vigor and effectiveness that opponents paid them the compliment of tagging them the "three invisible Senators."

Morton Bodfish is retired as chairman of US Savings & Loan League

US Savings & Loan League members at their 61st annual convention in Chicago late this month will have two lively topics to discuss: 1) the final retirement of board chairman and former Executive Vice President Morton Bodfish; 2) a bid by the League for a merger or reunion with the National Savings & Loan League. Many would regard the two subjects as one. US League President Charles L. Clements and former President Henry A. Bubb, chairman of a committee to study possibilities of a merger with National, insisted they were unconnected.

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Truss roofs cheapest. Richard B. Pollman, chairman of the institute's new design, engineering and research committee, reported a cost analysis of six typical roof systems which gave truss construction an edge. The study computed costs to roof a 40' house either 24' or 28' wide, based on labor at $2.85 an hour and constant material costs. At the prices used, a 4/12 slope truss construction was cheaper than any other method at either width. For a house 24' wide the savings margin was $23.28, or 3.5% under the next most costly method; for a 28' house, $51.49, or 6.7% cheaper. The cost summary:

<table>
<thead>
<tr>
<th>Roof type</th>
<th>24' wide</th>
<th>28' wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/12, truss</td>
<td>$628.80</td>
<td>$707.61</td>
</tr>
<tr>
<td>2/12 conventional</td>
<td>$522.00</td>
<td>$744.63</td>
</tr>
<tr>
<td>Beam &amp; purlin</td>
<td>$522.38</td>
<td>$760.84</td>
</tr>
<tr>
<td>Stressed skin</td>
<td>$609.33</td>
<td>$820.05</td>
</tr>
<tr>
<td>York, 4/12, conventional</td>
<td>$730.89</td>
<td>$820.05</td>
</tr>
<tr>
<td>Beam &amp; plank</td>
<td>$734.14</td>
<td>$834.77</td>
</tr>
</tbody>
</table>

Costs for 2/12 conventional, beam and purlin and stressed skin roofs 24' wide were all within a $7.25 spread, and within a $15.53 spread for roofs 28' wide. Their progressive order of expense at 28', however, exactly reversed the 24' wide expense order.

Suggestion for study. On the US league unification committee with Bubb were J. Howard Edgerton of Los Angeles, whose nomination as 1954 vice president was announced last month and who, barring a break with tradition, will become president in 1955; Ben Behac, president of the Talman S&L in Chicago; James Davidson, president of the Toledo First Federal S&L and Joseph Holzka, president of the Northfield S&L of New York. They met Nov. 1 and 2 in Top eka, where Bubb is president of the Capitol S&L. Bubb reported their only recommendation to the Chicago convention will be that "the National League be invited to consider appointing a similar committee for unification."

National's reaction as expressed unofficially but authoritatively: the younger league is happy by itself, has little interest in merger or reunion just for the sake of consolidation. But it harbors no hostility, would consider carefully any proposals the US League may make.

Unification Committee member Edgerton, 45, is a former president of the California S&L League. He became attorney for the Los Angeles Mutual Building & Loan Assn. in 1924, was vice president when it became California Federal S&L in 1937. He has been president since 1939.

Nominated for US league president next year was (as usual) this year's vice president: Ralph R. Crosby, 49, president of Old Colony Cooperative Bank of Providence. R.I. Crosby was on the league's policy-making executive committee in 1945-48.
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COMPACT KAUSTINE UNITS PROVIDE EXTRA LIVING SPACE AT LOWER COST...

- Faced with constantly increasing building costs, more and more builders are turning to Kaustine Engineered Heating to help them sell homes.

  With Kaustine they cut construction and installation costs...save usable space...and offer their prospects the finest and most economical heating equipment.

  Here are four hundred quality homes equipped with Kaustine fully automatic oil fired "Counter-Flo" Units delivering 75,000 B. T. U.'s that need only 3½ square feet of floor space to operate efficiently.

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QUALITY COSTS LESS

There is a Kaustine Furnace or Winter Air Conditioner for every type of home.
HOUSING STATISTICS:

Plywood prices rebound after sharp dip; starts so far this year fall below '52's

West Coast mill prices for plywood fell to a postwar low of $68.59 per M sq. ft. for a time last month, putting some producers in the red. That was $21.43 (23.5%) below the $90 list price of leading mills from February through late August, when the BLS index grade averaged $85.56 (see chart). There was fast reaction to the plunge. Marginal mills were forced to close, reducing total production; smart purchasers sent orders surging upward; soon prices headed up again. Early this month Georgia-Pacific pushed them all the way back to $88.

Equally important, although not so sharp as plywood's plunge, was the long and steady decline in Douglas fir 2" x 4" mill prices (see chart). From last year's (May) high of $75.80 per M bd. ft., the ELS index grade fell steadily to $58.78 last month—a 22.4% slide. Prices for larger Douglas fir dimension have been firmer, as have prices for southern pine lumber.

MORTGAGE LENDING ACTIVITY

(Mortgage markets in millions of dollars in non/arm mortgages of $20,000 or less by various types of lenders)

<table>
<thead>
<tr>
<th>City</th>
<th>FHA 4%/2's</th>
<th>VA 4%/2's</th>
<th>FHA 5%/4's</th>
<th>VA 5%/4's</th>
<th>FHA VA</th>
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<tr>
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<td>par-101</td>
<td>a</td>
<td>par-101</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>Out-of-state</td>
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<td>a</td>
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<tr>
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<td>96-98</td>
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<td>96-98</td>
<td>a</td>
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<tr>
<td>Denver</td>
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<td>97 1/2-98</td>
<td>97 1/2-98</td>
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<tr>
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<td>96-97</td>
<td>96-97</td>
<td>a</td>
</tr>
<tr>
<td>New York-New Jersey</td>
<td>97 1/2-98</td>
<td>97 1/2-98</td>
<td>97 1/2-98</td>
<td>97 1/2-98</td>
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<td>96-97-97</td>
<td>96-97-97</td>
<td>96-97-97</td>
<td>a</td>
</tr>
<tr>
<td>Portland-Sa.,</td>
<td>96-par</td>
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<td>96-par</td>
<td>96-par</td>
<td>a</td>
</tr>
<tr>
<td>San Francisco</td>
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<td>par</td>
<td>94-96</td>
<td>95 1/2-96</td>
<td>95 1/2-94</td>
</tr>
</tbody>
</table>


HOUSING STARTS as estimated by the Bureau of Labor Statistics dropped from 94,000 in August to 92,000 in September. That compared with 106,800 in Sept. '52 and 96,400 in Sept. '51. And for the first time this year, total starts since January sank below last year's level. Through September, they totaled 863,400, compared with 886,300 in the same period a year ago, and 886,000 in 1951. Private starts through September totaled 830,700—1% ahead of last year.

FHA AND VA APPLICATIONS for insurance and appraisals on new housing turned down again in September. FHA applications covered 18,041 units, compared with 22,118 in August. Total FHA applications for nine months were 163,698, or 24,874 ahead of Jan.-Sept. '52. VA requests covered 187,599, or 20,546 more than the first three quarters of 1952.
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**HOW TO GIVE YOUR CLIENTS BETTER SCREENING AT NO EXTRA COST**

**Give the homes you design the benefit of better screening protection.** Columbia-matic Tension screens are the newest, safest, most modern way to screen a double-hung window. They are the only screens on the market offering automatic tension! And, they cost less than old-fashioned, carpenter-fitted, wooden screens. Columbia-matics are the perfect complement to modern double-glazed windows.

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- **Save time** — Easy to put up and take down from inside. Anyone can do it in seconds. Easily swings free for dusting sill or washing window.
- **Save work** — No more struggling with clumsy wooden frames or ladders. Columbia-matics have top and bottom rails only. Roll up for compact storage.
- **Save money** — All rustproof aluminum. No drip stains on house. No painting, maintenance. Full-length aluminum mesh gives complete insect protection.

**Only Columbia-matic gives AUTOMATIC TENSION**

Patented bottom rail is spring-loaded, automatically puts right amount of tension on screening. Keeps it drum-tight to blind stops at all times ... automatically compensates for unevenness in sill; temperature changes. Screen can’t sag or ripple. Easy-open tension locks anchor screen firmly; flip up to open. Side-mounted, no hardware on sill to snag clothing. Another Columbia-matic exclusive.

**Here’s how Columbia-matics save on initial cost:**

- **Pre-cut to specification.** Perfect fit assured. No fitting. Can’t swell, stick, warp. All rustproof aluminum.
- **Easily installed.** Ready to mount from inside. Only 7 screws. No template.
- **Cost less than ordinary, full-length screens.** Installation time is cut to a fraction of that for wooden screens. Takes an inexperienced man less than 5 minutes. No painting.

**16,000 Columbia-matics!**

Mr. Clifford O. Boren, President, San Diego Building Contractors’ Association, says:

... “We have used 16,000 Columbia-matic Screens in our Redwood and Hubner developments. We have found them completely satisfactory. Not only do our customers like them, but they save us considerable on installation costs ...”

Clifford O. Boren Contracting Co., Inc.

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Address __________________________
City _____________________________
Zone ______ State __________

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HOUSE & HOME
NOVEMBER 1953

BUILDERS AT WORK:

Fourteen-city builder

Probably the only builder in the nation operating in 14 cities and towns strung out over a span of some 246 miles is northern California's Earl W. Smith. From his headquarters in El Cerrito on the eastern edge of San Francisco Bay, Smith directs homebuilding that stretches from the mid-San Joaquin farmbelt at Atwater to the upper reaches of the Sacramento Valley at Red Bluff. The secret, says Smith, is to find towns spaced close enough together so one superintendent can oversee construction in from three to six communities.

Trucking precut lumber from El Cerrito, surprisingly enough, is not a big cost problem, Smith says. One reason is that he is building only three models (two-bedroom as low as $6,895, three-bedroom as low as $7,695 and four-bedroom as low as $8,695) so a truckload of subs for concrete, paint, plumbing, roofing as few as 15 homes in one town, he is quick to admit he would lose money if he did so in a city "75 mi. from the nearest other one." In four spots, Smith is affiliated with local investors (former NAHB Executive Vice President Frank Conriff is the one in North Sacramento). But Smith's organization still provides everything from land planning and financing to salesmen.

Pulse of the market

Cleveland's new Southgate project of 500 houses, 450 apartments and a shopping center with 125 stores got a fast start with 44 house sales at $17,750 to $18,000 the first week, reported Joe Siegler of the building syndicate of A. Siegler & Sons, Zehman-Wolf Construction Co., and Maurice J. Fishman. The Cleveland Press's semiannual survey of homebuilders' construction plans for the coming winter and spring found 15% planning houses to sell under $13,000; 43% from $13,000 to $17,000; 24% from $17,000 to $20,000; and 18% over $20,000. Earlier this year FHA tagged Cleveland as the highest-cost residential construction area in the nation. Dayton, Ohio, Homebuilder C. W. Sharp switched to a contemporary-design slab-foundation house at $12,400 (with carport) this spring, and from June to October sold all 46. One feature was an interior bath, an innovation approved by FHA this summer after a builder's campaign in which Sharp took a leading role. Said Tacoma Homebuilder Steve A. Belfoy, commenting on changing market trends: "There is no more interest in stock plans. Buyers are demanding better planning." To design houses for next year, he engaged Architect Donald Burr. . . . Because the market for older houses was soft in the Newark, N.J. area, Prudential Insurance Co. found it had to give unofficial aid to sell houses left by some of its home office employees being transferred to its new regional offices in Minneapolis and Jacksonville.

'Split-level' row houses

A lot of Baltimoreans grew up in row houses and still like them. The small yards are easy to maintain. Masonry walls need little repainting. They can be heated far cheaper than a cottage of the same size. Taxes are less. Last month, Baltimore was taking especially to a 1953 version known locally as a "split-level" model. It was not a true split-level with staggered floors; Baltimore's had a ground-level basement in the rear with door and windows opening to a back terrace, allowing a full-daylight kitchen-dining-living space on the basement level, and in turn an extra bedroom or two upstairs.

Jack Meyerhoff & Sons opened six such models designed by Architect Kenneth Cameron Miller in September. In six weeks, the firm sold 87. Prices ranged from $10,990 for models with three bedrooms, two full baths, to $11,750 for five bedrooms, two full baths, and $12,490 for four bedrooms and two and one-half baths. The idea—which is also being used by other builders—evolved after people in East Baltimore began living in their basements in summer because they were cooler.

Why do Baltimore builders keep building row houses? Said Robert Meyerhoff, Jack's son and vice president: "Like merchandisers everywhere, Baltimore builders provide what the market will buy, and not necessarily what the theorists say is the right thing." The trend is away from row houses, however. Baltimore is running out of land zoned for them.

Multibuilder subdivision

Fort Worth Homebuilder Joe Driskell was pleasantly surprised with an experiment in his newest 600-lot Sunset Heights South subdivision. To induce small builders to work side by side with a large builder he offered to let any other builder erect houses in his development for any buyer, or designed by any architect—subject to architectural review by Architects Stewart & White and approval by Driskell. So far, seven builders had joined Driskell on the $9,000 to $16,500 homes subdivision. Twenty of 31 houses on the tract were sold opening day last month.

A prize for promotion

Work gave way to play last month for 20 regional winners in the Acapulco Derby home merchandising and promotion contest held during National Home Week under sponsorship of NAHB and Minnesota-Honeywell. Builders or firms who won the nine-day, all-expense fishing trips to expensive, tourist-starved Acapulco, Mexico: Charles J. LaDuke, New Britain, Conn.; Haring & Grant, Tkawkahoe, N.Y.; Catranel Builders & Developers, Pittsburgh; S. L. Haarman Organization, Inc., Baltimore; George Goodyear, Charlotte, N.C.; Fred G. Fett Jr., Brooklaven, Ga.; William F. Hendy, the Arcos Co., Cincinnati; John R. Worthman, Fort Wayne, Ind.; Bisant Brothers Construction Co., St. Paul; McMurtry & Co., West Des Moines; Frank Robertson, San Antonio; Cannon-Papanikolas Construction Co., Salt Lake City; Bill Weaver, Carey Construction Co., Denver; Albert Balch, Seattle; R. W. Kurth, Yourstone Homes, Inc., Van Nuys, Calif.; Charles Freeburg, Freeburg Brothers Builders, Memphis; Louis J. Zollinger, general manager of R. C. Construction Co., New Orleans; Hallcraft Homes, Phoenix; Earl R. Stephens, Brigantine, N.J.; Rollin E. Meyer, San Francisco.

Prize house for homebuilders' show designed by teen-ager

For their fall home show, members of the San Fernando Valley Building Contractors Assn. erected 21 display houses. One was this redwood board and batten, 1,200 sq. ft. contemporary designed by 18-year-old Kenneth Kooy (front) of Van Nuys, Calif. It was picked as the best of the more than 50 entries in a design contest sponsored by the association among valley high-school students. Judges awarded Kooy the $100 defense bond first prize, cited his clean lines, maximum use of floor space, and emphasis on modern building techniques and refinements.
Pitfalls in urban rehabilitation

San Antonio homebuilders' fight against slums faces stern test. Failure could hurt the program elsewhere

Token support at city hall, shortage of movers and shakers noted. New laws, more money are needed

One of the big dangers of rehabilitation drives, think many of the men who know the subject best, is that enthusiastic builders and realtors will oversell them. This can have unhappy results: an ordinance is adopted that is supposed to cure slums, but nobody follows through. Most are shacks, not sound brick or brownstone shells. The industry's rehabilitation in the pitfalls of rehabilitation drives? Reported House & Home's correspondent:

Watchword of San Antonio's Rehabilitation Commission is: "We have to crawl before we can walk." But outsiders, observing the committee's states righter approach and its disinclination to face up to the city hall status quo, doubt if the gait ever will exceed an uncertain toddler. The Housing Authority, using 1950 census figures, calculates 19,800 San Antonio families, or 43% make less than $2,000 a year. Of 41,000 dwelling units, 37% were classified as substandard by the census. Thousands lack all plumbing. Corral is the San Antonio term for a group of rented shacks under single ownership on one lot. During a tour of the area rehabilitation back-up, the city council was shown the operation of a housing quality survey. When the student returns volunteers will be recruited and taught how to make the survey. Most will come from the San Antonio Junior Chamber of Commerce which has endorsed the rehabilitation program and appointed a city development committee. It is hoped to have the survey findings ready at about the time the rehabilitation committee recommends a plan of action to city council.

The rehabilitation drive seems sorely in need of a broader base. Twelve of the 25-man rehabilitation committee are realtors or homebuilders. Most of the others are relative unknowns not noted for work in their city's or the nation's slum effort. There is a sore need for a handful of dedicated civic movers and shakers. Eight of the 25 members showed up at the last general rehabilitation committee meeting.

An effort in '39. The city's first assault on the slums was launched by Maury Maverick, then San Antonio's fiery mayor, in 1939. Many of the worst slum dwellings were razed and public housing units for 2,554 families were constructed. In 1949, the Housing Authority got approval from Washington for 2,600 more units. Completed or under construction currently are 2,145. In 1950, urban redevelopment recurred its head. The city planning commission, then consisting largely of prominent realtors, home builders and businessmen, recommended to the city council that San Antonio take advantage of the program. Washington made a preliminary grant and allocation and City Planner W. H. Lilly completed a master plan in late 1951. But little has been done since and Washington is moving to wipe out the San Antonio fund reservation.

The new city council obviously has no intention of tying in their clean-up, fix-up program with urban redevelopment, even in the case of rock-bottom slums. They plan to do the job entirely by education of tenants and landlords and strict enforcement of a minimum housing code, not yet drafted.

A city planning department staffer is to attend a month-long course under the auspices of the American Public Health Association. There he will get the details on the operation of a housing quality survey. When the student returns volunteers will be recruited and taught how to make the survey. Most will come from the San Antonio Junior Chamber of Commerce which has endorsed the rehabilitation program and appointed a city development committee. It is hoped to have the survey findings ready at about the time the rehabilitation committee recommends a plan of action to city council.

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Accent on economy. There is only token support from the mayor, council and city manager. Members of the economy-happy administration are likely to balk when proposals for hiring of housing inspectors are submitted.

The administration of building, health and fire codes appears honest but far from aggressive.

Building, plumbing and electrical inspection are under the planning department. Health is under the Health Department and fire and safety under the fire chief. There is no housing code or minimum housing ordinance. A housing code under discussion for some time contains no occupancy provisions.

Rehabilitation committee members are aware of the mess, favor the creation of a simplified, centralized housing division or department. This, however, would probably require amendment of the city charter which is difficult and time consuming under Texas law.

Old law balks reform. There is a bright note: A few corral owners have promised voluntary cooperation. Any effective clean up moves, though, must await amendment of the building code. Current code requirements would force slum owners into a relatively expensive type of construction, which is completely infeasible economically.

San Antonio's three dailies so far have confined themselves to routine reporting of the rehabilitation program. A measure of editorial support will probably be forthcoming later.

A housing court is a trifle Utopian for money-shy San Antonio. It may be possible for one of the two corporation court judges to devote a day a week or some such thing to housing cases.

There is a sore need for a handful of dedicated civic movers and shakers. Eight of the 25 members showed up at the last general rehabilitation committee meeting.

House committee probes VA 'mess' in Cleveland

Congressional committees love to investigate veterans' housing. Last month a group head-ed by Rep. George H. Bender (R, Ohio) said it had unearthed a veterans' housing mess in Cleveland.

Bender called the VA inspection procedure in his home area "incredible and shocking." He said probes sent out by his government operations subcommittee had found cases where "one VA employee inspect-ed 40 homes in a day." He said some houses were approved by VA representatives "who never saw them."

The principal complaints were the familiar ones of overcharging and shoddy construction. A committee investigator, Arthur Toll, estimated that "inflated VA appraisals in the Cleveland area" had cost veterans...
but an example he cited as typical by no means proved his point: a veteran applied for an appraisal and the VA fixed the value at $8,000. The builder protested this was not enough. A second VA appraisal boosted the amount to $10,600.

Bender promptly laid his charges before the new deputy VA administrator of veterans' benefits, Ralph Stone. He told Stone VA ought to make a nationwide checkup. Moreover, he warned that if the VA did not do a good job house cleaning, his sub-committee would undertake a bigger investigation. Stone dutifully asked the 70 regional VA offices to scan their loan operations for appraisal irregularities. T. B. King, whose title was upped last month from loan guaranty officer to acting assistant administrator but whose duties and powers remained about the same, reported that the Cleveland office had been making too few field inspections —4% instead of the 10% VA requires.

Millwork Institute formed; painters fight for market

Lumber, plaster and brick had some new bedfellows this month in their stepped-up efforts to hang on to construction markets. For instance, the Painting & Decorating Contractors of America were urging new marketing methods on their members to fight against the business being lost to the amateur with a roller in his hand. One suggestion was to push house paint jobs on a time-payment basis. (The same idea was being given a try-out in the attack on inadequate wiring in existing homes. Cincinnati Gas & Electric Co. and Union Light, Heat & Power Co. offered to pay for installation of up-to-date wiring in customers' homes and add the payments to monthly bills. The cost may be spread over three years.)

Competition from steel, aluminum and plastic led the nation's manufacturers of wooden architectural millwork into a fight for more business last month. At a two-day meeting in Chicago, 70 of them formed the Architectural Woodwork Institute of America. Aim: to boost use of wooden architectural millwork with architects and others.

The Institute decided to shoot at an annual budget of $100,000 (financed by contributions of 0.1% of its members annual sales (with a minimum of $300). Elected president was white-thatched Charles A. Rineheimer, president of Rineheimer Brothers Manufacturing Co. of Elgin, Ill. and sparkplug of efforts to organize the new group. One worry: elimination of gingerbread in design appears to encourage rival steel, aluminum and plastic trim in the millwork industry's major market—custom built homes, schools, hospitals, colleges and churches.

The Gypsum Assn. started an "add-a-room" promotion to pep up sales by tapping the repair and modernization market, which is variously estimated at $4.5 to $6.5 billion a year (H&H, Sept. '53, News). Weyerhaeuser Timber Co., worried like most lumbermen over the declining per capita use of wood, hired Stanford University's research institute to study future demand for American and Canadian forest products. The survey, due for completion early next year, will delve not only into the competition between lumber and other products; president J. Philip Weyerhaeuser said it will also "attempt to illuminate the intra-industry competition, for example, of hardboards, plywood, softboards, sheathing lumber, fiberboard, containerboard, and wooden boxes."

PEOPLE: Equitable drops Parkinson after nepotism charge; Grazier named American-Standard president

New York State Insurance Superintendent Alfred J. Bohlinger made an unusual announcement on Oct. 29: Thomas I. Parkinson, 71, would soon resign as board chairman of Equitable Life Assurance Society, third largest insurance company in the U. S., one of the nation's largest mortgage money sources, and a large owner-builder since World War II (Pittsburgh's $50 million Gateway Center, and New York's 1,118-family Fordham Hill apartments). Bohlinger implied that he had forced the resignation. Equitable was in "sound financial condition," Bohlinger noted. But he charged that a two-year investigation of Parkinson's handling of Equitable affairs showed "nepotism" and "favoritism" in advertising, legal and construction contracts. Advertising totaling $950,921 was entrusted to a newly formed agency controlled by his son, Courtney V. Parkinson, who had no experience handling such large accounts, Bohlinger reported, and much of the society's legal business was concentrated with a law firm of which Thomas I. Parkinson, Jr. was a member.

Bohlinger also criticized Parkinson for awarding architectural and construction contracts for its largest projects to individual firms without competitive bidding—a charge that would find little support among architects or large contractors. Overlooked by the insurance superintendent was the fact that on multi-million dollar construction the hazard in error is so great any competitive bid by a dependable firm must be boosted high to provide a margin of price safety. For its largest projects, for instance, the federal government has yet to find a satisfactory substitute for cost-plus or negotiated contracts.

Parkinson reacted sharply to Bohlinger's attack, and the implication that he was resigning under fire. Last June he had told Equitable's board that he would retire in February from $100,000-a-year post, take a $36,000-a-year pension. After the Bohlinger attack, Parkinson said he would not resign. On Nov. 4 Equitable directors met at the "request" of the insurance superintendent. Present were Bohlinger and two deputies, but not Parkinson, who had undergone an operation for a cataract on his left eye the same day. Outcome: after 12 hour session, the directors voted to retire Parkinson as scheduled.

In booming Bucks County, Pa., when the Bristol Township school board found it could not afford $2 million to build the schools it had planned to serve new Levittown, Builder William J. Levitt stepped in with an offer to form a nonprofit corporation, build two 20-classroom schools for $900,000 each and lease them to the board at $40,000 annually. After 20 yrs. the schools would revert to the township. Local officials accepted Levitt's idea enthusiastically. Last month Dr. Francis B. Haas, state superintendent of public instruction, added his preliminary approval to the lease idea. Under Pennsylvania law, the state department of public instruction must approve all school plans to qualify local communities for 50% reimbursement of the cost. Levitt hoped to find a mortgage investor for the schools; if not, he told school men he would put up the construction money himself.

Last spring, 68-year-old President Theodore E. Mueller of American Radiator & Standard Sanitary Corp. suffered a paralytic stroke while presiding at a stockholders' meeting, and on June 1 Executive Vice President Joseph A. Grazier was appointed acting president. Last month Mueller, still hospitalized, was elected board chairman and Grazier elected president, Mueller joined the company in 1901 as a $3-a-week patternmaker's apprentice and rose in Horatio Alger style until he was elected president in 1946. Grazier, 50, graduated from Pennsylvania University law school and from 1928 to 1937 was employed by a New York law firm. Then he joined the secretary's staff of American-Standard, became assistant secretary in 1939, secretary in 1948, vice president in 1951 and executive vice president last year, American-Standard now has three Canadian and nine European affiliates, 46 plants in the US and abroad.

Most extraordinary switch of the month: Joseph Lilly resigned as public relations director for New York State Rent Administrator Joseph D. McGoldrick to open his own public relations firm and was promptly re­ tained as public relations counsel by the Real Estate Board of New York. Ex-news­ paperman Lilly joined the LaGuardia administration in 1934 as secretary of New York's finance department, of which McGoldrick
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in 2 thicknesses

for all your floor service and budget requirements

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Johns-Manville now announces the availability of Terraflex in two thicknesses, standard gauge (1/16") for residential and office installations and 1/8" gauge for areas subjected to extra heavy traffic. Tiles are 9" x 9" in size. Johns-Manville Terraflex offers these outstanding advantages:

• Far outwears any other type of resilient flooring of equal thickness
• Defies grease, oil, strong soaps and mild acids
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Specify J-M Terraflex whenever your plans call for resilient flooring. You can depend on its long-wearing beauty and long-time economy to provide a maximum of reliable floor service.

For complete information about J-M Terraflex, write Johns-Manville, Box 158, New York 16, N. Y.
Can new field chiefs pep up FHA?

T

The robust influence of Chicago's school of architectural greats somehow got lost between the city's expansive lake front and its hinterland, where the little home owner dwells. A visitor driving up Chicago's Outer Drive can see unmistakable marks of such men and firms as Louis Henry Sullivan; Frank Lloyd Wright; Ludwig Mies van der Rohe; Skidmore, Owings & Merrill; and Shaw, Metz & Dolio. But as the visitor drives inland — where the postwar housing booms - he fades into a drab world of tired little houses, nearly all cast in much the same conventional mold.

There have been attempts to explain why the brightness of Chicago's own architectural school should fail to penetrate further into the smoky atmosphere of its own city. Obsolete building codes, uniform restrictions and even the vagaries of Chicago weather have been advanced as reasons. Almost everyone will agree that one other influence which has tended to standardize Chicago homebuilding upon conventional lines is the policy of the FHA district office toward new ideas of design.

From 1944-53 Chicago district FHA policy-makers were Director Edward J. Kelly, who died last May 6, Chief Underwriter Carl A. Jackson; and Chief Appraiser, William Sorgast. Kelly spent 25 years in the real estate business before he became chief FHA appraiser in Chicago. He was made director in 1943 when his predecessor, Gual Sullivan, left for Army service. Jackson and Sorgast are civil service career men who have worked up through the ranks.

Solid conservatism. All three were solid, conservative types who felt it was part of their job to protect investors and the public against unconventional ideas. Repeatedly they rejected houses designed by architects trained by Sullivan, Wright or Mies. In their FHA eyes, such houses were unproved - if not unproved structurally, at least unproved economically. Examples:

William Hasskarl, a Mies disciple who since has become design chief for the Chicago Housing Authority, submitted a plan for a two-story apartment project in suburban Deerfield. It had open second-floor galleries that eliminated inside halls and stairs. Interior baths with forced ventilation saved additional hall space, and thus Hasskarl figured he could provide modern accommodations for nearby defense workers for $10,000 a unit. But Sorgast told Hasskarl to get rid of the galleries, provide inside halls and stairs. Interior baths, he suggested, were bad design. Added cost for such changes: $1,000 per unit. After FHA finally approved a vastly modified design, the sponsor dropped the venture. He said the added cost was a factor, but explained that he also had trouble with Deerfield building officials.

Homebuilder Irving Blitz submitted plans for some town houses in Evanston with combination kitchen and utility rooms. FHA nixed them. After Blitz bought the houses with conventional financing, FHA revised its local standards. But although they might now qualify, he did not resubmit them. Now he is planning a still more advanced model.

Architects George, William and Fred Keck brought in plans for new treatment of stone window sills in a $200,000 apartment. They had a new method for anchoring the sill (continued on p. 52)
Now you can specify KenRubber for installation on concrete in contact with earth

KenRubber is made in the industry’s newest plant which contains all of the new equipment and manufacturing techniques recently created for rubber tile production. Its colors are cleaner and brighter...its marbleization clearer and crisper—free of “muddiness”!

Luxurious in appearance...resiliently comfortable underfoot—KenRubber is also outstandingly tough with “coiled-spring” strength, never soft or flabby. Dirt and grime that grind into other soft rubber tiles, stay on the KenRubber surface...are easily wiped away. Occasional washings and infrequent waxings are all that is needed to keep KenRubber bright and beautiful through years of hardest use.

Specifications and Technical Data

INSTALLATION

Over any smooth firm interior surface that is removed from greases and oils. At left diagrams show how new KenSet adhesive makes possible easier, more economical installations over on-grade underfloors that are at least 12” above the surrounding grade level with drainage away from building.

INSTALLED PRICES

Prices range from 50¢ per sq. ft. to 80¢ per sq. ft. for a minimum area of 1000 sq. ft. over cement depending on which of the thicknesses is chosen, which color group is specified and condition of the underfloor.

THICKNESSES

KenRubber is available in .08” and 1/8” thicknesses for normal demands...3/16” for extra-heavy duty.

SIZES

Standard tile size is 9” x 9”. Other sizes furnished on special order.
The restful, "Cushioned Beauty" of KenRubber softens sounds, helps lessen fatigue in stores, shops and offices. KenRubber color at right is Connemara with Ivy ThemeTile and White Feature Strip.

The distinctive elegance of KenRubber adds value to every home. KenRubber colors above are Vert Isabelle and Parrock.

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KENRUBBER TILE FLOORS

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KENRUBBER TILE FLOORS
KENFLEX VINYL TILE
that let them reduce its thickness to 1". FHA said: "No." Eventually a modified plan was adopted, but it added about 1% to the final cost of the building.

Agree—or avoid. Discouragements such as these gradually led Chicago architects to one of two paths: trim their thinking to what Kelly, Sorgast, and Jackson would approve, or design only for clients who were willing to forego the advantages of FHA financing. Some—such as the Kecks—did a little of both. They have learned to live with the FHA ideas when necessary. When clients can afford it, they turn to savings and loans (which do two-thirds of the Chicago business, anyway) or to other institutions.

Gradually, as many non-FHA buyers around Chicago accepted a house without a basement, a one-story ranch house and finally a flat roof, FHA's Chicago policy board began to inch away from its opposition to such details. As an example, it approved a development of 200 flat-roofed cellular concrete houses being built in Sterling, Ill. by the Cellular Concrete Construction Co.

Still, from disappointing experience, builders rarely asked for approval of a house with an open plan, cavity walls, solar construction or other major innovations. The FHA staff was unable to cite a single example of a truly modern house it had approved. This was the picture in the Chicago FHA office on July 20, when the vacancy caused by Kelly's death was filled by James C. Moreland.

A powerful Republican. Moreland, 67, was best known in Chicago as the leader of the most powerful Republican ward in the strongly Democratic city. He probably could have been Republican county chairman if he had wanted it. He was born in a Christian County, Ky., log cabin. He came to Chicago in his youth and in 1910 won a measure of fame as an amateur long-distance runner. He still trains, never smokes and seldom drinks. Moreland acts and speaks conservatively. He seldom gives a direct order. And he meets people with the warm, friendly manner of a successful politician. As district FHA director, he has finally blended two separate careers he followed for 40 years: politics and building.

Moreland says he got into building incidentally. He was working as an advertising projection man when his carpenter father-in-law quit his job because of a pay cut. Together they built two houses. They lived in them until they were sold, then built two more. Eventually, Moreland set up his own company. When he sold all his stock to his wife before taking the FHA directorship it was set to produce about 100 houses a year.

Son William is now president of James C. Moreland & Son, Inc. Two married daughters are vice presidents. Moreland's wife, Izora, is secretary-treasurer. She runs the office and handles decorating problems, but she can swing a hammer better than anyone else in the family, says Moreland.

A flyer in 'modern.' Until two years ago Moreland houses were pretty run-of-the-mill Chicago stuff. Then young Bill persuaded his father to take a flyer at contemporary design with a two-bedroom ranch using a slab floor, low shed roof, exposed beams and a large living-room window.

Moreland laid out a 72-house development, then submitted his plans for VA approval. They bounced. Moreland protested. Finally he carried his fight to Washington. Washington, he says, told the Chicago VA office: "These plans may be something new to you, but they're not new to the rest of the country." Final VA approval came after 12 months delay. Moreland did not have the stomach to fight for FHA approval.

Last year Moreland completed and sold 64 of these houses with savings and loan financing. This year the firm added an extra room off the kitchen and kept building. It sold 46 within six weeks after completing the first, and continued taking orders for more. Basic price for the $150 sq. ft. house on an 80' lot is $19,950. Only change planned for next year: optional air conditioning.

Why did Moreland apply for the job as FHA director? "My organization felt I deserved it after all these years in politics. Then, too, it was a way I can retire from politics without leaving any hard feelings."

What does Moreland hope to accomplish? "I want to make FHA a better service to builders, who are our customers. The most important thing is to improve its efficiency."

His first objective: less red tape, speedier processing. He will bypass routine plans around the mechanical and heating engineers. "Every plan doesn't need special attention, only those where there is some question."

His second objective: a "more realistic" appraisal policy. "We will be as liberal as we can. The office here simply hasn't kept up with rising values, particularly rising land values."

What people want. What will be Moreland's attitude toward controversial details of design? One indication is his own house, which might be called a middle-of-the-road contemporary. He thinks it is "well." But he may go beyond his own design, he indicated. One thing Moreland learned well was that in politics or business "you've got to give the people what they want."

"People want contemporary design today," he said. "I don't mean everyone wants it, but lots of folks do. I see some houses now that I wouldn't buy, but they are architecturally sound and I don't think we are entitled to say they shouldn't be built."

Will Moreland direct Jackson and Sorgast to revise their ideas on proper FHA risks? "I don't think there will be any order. The argument over contemporary design was settled here a year or so ago. I think Chicago is moving along pretty well. Of course FHA should not underwrite any freakish sort of thing." Each plan, he said, would be judged on its own merits.

Best guess of Chicago-area architects who have been dissatisfied with former FHA policies: "Moreland might help a little. He certainly won't make things any worse."
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These are "rain-shedding" windows! The projecting vents permit draft-free ventilation in any weather and protect walls and furnishings from rain.

The graceful, horizontal lines of these new Fenestra Projected Steel Windows add to the long, low, streamlined look of your homes. They are easily installed—come complete with casings (all standard Fenestra Casement fittings can be used, such as metal trim, mullions, fins, etc.). And they are available Super Hot-Dip Galvanized so painting is unnecessary! Fenestra Metal Screens go on quickly and easily from inside.

For complete details on these new windows, or on Fenestra Casements, Basement Windows, Swing Doors or Sliding Closet Doors, call your local Fenestra Representative (listed in the yellow pages of principal city phone books). Or write Detroit Steel Products Company, Department HH-11, 3411 Griffin St., Detroit 11, Michigan.

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This is a "big-view" window. You get more glass area (more light and view) because the steel frame is strong and rigid without being bulky. You get controlled ventilation through awning-type ventilators even in downpouring rain. Designed so that Fenestra Metal Screens slip on from inside the room. The new Fenestra WindoWall will also take ½" insulating (double-paned) glass.

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This superbly modern flooring brings the miracle of vinyl-asbestos to the modern home... lightens chores because it rarely needs hard scrubbing... never needs waxing. It brings safer footing, easier walking, because it has a cushioned resiliency that makes it easy on the feet.

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Another modern room idea from Crane's architectural competition

Here's effective open planning for the small, economical home with a truss roof and no load-bearing partitions.

Elevated above the main floor on a plant-bordered balcony, this Crane-equipped kitchen is well separated from the living room yet also is a part of it—adding to the effect of spaciousness (when screen is left open), and permitting easy conversation between living room, dining nook, and kitchen.

Or, with screen drawn, the kitchen is closed off completely without reducing working space. And work moves smoothly because the Crane sink, Crane cabinets and the range and refrigerator are arranged in a line that leads naturally from food storage to preparation, to cooking, to serving.

The Balcony Kitchen is one of many modern room ideas that have been developed as a part of Crane's service to architects and builders—all for the purpose of helping sell homes. 46 such selling ideas have been collected and published in a big, colorful book that is now offered free. Just ask your Crane Branch or Crane Wholesaler for your free copy of the Crane Sketchbook of Ideas—today.
In "Spacemaster" folding doors, Maryland builder Joseph D. Judge found the perfect solution to the problem of effective closet closure. The rolling post "Spacemaster" shown above provides for ample, easily accessible closet space in his 96 "University Rambler" homes located in Lewisdale, Maryland. Yet these quality folding doors are available at a price so low that they actually cost less than a wood door and necessary extras. Says Mr. Judge, "In my opinion it is one of the finest doors of its type on the market today."

Not only do "Spacemaster" folding doors let you save on initial cost, but they save preparation costs, save installation time, save labor costs as well. You can eliminate trim and wood casing. You can put them up with eight screws in ten minutes. And there's no fitting, mortising, planing or sanding with "Spacemaster" folding doors. They come in two heights: 6'6" and 6'8½"; three maximum extension widths: 2'6", 3'0" and 4'0". Vinyl fabric covering is in popular "Decorator Gray" that blends easily with any color scheme.

Find out how you can cut costs with "Spacemaster." See your building supply dealer or local "Modernfold" distributor. Clip coupon for more information.

LETTERS—EISENHOWER ON TIGHTROPE

demand large discounts on all material purchases, special rates from architects, surveyors, sub contractors, insurance agents, title companies, mortgage bankers, etc., etc. Now the discount squeeze is on them and now they are screaming for help. "Chicken's always come home to roost" was never truer than it is today.

The tight money situation today is a blessing in disguise if each of us would only take the time to analyze the situation thoroughly and honestly. The danger of overbuilding has been eliminated. In most parts of the nation there is more than adequate housing available and at fair prices for both purchasers and renters. Here in the Southwest we have a surplus of housing. We have found adequate mortgage money from conventional mortgage investors for new home financing and have also noted a marked improvement in the quality of homes now being erected. Today buyers are getting more quality for their money. We have placed more loans in the last six months than in any six-month period since 1948. The greater down payments required on conventional loans have not affected our volume of business. "Shoestring" financing always was inflationary and always will be as long as it is permitted. FHA, VA and FNMA should gradually be eliminated from our economy.

WARREN J. TALBOT, president
Public Mortgage Co.,
Tucson, Ariz.

Sir:
The question asked just under the title, "Where does that leave the homebuilding industry?" is well put, because the problems that you present are certainly unanswerable now.

For instance, if we admit that savings are not sufficient to finance 1 million homes per year and then admit 1 million homes per year are needed, then we are either admitting defeat, or we are openly soliciting direct government lending.

Further, we admit that the merchant builder is the one man capable of delivering more for less and improving the housing standards of the nation; then we admit that there is no way to keep him in business, because he needs lower down payments and longer terms to keep his high volume of new building, and, as you point out, this is a two-way pinch.

How many merchant builders can scale their operations downward as much as 60% and still maintain their reputation of delivering more for less.

G. W. MAGUIRE, vice president
Ricks-Maguire Co.,
Amarillo, Tex.

Sir:
You covered the field very thoroughly. If FHA would go back to Title 6 with changes to bring it up to present-day values, it would continued on p. 92
MODERN MORTGAGES
A monthly report on important developments in the modernization of mortgage credit, with particular emphasis on the expanding potential of the package mortgage, the open-end mortgage and the expandable mortgage.

Open-end mortgage: legal opinion vs. horseback opinion

Open-end mortgages can be made safely in every state of the union.

The only problem is what, if anything, a lender must do to make sure the additional advances have first-lien status.

Here is the score on that point:
In 32 states the additional advance automatically takes precedence over any intervening lien and no title search is necessary. In 12 states the additional advance probably takes precedence, but the lender had better play safe and get the title searched or insured. In four states the additional advance does not take priority and title search is essential.

These are the important conclusions of a comprehensive and scholarly study just published by the US Savings & Loan League. Authors are Horace Russell, the league's general counsel and legal authority on the open end, and William Prather, assistant counsel.

Their study will almost certainly encourage wider use of the open-end mortgage which is now making rapid strides among US mortgage lenders. It sets the record straight for lenders who have been confused by horseback opinion rather than sound legal opinion about what they can and cannot do with this modern mortgage vehicle.

Here are the highlights of their 32-page report:

No search necessary in 32 states. These are Alabama, California, Colorado, Connecticut, Florida, Georgia, Indiana, Iowa, Kentucky, Louisiana, Massachusetts, Maine, Maryland, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Jersey, New Hampshire, New York, North Dakota, Oregon, Rhode Island, South Carolina, Texas, Vermont, Virginia, Washington, West Virginia and Wisconsin.

In these states, either the statutes or the courts have held that the only way an intervening lien can take precedence over an advance granted through a properly drafted and recorded open-end mortgage is for the intervening lienor to prove that the mortgagee had actual notice or knowledge of the intervening lien when the optional advance was made.

In these 32 states record alone (e.g., through state recording statutes) does not constitute actual notice and is not sufficient to subordinate the priority of later advances. Recommendation: additional advances are perfectly safe except after actual notice. In that case there is enough question as to their first-lien status so that additional advances should not be made.

States where search probably is not necessary. Here are the 12 states where it is questionable whether a search is necessary although it probably is not: Arizona, Arkansas, Delaware, Idaho, Kansas, New Mexico, North Carolina, Oklahoma, South Dakota, Tennessee, Utah, Wyoming and the District of Columbia.

Although decisions are few, inconclusive or incomplete in this group, the courts would probably uphold the priority of optional advances in the absence of actual knowledge of an intervening lien.

Even though existing court decisions in these states favor the superiority of the optional advance, many prudent lenders will require a title search in the absence of a decision both clearly defined and directly in point. An affidavit from an owner stating there are no other liens against the property may be relied upon for relatively small advances.

Recommendation: in those states where the law is not comprehensive or definitely formulated, mortgagees can deal properly with open-end mortgages by having an authoritative legal study made of the state law and a mortgage form properly drafted to secure described future advances up to a stated sum. Where there is little or no litigation, a test case may be tried. If advances are held superior to intervening liens, this settles the matter. If courts hold the contrary, legislation should be instituted.

Search necessary in four states. They are Illinois, Michigan, Ohio, Pennsylvania.

In this small but important group of states, for priority purposes an optional advance is treated as if it were a new mortgage, its lien attaching as of the time of the advance and not back to the parent instrument as in the majority of states. A title search is unavoidable, but the lender can still make advances under a valid first mortgage. If the amount to be advanced is nominal, an affidavit is often taken from the borrower, again as a calculated risk by the lender.
A good plan is always better when it includes symbols for telephone outlets

Covered-up pipes and built-in telephone raceways are two concessions to people's ideas about how rooms should look. More and more clients want their telephone wires kept behind the scenes.

You can protect the beauty of carefully planned interiors by making telephone outlets and raceways standard features of your plans and specifications. Doing it at this early stage saves misunderstanding and expense later on.

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is quick and easy to install
for hundreds of uses

LOW INSTALLATION COSTS are a big part of the popularity of the new Andersen Flexivent Window Unit with the nation’s builders. See for yourself how easy assembly and installation combines with a low price for the unit to make Andersen Flexivent one of the outstanding window values of the decade!

HUNDREDS OF USES! Choice of hopper, awning, outswinging casement or fixed sash! Choice of 9 sizes! Combine Flexivents in ribbons, stacks, groups. Use them singly or with other windows. No end to the arrangements and combinations possible!

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Starting from scratch in 1940 Price has built National Homes to a volume of better than $40 million a year.

Now, at last, he has the resources and the volume to influence the house market in a really big way, for his business is big enough to make him, in effect, a principal competitor of the local builders in hundreds of communities. With this year's big improvements (fully reported for the first time in these ten pages) and this year's price cuts (up to $1,000) his broad range of houses will set a floor under the quality local builders must match and a ceiling over the prices local builders can ask.

While there are not yet National dealers in every town, Price is expanding his territories as he expands his production line. As his huge trailer trucks begin rolling into more and more towns, his new houses will spread their influence in a steadily growing list of communities. As all the prefabricators improve their design and step up their values, builders everywhere must give more thought to how they will meet this new national competition in their local markets. Some builders will decide they can beat it with still better values. Others will prefer to join it as builder-dealers.
values every builder must meet

America's biggest prefabricator gets ready for tougher selling

This is his program:

**Better design:** National has retained one of the very best builders' architects to restyle its entire line—Charles M. Goodman.

**Lower prices:** At a time when most builders are talking higher prices National expects its dealers to charge about $1,000 less per house for an improved product. This price cut will reflect 1) factory economies, 2) design changes for easier erection, 3) greater volume.

**Bigger volume:** National is spending $1,500,000 to expand and streamline its plant to produce 37,500 houses a year on a three-shift basis (vs. last year's 12,738 sales; see p. 111).

**New low-cost line:** National is entering the Title I field for the first time with a four-bedroom, 900 sq. ft. house for $5,300, a two-bedroom, 705 sq. ft. house for $4,700 (plus land).

**A new de luxe line:** Putting a bargain price tag on many of the best features of modern custom design (see next page).

**Air conditioning:** For only $500 extra in houses up to 900 sq. ft., $600 in larger units (see p. 110).

**Packaged plumbing:** A radical new step to cut costs (see p. 110).
Architect Goodman designs a brand-new package—

2,000 sq. ft. of indoor-outdoor living for $12,500

Here at last is a volume-built house that makes indoor-outdoor living mean what it says—a house that comes with a pleasant outlook assured through all its big windows, a house where all the living space inside is tied to the living space outside.

To architects it may seem almost as revolutionary as to builders, for it abandons the whole idea of rear living, puts the patio in the front or side yard, does not even have a back door. Goodman’s explanation: he has seen too many rear living windows looking out on nothing but weeds and refuse. Says he: “Middle-income families cannot afford gardeners; they are slaves to their front yards in order to keep up with the Joneses. Few of them have time left to keep their back yards looking nice, too.” Moreover, children with their wheel toys want to play in the front (see Park Forest report, H&H, Aug. ’53). Thus Goodman puts a paved patio in the front and National includes it with the house package.
Open kitchen lies between two family areas along front of house, overlooks patio

Patio gives privacy to front (instead of rear) living rooms and kitchen

Alternate patio treatment includes roofed terrace accessible from front door. Color styling throughout is by Beatrice West
Living end of kitchen seen from in front of range—as area Goodman thinks will be in constant use; e.g., housewife can have children under her eyes without being under her feet. Door (right), leads to covered patio and carport, funnels traffic into house without going through living room.

Work end of kitchen, seen from living end, is half open to more formal living room beyond. Freestanding partition ends 12” below ceiling, creates an air of spaciousness. Unbroken ceiling spans entire length of house. Note ventilating louvers under windows.

Living-kitchen (above) is much bigger than the living room (below)

Formal living room has its own door on left leading to patio. Depending on view, picture window behind drapes can be interchanged with smaller window on other side of house (at living end of kitchen). Warm air discharged from floor register under window neutralizes downdrafts.
Master bedroom features floor-to-ceiling closet with folding door. Big mirror makes the room look twice as large. Note plywood-block floor used throughout except in living-kitchen. This floor is of T&G and multiple ply construction, is bonded with marine-type, waterproof glue.

Bedrooms and bath line up along the other side

Bedroom hall houses washer-drier, which is convenient to living-kitchen yet out of sight. Grille in ceiling plenum is for return air in air-conditioning system. Door louvers are for return air to separate furnace.

Living-room corner: dropped ceiling over bedroom hall creates air-conditioning plenum, thus eliminating ductwork (see p. 110). Side-wall louvers are part of return-air path for warm-air heating system. Note functional use of kitchen partition (right).
Prefabrication's answer to the challenge for really low-cost housing

National Homes is putting these trim, low-cost packages within reach of 12 million families making as little as $45 a week. Under FHA's Title 1, terms will be $300 down, $37 a month for two bedrooms; $400 down, $39 a month for four bedrooms. Price includes water, sewer or septic tank and digging a well if necessary. Dealers may neither add to nor subtract from the package. Both houses already have FHA approval.

National has packed so much into these bargain houses that they also meet many of the stiffer requirements of FHA's Title 2. However, as one of their biggest dealers sums it up: "These are low-cost, low-profit houses and the only way out for builders is big volume." Thus National's Jim Price is urging his dealers to explore every possibility for cheap land at the outskirts of cities. To minimize costs, curbs, gutters and sidewalks will be eliminated, each lot being extended to the street. Price says drily, however, that "these houses will not be the slums of the future." Already his architectural consultant, Charles Goodman, is readying a master manual on site development designed to guide all dealers over the hurdles of planning a good subdivision.

... and here is how it expands to four bedrooms and 900 sq. ft. for $6,100
Here are the major reasons why National Homes can afford to package and sell these Title I houses at such low prices:

- Such items as wall furnaces and double-hung windows are the same parts mass-purchased at rock-bottom prices for National’s higher-priced houses.
- The entire plumbing hookup comes in one prefabricated package that can be installed in 8 man-hours, saves as much as $400 a house (see next page).
- Electrical costs are cut by sending a complete wiring kit with each house, by running main circuits in raceways around the top of outside walls.
- Side walls are only 7' high but this is not apparent because the sloping ceiling pitches up to a height of 9 1/2' in the middle of the house.
- One standard size of trim is used throughout for baseboard, windows, etc.
- There is no finished floor, just the slab or plywood over a crawl space.
- On-site erection time has been slashed to 80 hours all told—less than half the time needed to erect National’s higher-priced houses.
This prefabricated plumbing package cuts site labor to 8 hours...

National's new plumbing package, pictured here, is running interference for the whole housebuilding industry in a major try at cracking the high cost of plumbing (11% of house costs, says NAHB). Some day the principles that National is inaugurating may be used in a large share of new houses. Right now, National is pioneering its new system only in its lowest-cost, Title I houses, described on the two preceding pages. (In larger houses, builders or their plumbers may buy ready-to-use materials and fixtures direct from National, which Price says will save $128 in materials and from 9 to 13 hours of labor.)

This Title I plumbing package includes all parts for a complete job "from street to rooftop." The piping tree is attached to the wet-wall partition (left) in the factory. Only 11 screw connections are needed on the site to finish the job in 8 man-hours. In some locations this will save up to $400 a house, Price says. The package conforms to The National Plumbing Code and is approved by FHA.

Some resistance from local plumbing inspectors and labor unions is expected. However, Price is determined to get costs on his Title I houses as low as possible and believes the plumbing offers one of the greatest opportunities to do so. From experience he knows that plumbing costs on exactly the same house have varied from $550 to almost $1,100. He is convinced that reducing costs and increasing volume will mean twice as much work for all trades, including plumbers.

... and this new air conditioner fits in the attic, costs only $500

National's air-conditioning system demonstrates a simplified way to get low-cost cooling. The cooling system, entirely separate from heating, is integrated with house design, is not an expensive afterthought. For example:

- The cooling unit is centrally located in the attic, where it takes no floor space and provides the shortest air route to all rooms.
- Cold air is blown from the unit to each room through a central plenum formed by a dropped ceiling in the hall. There are no ducts.
- The central unit is air-cooled but gets double value from a big fan that pulls outside air into the attic. This air stream cools the condenser, also creates an air wash under the roof to keep the attic cool.
- A novel idea is to use a second flue in the chimney through which the outside air is pulled into the unit. (Some engineers think this air circuit should be reversed: bringing fresh air in through the gables, and blowing it out through the chimney.)

In houses up to 900 sq. ft. total air-conditioning price is $500, covering a 11/2-hp unit with a capacity of 15,700 Btu's an hour (1.3 tons). However, National's bigger houses need a 2-hp system with a capacity of 21,000 Btu's an hour (1.75 tons), at a price of $600.
National spends $1.5 million on new plant equipment to speed up production

High-speed machines shown on this page are examples of new plant equipment that enables National to slash factory costs—chief reason regular line of 1954 houses is priced as much as $1,000 lower than 1953 models. Double saw (right) makes 23 cuts, dadoes and drills all holes needed in studs at a single pass, can handle a carload of lumber in 2 hours.

Framing wood fed continuously into double saw is top-grade lumber which most prefabricators use because cheap, untrue wood would knock high-speed machines out of kilter. Even doors are made with machine (not shown) that mortises and drills all holes needed in 15 sec.—formerly a 12-min. operation. Door’s honeycomb core is made of strips of waterproof, laminated fiber wall panel.

Automatic nailers, spaced 8” apart, nail each end of stud to plates. With studs on 16” centers, frames move along and are nailed at rate of 20’ per min. Then each frame passes under rollers that automatically apply glue to studs and plates. Other nailing machines secure laminated fiber wall panels to interior side of frame.

Swivel table turns over half-finished frame to another conveyor where glass-fiber insulation is glued between studs, exterior sheathing is applied and windows are installed. Complete panel is turned out in 7 min. Besides equipment here, National plans expansion to boost 1953-54 output to 37,500 houses with factories working around the clock five days a week.

Photos: Robert C. Laxinon

NOVEMBER 1953
The need for better planning

California architects and clients find building industry suffering from inadequate planning, urge better public relations on architectural services and building costs

Here is a joint statement on the need for better planning by California architects, homebuilders, mortgagees, material suppliers and other representatives of all groups with a stake in better building. It is the consensus of 17 outstanding men who were assembled by the California Council of Architects at Coronado last month for a round table discussion of their mutual problems.

Moderated by HOUSE & HOME's editorial chairman, the Round Table covered many kinds of building and many phases of the architect-client relationship, only the housebuilding phases of which are covered in this report.

The report: Californians have made the building industry their biggest industry. Counting its manufacturing, real estate, construction, mechanical equipment and furnishing operations, it is bigger than California's airplane industry, probably bigger even than her agriculture. And the Round Table agrees that the greatest single need of this big industry is for more planning and better planning.

Better planning can do more to assure the people of California the new built-in economy and efficiency of operation, more to give protection against obsolescence and blight than any other move the industry could make. Better planning can do more than any other factor to keep construction booming long after present shortages are met...

Biggest deficiency: lack of plans. Yet California's building industry, despite its proud progress, despite its leadership, despite its close importance to the people, is the big industry which now spends probably the smallest share of its income on planning and development for the future.
Compare building with cars: though the ordinary citizen leaves homemade cars strictly to the hot-rodders and sports-car fans, a great many try to build houses for themselves, and a great many other houses are built without benefit of architect; so Builder Slipher and Architect Fickett of the Round Table agreed that only one tract house in ten built today benefits from truly professional plans (though the proportion is rapidly rising).

Nobody today would entrust his life to a plane built without benefit of trained scientific skill, yet millions entrust their safety and comfort to homes and shops built in ignorance.

The airplane industry, said Round Table Member Hull, puts about 33% of its total expenditure, at a conservative estimate, into development and planning of tomorrow’s planes—engineering them, testing them, working ahead on planes not yet in production. Compared to this, the Round Table Member William Koblik testified that the top planning allowance for schools is 8%, and Victor Gruen said the mere mention of 33% for construction planning would cause a merchant to collapse—he would prefer to think in terms one-sixth of that or less.

Unplanned buildings rapidly become obsolete. Meanwhile the building situation has changed so rapidly that lack of planning which at one time resulted only in intolerable inefficiency and inconvenience can today result in serious trouble or even catastrophe, physical or economic.

Almost unnoticed, building costs have more than doubled, so every error or oversight in planning costs twice as much. Such errors can be stopped only on the drafting board before construction has begun.

Almost unnoticed, such advances as air conditioning have invaded even the house; and too few are aware that in a house even the difference between a plan and design meant for air conditioning, and a plan which ignores air conditioning can mean either halving or doubling the expense both of installation and operation.

Again almost unnoticed, standards of building performance have risen. In today’s smaller house, the noisy fun-seeking part of the family can no longer withdraw its disturbance of peace and quiet to some remote room: careful planning and knowing insulation are needed to protect both sides of the same friendly family from one another.

Homebuilding has been revolutionized. Said Round Table Member David Slipher: “Back in 1910 only 20% of our houses were built for sale; 80% were built on contract for those intending to live in them. In 1952 the situation was reversed: 80% of the nation’s housing was built for sale and only 20% on contract; in 1953 it’s going to be close to 85% for sale and 15% on contract.”

This means that home building for most Californians has now become a “production” operation which must be professionally planned in all details.

Indeed the problem of homebuilding since World War II is so wholly new that the entire Round Table agrees with Members Fickett and Brock that everybody connected with the tract operation has to “go back to school and learn the housebuilding problem all over again.”

For the first time in history the building of individual houses, in such quantity, demands the talents of first-rate engineers—not only process engineers but structural and mechanical engineers.

For the first time the modern tract cannot be site-planned without professional skill, and if this is not employed by the builder himself the FHA planner is certain to annex it for the bureaucrats.

For the first time at least 10% of total cost goes into plot planning and landscaping, so if a good landscape architect is not employed this only means that his work is done by an untrained substitute—it cannot be evaded or satisfied with a few potted cedars.

And for the first time the over-all design needs are so exacting that this Round Table, including bankers and builders, agrees that tract housing demands the architect. This employment of architects, in a field rarely dealt with by them in the past, is indeed progressing at high speed. Said Round Table Member Gruen: “Three years ago I scanned 20 pages of the Los Angeles Times real estate section most carefully and found not one mention of the word ‘architect.” Last Sunday I repeated the experiment and found the word ‘architect’ 39 times in the editorial part of the paper and 11 times in the ads of homebuilders—who always made it very clear that this was a better house because it was architect-designed.”

Three misconceptions must be corrected. The first frequent error of the public relates to what the architect does: he is considered an embellisher of buildings or houses which the public thinks could otherwise be built without him. The Round Table agrees he has five principal functions: 1) to interpret in his plans not only the client’s program but also the requirements brought in by the engineer and by the builder; 2) to specify materials to be used; 3) to correlate the efforts of a many-sided building team; 4) to supervise construction seeing that standards have been maintained; and 5) to act as a professional agent advising and safeguarding the client who is often an amateur in an expensive undertaking.

The second frequent error concerns the architect’s relationship to costs. Few realize clearly that, in the words of Round Table Member Gruen: “The architect sells no products and therefore cannot be an architect and give a cost guaranty, though he must furnish the best possible cost guidance.”

The third frequent error relates to the way the architect is paid. Because most architects have charged “fees”—usually a stated percentage of the construction cost—the public has unthinkingly concluded that the architect’s fee is the last charge against the building, something above and beyond the building cost, perhaps a luxury. The plain fact is that plans and specifications are as necessary to a building as a roof is; and the draftsmen, specification men and others working for the architect, are a payroll expense which must be met even before the pay of bricklayers and plasterers is met.

The public must be advised on costs. The Round Table recognizes that a public impression that “buildings can cost more than you expect” has done harm to the reputation of the industry, and especially of the architect who bears the brunt of it. There is a moral obligation upon the industry to keep the public advised on costs, to anticipate costs, to do all possible to control them.

As final comment this Round Table agrees there is no hardship involved in proposing a higher planning budget for an industry which now stands far behind some others in the proportion of its expenditures devoted to planning and development.

California’s building industry has served its people well. Yet the need for better planning has mounted so fast it is to be doubted whether even a fifth of all buildings erected in this greatest building boom have had the benefit of enough study and planning to reach full economy of construction, full economy of operation, full efficiency in use, or a full yield of pride and delight. Where blight and ugliness have marred the fair landscape, no single contracting has been so much at fault as inadequate provision for proper planning. Only in planning can so modest an added investment bring such a bounty of result.
Design standards and data

HOUSE & HOME introduces a new department by the co-author of Architectural Graphic Standards to help keep architects and homebuilders current on new design details.

Beginning this month HOUSE & HOME updates the most thumbed book in every architectural office: Architectural Graphic Standards, by Ramsey & Sleeper.* Each month this new department will present several new pages of design standards and data developed by Architect-Author Harold Sleeper for future publication in a companion volume.

The three pages of sunshading devices that follow are the first in this monthly series of plates. They are additions of important new material not covered in Graphic Standards. But, like the plates in the book, these present only accepted standards, checked with appropriate authorities, associations, manufacturers and architects.

Subsequent plates, already being prepared by the Sleeper office, cover such timely subjects as roof coverings, modern windows, garages and carports, built-in lighting, special fireplaces, storage walls, built-in furniture and a unique table that will permit anyone to calculate easily and accurately the size of sunshade required for any kind of window, for any orientation, for any part of the country. This table is based on 5,000 separate calculations.

Meanwhile, HOUSE & HOME’s sister publication, FORUM, will present a similar series of nonresidential design standards and data by the same author.

HOUSE & HOME believes both homebuilders and architects will find this new department as useful as the architects have found the book it supplements—the book Architect Ralph Walker, past president of AIA, has praised as “an encyclopedia of all sorts of building information that is tested and true . . . a part of architectural practice and a reference for all of us who work in architectural and allied fields . . . ”

† Such newsworthy pioneering data as are presented will be clearly designated as such.

NOTE: If clipped on the dotted lines, these pages will fit handily in an ordinary 8½” x 11” file folder.

HAROLD R. SLEEPER is an author of note as well as an architect of broad experience. His books include Architectural Graphic Standards, which he co-authored with Charles G. Ramsey, The House for You, which he co-authored with his wife Catherine, and Architectural Specifications, which he authored alone.

Sleeper’s architectural career began in Cornell (B.A) and New York University, and has included successive associations with several of New York City’s prominent architects: Starrett & Van Pelt, Trowbridge & Ackerman, Charles G. Ramsey and Daniel Schwartzman. Today, on his own, he is at the head of an office of 12, applying the knowledge gained in a broad architectural experience that has covered everything—from “houses to public housing, from barns to banks, from comfort stations to colleges, from asylums to apartments.”

When not busy with his books and buildings, Harold Sleeper may be seen at New York’s Architectural League (of which he is past president), at Columbia or Princeton or the New York School of Interior Design (where he lectures), at AIA’s Octagon (he is a fellow and a member of the important public relations and education committee), at a manufacturer’s office (where he may be consulting on product development or product literature) or at HOUSE & HOME’s offices discussing his new series of design standards and data.
SUNSHADING DEVICES

**SOLID ROOF OVERHANG - FLAT AND PITCHED**: Effective primarily on south wall. Length of overhang can be calculated to eliminate summer sun's rays completely and to allow desirable winter rays to enter. Prevents free air movement. Darkens room on overcast days.

**OVERHANGING BEAMS WITH REMOVABLE FABRIC**: Eliminates summer sun's rays. Removable to allow entry of winter rays. Hinders free air movement.

**LOUVERED OVERHANG**: Eliminates direct rays of sun. Spacing of louvers and projection of overhang should be calculated if louvers are fixed. Prevents free air movement and entry of diffused light.

**ADJUSTABLE HORIZONTAL LOUVERS**: Adjustable to control direct sun's rays and glare. View is broken by horizontal lines. Operation is questionable in northern climate.

**EGGCRATE OVERHANG**: More effective than louver. As it eliminates oblique rays of sun. Hinders free air movement and entry of diffused light. Expensive.

**OVERHANG WITH HINGED SHADES**: Adjustable to eliminate summer sun's rays and to permit entry of winter rays. Interferes with view and free air movement. Expensive upkeep.

**ADJUSTABLE METAL LOUVERED AWNING**: Adjustable to control direct sun's rays and glare. View is broken by horizontal louvers.

**LOUVERED WINDOW UNIT OR JALOUSIE**: Adjustable to control direct sun's rays and glare. View is broken by horizontal louvers.

**OPERATING SHUTTERS**: Eliminates sun's rays when closed. Interferes with view.

**TRELLIS WITH NATIVE GROWTH**: A thick growth eliminates sun's rays. Some diffused light will penetrate. Allows sun penetration through bare vines in winter. Air moves freely around leaves.

**DECIDUOUS TREES**: (adjacent to South wall). Eliminates or diffuses sun's rays in summer, allows sun penetration through bare branches in winter.

**FENCE, HEDGE, WALL OR GROWTH ON LATTICE**: Eliminates low East and West rays of sun during summer. If growth is used, it allows sun penetration through bare vines in winter.

**HEAT-ABSORBING GLASS**: Reduces amount of solar heat which enters room. Almost 1/2 of the sun's infra-red rays are excluded.

OVERHANG DETAILS 1.

1. Sliding ledge for Vent
   - Pipe column screwed to girder
   - 3/16" tempered hardwood
   - Brass pin

2. Pipe column to girder
   - Steel plate
   - Bent steel plate
   - Pipe, concrete filled
   - Brass pin

3. Concrete post
   - H-column
   - Split post mounted to base
   - Pipe column to girder
   - Split post to girder

4. Post attached to girder (nail or angle)
   - Cement plaster
   - Vent
OVERHANG DETAILS 2.
In this 1,700 sq. ft. exhibition house lie Frank Lloyd Wright’s suggestions to the average American who builds or buys a home—suggestions first made in 1900 when his houses embodying the same principles first appeared on the prairie outside Chicago. Unlike the more elaborate Wright design presented on p. 122, this two-bedroom “Usonian” house has a simple in-line plan and is within the reach and tastes of many. It shows how Wright first introduced spaciousness and sunlight, warmth and human scale to house architecture and how he opened up the plan, freeing the housewife from the isolated drudgery of the kitchen and permitting her to be a gracious hostess instead of a kitchen mechanic.

This house also represents a long-awaited tribute: it is the first Wright building to be erected in New York City. Part of an exhibit of his 60 years of architectural work, it was built next to a pavilion housing his drawings, models and photographs on the site of Wright's projected Solomon R. Guggenheim Museum.
how to make a small, simple house rich and spacious

High, open side of living room, seen from entry, faces living terrace (walled in because of New York lot limitations). Except for chairs facing fireplace, all furniture is by Wright, including the spherical black kettle. In charge of construction: David Henken of Henken Builds, Inc., a former Wright associate. Wright estimates this house could be duplicated in the New York area for $25,000-$30,000.
Tall doors extend to full height of 12 1/2' ceiling, throw the big living room wide open to its terrace. Roof overhang is richly patterned with rhythmic openings and ornamental dentil bands.

Light and space play freely through the 26' x 32' living-dining area (right). Interior is warm and alive with deep red texture of brick, checkerboard ceiling of reddish oak plywood, twinkling accents of brass spotlight plates, piano hinges, copper-edged shelves and tables.

Central kitchen is itself centrally planned around a table for assembling meals, has a tall view window at left and a skylight above.
Long gallery leading from entry hall to bedrooms has 34' of closets along outside wall opposite a laundry alcove. Hall lavatory-toilet is convenient to kitchen at left and living room (foreground).

At the end of the hall is the master bedroom, secure and intimate in mood with its rich wood finishes, dramatic spotlighting, high windows filtering sunlight through patterned shutters.
A new house by Frank Lloyd Wright opens up a new way of life on the old site

For 30 years the Henry Neilses lived in this big, Italian-French-Spanish box—an alien house that could never fit into the land around it, a shut-in house that shut the people in too.

Now the Neilses have a new home by Frank Lloyd Wright, a structure that is at the same time more sheltering and more open to nature. For the first time they are actually living with their wild and beautiful trees, sunsets on the nearby lake and the flights of Canadian geese that honk their way southward in the fall.
Shelter springs to life in the sweep of protective gables, the slanting battlements of masonry that seem to grow right out of the ground. From carport and entrance (left) the house moves through a bedroom wing to the full height of the living room and out to a terrace (right).

The prow of the terrace rises from the falling land, pointing straight down a clearing to the lake below.
Anchored at one corner by a giant chimney, the tented living room slowly dissolves into glass as it rounds the corner (photos above and opposite).

The great sheltering roof floats on glass above a marble rampart

The big view across the lake comes last. Here the living room flows out through glass doors to the planted apex of its terrace. Mitred glass liberates the corner.
In-line plan keeps living areas away from the road and opens them boldly to the lake; the small, secure bedrooms face an intimate woodland scene. The service side of the house faces less-desirable views.
Focal point inside the living room is Wright's familiar corner fireplace, which provides a complete change of mood from the open view side. Fire can be seen from all parts of the room, including the dining area (photo opposite).

Intersecting planes, warm textures, deep perspectives enrich

Long hall pulls the entering visitor down its dark, mysterious tunnel. At the end, a baffle turns him half-right and suddenly he emerges into the bright, spacious world of the living room. Behind bookcase at right is a passage to the bedrooms.
The building inside and out

**Multicolored marble**, hand-chipped into thousands of facets, takes on glowing richness under special ceiling spotlights. The 30 varieties of marble used are culls reclaimed from the owners' old marble business. Furniture is from the architect's design, fabrics woven by Mrs. Neils.

**Sheltered service walk** leads in dramatic perspective past the toolroom and carport piers to maid's room and kitchen.

LOCATION: Minneapolis, Minn.
MADSEN CONSTRUCTION CO., contractors,
Lyell Halverson in charge of construction

NOVEMBER 1953
Architect takes a lot and a half to give his

West-facing front of house, fondly called "Born's Barn" by neighbors, is wisely closed to sea glare, wind and curious passers-by. Extra half-lot added only $1,000 to total, permitted advantages not possible in typical 25' houses with long, narrow plans, living rooms over garages (seen in left background).

LOCATION: San Francisco
ERNEST BORN, architect; ESTHER BORN, associate
A. V. SAPH JR., structural engineer
CLYDE E. BENTLEY, mechanical and electrical consultant
DOUGLAS BAYLIS, landscape architect
FRANK S. MARSHALL, contractor
plain-seeming row house five luxuries:

1. The luxury of spaciousness, for less than $12 per sq. ft. The living room, seen here from the entry hall, is a full 50' x 25', two stories high. Window wall opens the whole house eastward to the garden and to the welcome morning sunshine.

2. A chance for indoor-outdoor living in the city. Wider lot allowed Born to fit all required indoor spaces on front part of lot, use over half its depth for garden and have indoors and outdoors conveniently at same level. House acts as big windbreak, shielding terrace from strong sea winds. Future house will replace fence at left, share rear garden three lots wide.
A kitchen with a kitchen yard right outside. Extra lot width meant not having to build right up to the sidewalk line to get all the necessary rooms in. The fenced yard, 15' deep, is usable as a herb garden, drying yard and supervised play space, has a two-way receptacle in front fence for garbage and deliveries. Kitchen is designed for light and view toward yard, easy access to front door (through hall door at right), and a pass counter to the dining area (foreground).

A mezzanine plan that opens all major rooms to the garden. Living room, dining area, kitchen and balcony study all share the two-story spaciousness and view of the rear terrace. The big room is large enough in floor area and scale for many uses—hobbies, meetings, informal parties. Slab floor is vibrationless and nearly indestructible, can be sluiced and mopped down like a ship’s deck when cleaning up. Skylight, replacing side windows, makes the whole interior bright and cheerful even on overcast days; exposed ceiling joists act as baffles against sky glare.

An intimate dining area under the balcony study. Here the low ceiling is finished in the warm texture of spaced wood slats; above are built-in light troughs, glass wool for sound absorption. Table, a Born design, is laminated of 1” x 2” strips of fir and sugar pine.
OLD WAY—how Place used to wire his houses:

A maze of four two-wire general-purpose circuits, paralleled and crisscrossed. Place's wiring layout was better and more economical than the average job, but expensive electricians spent too much time drilling and notching studs and rafters. Over 600' of two-wire cable was used, plus 73' of three-wire for switching legs, but capacity of the four circuits was only 60 amps, and a heavy increase in the load (like a room cooler or bathroom wall heater) would require the installation of an expensive 240-v. line from the main. (Separate range, drier and appliance circuits not shown in diagrams.)

HOUSE & HOME suggests how

New wiring layout is developed by Carl Boester (left),
tried out by Andrew Place (below),
approved by South Bend
and endorsed by industry leaders and electrical code experts
to get adequate wiring for less money

Three years ago this magazine's Round Table on waste in homebuilding noted that the electrical requirements of most houses were alike, urged that topflight technical talent develop a better and more economical way to wire the builder's house.

When neither the electrical manufacturers, nor contractors, nor the now-defunct research division of HHFA—nor anyone else—took up the challenge, H&H handed the assignment to Carl Boester, former director (and still consultant) of housing research at the Purdue Research Foundation, and chairman of the electrical systems panel of BRAB's study on conservation in building construction.

Next, H&H looked around for a builder to field-test Boester's ideas, selected Andrew Place of South Bend for these four reasons:

1. He was so well known that other builders would have confidence in his report.

2. His houses were reasonably typical.

3. His wiring was already more economical than most.

4. He was assured of cooperation both from his electrical contractor and the local chief electrical inspector.

Place is so pleased with the results on his test houses that he will follow the Boester-H&H wiring ideas from now on. The dollar saving cannot be determined exactly until scores of houses have been wired this way, but it will certainly be not less than the 5% achieved on the first job, and may reach 25%. And everyone agrees that the new system has more flexibility and greater capacity, makes provision for future needs much easier. By putting the savings back into the wiring system, the builder can offer 100-amp. service capacity and No. 12 wire circuits, sufficient for any normal electrical load that might be added in the future.
WIRING

New system has four advantages

Before and after pictures are dramatic demonstration of how preplanned three-wire system saved time formerly spent in drilling holes by $5.50-per-hour electricians.

1. **Three-wire system is fast.** Place’s electrician cut 6 man-hours from the 27 previously required to rough in the general-purpose circuits because three-wire cable went in just as fast as two-wire, and the new system saved drilling almost 100 holes through the framing. It used 21½% fewer feet of wire (344’ of three-wire and 168’ of two-wire, as against the old 600’ of two-wire and 73’ of three). Material costs were almost exactly the same, figuring three-wire No. 14 at 6½¢ per ft., two-wire at 4¢ per ft.

2. **Three-wire system is adaptable.** First cost will be almost the last, for 240-v. current is available anywhere in the house and the two circuits around the perimeter can be tapped for additional wall outlets at minimum cost. Loads on these circuits are kept in reasonable balance by putting outlets on alternate 120-v. lines. Outlets may be changed to 240 v. by a simple change of wiring within the outlet box and the substitution of a 240-v. outlet.

3. **Three-wire system is extra safe.** As an extra precaution, Inspector Harrison suggested incorporating individual fuses in each outlet, and designed a device for Place. This will cut the danger of overloading circuits and blowing main fuses most of the time. First models did not meet National Electrical Code requirements, but are being redesigned to make them foolproof before they are marketed. Andy Place thinks homeowners will like this feature, for many homeowners are nervous about replacing fuses on the main panel and anyone can replace the fuse at the outlet with just a twist of the wrist. It is not a necessity with the three-wire system, but merely an extra safety factor.
4. Three-wire system adds capacity. Though increase in conductors is only 50%—from two-wire to three-wire—maximum rating goes up 100% (see chart, right) and capacity rises 400% at the same voltage drop. In addition, at an equal 1-v. drop, a three-wire system carrying a 2,400-w. load can be four times as long as a two-wire circuit. If Place switches to No. 12 wire, he will probably have to use new devices with pressure-lock terminals (sketch below) rather than the screw-type, for bending No. 12 wire around screw terminals is slow and heartily disliked by electricians.

Three-wire system wins industry praise

"This seems the most advanced thinking being done in residential wiring. It will be up to the industry to take the ball from here."

A. Carl Bredahl, Westinghouse Electric Corp.

"I think the system is a big step forward. I especially like the safety of the individually fused outlets, and am looking forward to Place's making a 100-amp. panel standard equipment."

Herbert Harrison, chief electrical inspector, city of South Bend.

"Evidently, the three-wire system indicates a worthwhile improved installation and dollar saving. Our Research Institute will follow through and post our members on all the details."

Leonard G. Haeger, NAHB Research Institute

"We got the better, safer electrical wiring system we were looking for, and still saved money."

Andy Place, Place & Co., South Bend

"The use of three-wire 120/240-v. circuits will result in marked advantages: enlarged capacity, increased ability to handle motor-starting inrush currents, decreased voltage drop, increased allowable circuit length and the important gain of a 240-v. source readily available at strategic outlets for the larger appliance motors coming into general use."

A report of the Joint Committee on Branch Circuiit Protection of the Association of Edison Illuminating Companies and the Edison Electric Institute

"It is encouraging to learn that enterprising builders are adopting the approach to branch-circuit design that is recommended in the 1953 National Electrical Code, Section 2115b. This recommends the use of a three-wire branch circuit as the equivalent of two two-wire circuits. Residential buildings equipped with this three-wire arrangement provide a greater opportunity for the enjoyment of the real and lasting benefits of electrical living."

H. H. Watson, commercial engineer
Hints on housing policies

▶ FHA will seek major overhaul to simplify titles next year. It wants higher mortgages for big-city apartments

▶ Flexible interest rates face sure death in Congress and rent certificate idea for public housing draws fire

As the President’s housing advisory committee dug into its welter of problems, the first hints appeared last month of what the administration’s 1954 housing policy might be. The changes shaped up like this:

▶ Public housing—may be more firmly tied up with rehabilitation and redevelopment, but chances seemed to be growing that the committee will not recommend killing it altogether.

▶ On FHA—a major overhaul and consolidation of titles to simplify the program, a better break on down payments and amortization for existing homes, higher mortgage limits on high-rise apartments, new legal tools to help rehabilitation and (perhaps) a recommendation for fiscal independence like the Federal Reserve Board or Home Loan Bank Board.

▶ On VA—appraisals and perhaps valuation procedures will probably be combined with FHA, but VA would otherwise keep its separate status.

▶ Fanny May—probably a recommendation for improving its possibilities as a central mortgage bank, perhaps with provision for ultimate private control.

On many another topic, dues were too scant or the members of the committee too divided to warrant forecasting. And whatever the advisers (many of them Democrats) urge on President Eisenhower as GOP housing policy, their labor will be lost if Congress disagrees with them. One example of how sense-making housing policy can go aground is the current impasse over political shams was interest rates. It was an open secret that the committee might well propose that FHA and VA be given a flexible mortgage rate to allow for market ups and downs. To do this, Congress would have to raise the ceiling rate, at least on VA loans. In an election year, few expected the legislators to muster courage enough to do it.

Although such a move, by stabilizing the flow of money into government-backed mortgages, might well reduce house prices—public understanding of the fact was not wide enough to seem persuasive to politicians. Said Rep. William H. Ayres (R, Ohio), a high-ranking member of the House veterans committee: “It would be unrealistic to expect us to hike the interest rate on veterans.”

Public housing tangle. It may also prove difficult to talk Congress into dismantling the public housing program unless the advisory committee performs a miracle and comes up with a palatable substitute. Some private industry groups were urging a rent certificate plan under which needy families would be housed in private housing certified by local authorities as safe, sound, sanitary and reasonable. The local community and federal government would share the cost of rental aid. Backers of such plans would require that communities be making modest efforts at rehabilitation and conservation and 2) efforts to educate and train rent certificate recipients to earn more money before they qualify for federal aid.

Propublic housers in the advisory committee were so set against such maneuvers to make localities shoulder more of their own responsibility that they were preparing to write a minority report if the recommendations did not suit them.

HFF Administrator Albert M. Cole, the committee chairman, told the National Assn. of Housing Officials (see p. 37) that he hoped to make public housing more “effective” by helping “localities to marshal their own resources to the fullest so that we can remedy the root causes of our slums.” He said public housing must be tied in far better with over-all plans for city redevelopment.

Another spot where Congress might overrule administration policy framers was FHA’s wish to be freed of congressional control over its budget as soon as it repays the Treasury the $85 million advanced to get the agency started. Since FHA operates at a big profit (it has no selling expense, as do other insurance organizations), it made much sense to do so. Among other things, it would end periodic Congressional or Budget Bureau penny-pinching which this year has forced FHA to fire 300 field men. And another 200, according to Edgar C. McIntosh, assistant to the commissioner, are due to go soon.

Bolstering their argument, FHA men can point to other federal agencies supported by their users and not subject to the spending whims of others. The Federal Reserve is supported by assessments on its member banks and can use its income as it likes. The
Federal Deposit Insurance Corp. enjoys the same status. But the member-supported Home Loan Bank Board, which has long since repaid the Treasury its founding advances, remains (like FHA) a budgetary captive of HHFA, the Budget Bureau and Congress.

What FHA wants. In talks to the National Association of Housing Officials, to New York savings bankers at their seagoing convention and to homebuilders at New Orleans, FHA Chief Guy Hollyday let a few kittens out of the bag about FHA's legislative plans. Because the National Housing Act which created FHA in 1934 has subsequently been amended 46 times, he noted, it has grown too complex. So Hollyday said he "would like to see some of the present constraining statutory controls eliminated for the sake of simplification." He wanted unused sections of the act scrapped or consolidated with active ones. Existing homes should get an equal break with new construction on the maximum loan-value ratio of mortgages, the commissioner argued.

That meant a 95% loan, instead of the maximum 80% loan. The present discrimination, he said, is a "handicap" to urban rehabilitation drives. For these, FHA will propose it be given new legislative tools—presumably along the lines Hollyday suggested five months ago in a Baltimore speech; FHA would take rundown neighborhoods off its lending blacklist if cities begin strong rehabilitation drives.

Rental overhaul. The biggest potential change involved rental housing. Hollyday told NAHO that FHA was trying to overhaul its entire rental title. Under the present $2,000-a-room ceiling, he admitted, it is "impossible" to build fireproof elevator buildings in big cities. Said Hollyday: "We will ask for a higher ceiling in high cost (city) areas."

If the housing policy committee and Congress approves Hollyday's plan, FHA's rental overhaul would mean a job for the metropolitan construction scene. Reason: under FHA's present $7,200 mortgage-per-unit limit the more costly the land the smaller the mortgage on the construction. So FHA apartments have been built (since Sec. 608 was killed) almost entirely on cheap land at the fringes of cities—accentuating the flight to the suburbs that plagues big US cities.

Central bank plans. Mortgage men who dominated the housing committee were reported leaning toward giving Fanny May a major shakeup. Apparently they had in mind a hybrid between the old Fanny May and the central mortgage bank so long espoused by realtors. Like Fanny May, the new concoction would buy and sell only federally-backed mortgages. Unlike Fanny May, it would sell debentures on the open market, instead of leaning on the Treasury for financing. It seemed a good bet, anyway, that Fanny May would get no more money from Congress—

at least next year. Too many powerful legislators opposed it.

Whatever the President's housing advisers recommended, their decisions would have to reach to the bedrock of federal policy. And political repercussions seemed inevitable. A lot of people expected a call for less government responsibility for sheltering its citizens. But the committee may surprise them. Said Chairman Cole: "There is readiness for fresh thinking on these questions. We are at a logical threshold for new and imaginative approaches to the housing problems of the nation."

FHA cracks down on Title I repair racket; orders lenders to investigate, certify dealers

FHA moved decisively this month to stamp out racketeering in Title I home repair loans (H&H, Oct. '53, p. 168). Commissioner Guy Hollyday issued orders that:

- Lenders must henceforth obtain signed applications from contractors doing Title I business with them. These must guarantee that "ethical and proper selling practices will be followed" and "immediate attention given to all complaints involving materials, workmanship or sales representations." Deliberate false statements are punishable by a $5,000 fine or two year jail term.
- For contractors with whom lenders have not done Title I business in the last 12 months, lenders must certify to FHA that they have investigated and found them "reliable, financially responsible and qualified" to do a good job.
- Lenders must begin keeping records of their experience with each Title I contractor—showing loan volume, losses and complaints or irregularities.
- A six-day waiting period be imposed before a Title I contractor can collect from a lender for a completed job. Purpose: the lender will meanwhile notify the homeowner of the transaction and await squawks, if any.
- FHA will insure no more Title I loans where borrowers have been given or promised a cash payment, rebate or commission on future sales. (These were some of the most frequent come-ons used by "dynamiter" salesmen of home repairs and improvements.)

To make sure the cash bonus loophole was really plugged up, FHA will also require contractors to certify in completion certificates that no cash bonus, rebate or commission on future sales has been given or promised. Contractors also must certify that all bills for labor and materials have or will be paid, and that they will hox back the Title I loan if any of their representations prove wrong.

FHA's orders added up to a serious and probably successful effort to overcome what has been called the Achilles heel of its loan insurance program. FHA relies solely on banks' prudent lending policies to screen out bad Title I loans. It neither investigates nor evaluates them itself before insuring. Such a task would cost too much, anyway. Last year, FHA insured some 2 million Title I repair loans averaging $500 each. But because Title I pays an effective 9.6% interest and bears federal insurance, many an institution was making too little investigation.

By last spring, hot-shot and high pressure salesmen were so active in the home repair field that in one three month period Cali­­fornia's state license board filed charges of fraud and misrepresentation against 50 construc­tion firms. In San Francisco, the Better Business Bureau went to the lengths of calling a press conference to expose and denounce sales pitches which were leading some home­owners to think they would get a $1,000 mastic job free because their house would be used for "advertising."
Nathan Manilow, whose firms have built more than $180 million worth of housing since 1940, is now president of American Community Builders, Inc., and second vice president of NAHB. Park Forest is only two-thirds completed, and Manilow's decisions will greatly influence future design.

**Nate Manilow and Park Forest**

From now on, Park Forest will offer only designs like these . . .

... instead of these semitraditional houses offered since 1950
switch to the contemporary look

Will cautious Midwestern builders take courage about modernizing their design from the example set by mid-America's most successful planned community?

Nate Manilow explains: "People's taste is changing fast in favor of contemporary. Especially the young couples — and young couples buy most of the new houses. Like the first new postwar cars, our houses have been basically refined and dolled-up 1941 models. But our 1954 program calls for a real 1954 house.

"In an operation as big as Park Forest (2,600 homes, over 3,000 rental units, 22,000 residents since 1948) you can't afford to gamble on public acceptance. But now we are so sure our market is ready for contemporary design that we have already started engineering a still more advanced house for 1955."

Architect (and construction v.p.) Joe Goldman adds: "Three years ago FHA and VA would have discounted these new models heavily. Today they both give us full valuation. We do not expect construction economies at first, but in the long run, modern design should be more efficient and economical."

Sales Manager Jack Rashkin agrees: "Our whole sales staff is waiting for the new models. From the people who went through the Parents Magazine house (p. 141), we have over 125 good prospects for a contemporary house. We know we will sign up most of them for one of our new houses."

Park Forest's sponsors looked before they leaped. Here are some of the reasons Manilow, Goldman and Rashkin are so sure their new modern designs will sell well:

1. Manilow has talked with many other builders and architects at NAHB Trade Secrets meetings and H&H Round Tables, knows how fast modern design is winning acceptance everywhere.

2. Last spring Park Forest slipped two houses with the contemporary look into its production line, saw them make an immediate hit, heard compliments for "your new house."

3. Park Forest residents show their readiness for modern in the advanced plans the local committees approve for schools and churches. The one section of Park Forest reserved for custom houses leans heavily to contemporary.

4. The success of the Parents Magazine house (see p. 141).
Park Forest is abandoning the idea that every house must be sited the wide way on the lot, with a Cyclopean picture window staring at a similar one across the street. Most of the new models will have their long dimension from front to back, but low roof lines carried over side carports will give the wide appearance the Midwest demands. This switch automatically gives:

1. A convenient second entrance for children and deliveries.
2. The privacy of a side-yard view.
3. Outdoor storage (50 to 80 sq. ft.) at side or rear of carport.
4. Car shelter, which most Park Forest home buyers have been paying $700 to $1,500 to get in the form of a garage after they move in.

To make more room for side-yard living, some Park Forest lots will be upped from 60' widths to 70'. None of the new models will have rear living rooms, though Goldman says the idea is being considered:

"We won't build rear-facing houses until we have land that is completely laid out for that kind of living. The whole question of land planning would have to be reconsidered. We're trying to learn how our 22,000 residents really want to live."

Storage for everything. Attics and oversize utility rooms have always been the Park Forest solution to the storage problem in their slab houses, but the 1954 models will put all outside-use items (bicycles, hoses, lawn mowers, etc.) where they belong—outside. One model, which has storage space under a hip roof, eliminates the utility room entirely, puts laundry facilities in the kitchen and adds a full dining room.

Storage walls have not been used because of a code requirement for electric outlets on interior walls, and because Joe Goldman thinks the cabinets he has seen are "too flimsy."

Nate Manilow frankly admits that most of his attention has been on elevations in these first efforts, but floor plans are not sacrosanct and will soon be re-examined. Already Goldman is planning a combined kitchen-utility space, now feasible because of the outside storage for all the clutter that makes utility rooms unsightly.

Time-saving techniques learned on previous houses will be carried into the new models. Rubber cove strips that can be installed by asphalt floor layers will eliminate return trips by carpenters and painters to finish base molding. An FHA-accepted one-coat paint job is obtained by painters who slop paint on heavily with a white-wash brush, then roll it smooth with a roller.

Sales are always good. Park Forest has no sales problem for its more than 1,000 single-family houses per year, and has a long waiting list for its rental units. The social advantages of the "Park Forest life," which add to house values, have minimized customer dissatisfaction with conventional designs. It is greatly to the credit of Park Forest's management that they have not sat back on their success, but have noted the shift in public taste and have begun to bring their styling abreast of such change.

End-turned plan is radical departure for Park Forest, but will face living rooms away from street. Wide front models will get additional 5' lot width, and corners will get 10'. AGB feels customers will like carports, though few builders in the Chicago area offer them.
This house confirmed Park Forest's decision that contemporary will sell

Park Forest is not really gambling that its Middle West, middle-income, middle-of-the-road market will like contemporary enough to buy it. Its popularity has already been proved. Without any advertising, the two models of the 1953 Parents Magazine houses shown here pulled as many as 5,000 visitors over a week end when they were built at Park Forest in September. Jack Rashkin's sales staff sold 15 duplicates (at $17,500) before a lack of suitable lots forced them to stop taking orders.

Architects Loeb!, Schossman & Bennett's house proved so popular among families with growing children—and so easy to build—that Manilow says he will build a larger version of it in a new project on the North Shore, as well as more at Park Forest.

Side yard looks impressive, though only 60'-wide lots were used. For the 15 duplicates, Park Forest will provide 70' sites to add to privacy for side-sited houses. Woven board fence was immediate hit with visitors, has already been duplicated many times at nearby houses.
Child supervision is easy for busy mothers from kitchen vantage point. Laundry, cooking and cleaning are also easy to integrate from this pivoted location. One model had folding door between kitchen and dining area, but preference was for solid wall with sliding door.

Overlapping square plan of test house offers many advantages

Open dining area is very popular at Park Forest, since it can be closed off from kitchen. Hanging light extends into room on metal track and can be adjusted to either high or low lighting position. Large windows in dining area brighten one end of living room.
Children's bedrooms open into huge playroom when folding door is thrown back. Architects envisioned this as fine rainy-day solution to play-area problem, important in slab houses. At end of day, privacy can be regained by closing the wall-length folding door between rooms.

Living room can be oriented to side yard for privacy, would not require closed drapes, as would street-facing window. Entrance foyer insures that traffic bound for other rooms will not have to funnel through living area. Full-length windows are protected by 2'-3" overhang.
Old houses are moved and modernized

Southern California builders show that remodeling can pay off for both builder and buyer

Most talked-about houses in the San Fernando, Calif. Parade of Homes last month were these two antiques which were moved in and rebuilt while the crowds watched. Both were bought and modernized by Ernest Becker, president of the San Fernando Building Contractors Assn. Sponsored by the builders' association, the demonstration was successful in dramatizing how modernization can transform old houses.

The house above has now been moved to a parking lot across the street from the Statler Hotel for the California Real Estate Assn. convention and for a subsequent NAREB convention. Becker bought this 40-year-old house for $2,900, spent another $1,000 to move it. To make sure his demonstration was a success, he modernized practically every part of the house. After he had torn off the front porch he closed one of the front doors, added new windows all around, installed side-wall shakes and a new roof, then completely remodeled the interior with dry wall applied over the old plaster. New heating and wiring were part of the improvements.

Also added: an entirely new kitchen filled with mechanical equipment, a new bathroom, large floor-to-ceiling sliding glass doors that open a rear den to a terrace. Becker estimates he now has the equivalent of a new house that would sell for $16,000 to $17,000.

To demonstrate the remarkable improvement in appearance and livability, a large photograph of the original house was displayed on a signboard and one of the bedrooms was left in its original condition so that it could be compared with another bedroom that had been modernized with new windows, color and storage walls.

Most important lesson from this experiment for other builders' associations is that a modernization job done in a home show is a dramatic way to get public attention and to stimulate remodeling.
Transformed house after remodeling was finished

This pre-1890 shack was bought and completely rebuilt by Becker to encourage owners of rundown properties to remodel their houses. Working closely with Gil Morris, Los Angeles superintendent of buildings, and with Chief Building Inspector William S. Bush, Becker transformed this uninhabitable shell (dubbed "the basket case") into a house that became known as the "Re-enchanted Cottage."

Under normal circumstances, this house would not have been worth remodeling; it would have been easier and cheaper to build a new one. But by rebuilding it before the Parade of Homes visitors, Becker aroused interest in both the NAHB modernization program and in NAREB's rehabilitation activities and its "Build America Better" program.

The house was so far gone that when Becker finished with it, there was little of the original lumber left. He added new stud walls, partitions, siding, roof, windows, doors, wiring, plumbing, heating and dry wall. All work conformed to the L.A. building code.

Labor and material bills came to $2,664, of which plumbing cost $500; electrical, $160; rough lumber, $245; siding, $186; finish lumber, $303; dry wall, $321; cabinets, $140; painting, $159; rough labor, $324; siding labor, $108; finish, $194; cabinets, $24.

NOVEMBER 1953

for Parade of Homes

COST BREAKDOWN of "Operation Face Lift":

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<th>Item</th>
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<td>Wiring</td>
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Priced at $11,250, "Del-Mar" model has three bedrooms, one bath. Roofs on all are asphalt shingle. Note how windows line up on front and side, how shingles course out evenly with them. Some architects would question wing-wall segments which flank picture window.

1,030 sq. ft. plan has 60 sq. ft. of outside storage. Service entry from carport to kitchen is direct. Front kitchen gives housewife command post for side, front doors. Note how kitchen and bathroom plumbing is backed up. Closet in master bedroom has sliding doors.

The fastest-selling houses in the USA

LOCATION: Newark, Del.
LEE & KORNREICH, builders
STEPHEN KORNREICH (AIA), architect
MYERS-RICHARDSON, engineering
BEATRICE WEST, color coordination
FINANCING: T. P. O'Toole, Inc.

Sales manager is Mrs. E. T Holm (right), demonstrating range to customer in larger, L-shaped house.

Mass merchandising: builders bought half hour on local radio station before big opening, sponsored another half hour on opening day with roving reporter interviewing visitors. Radio tub-chumping was so successful, builders tried 15-min. TV show which sold 22 houses in two weeks.
Big value quickens sales in Newark, Del.

By using assembly-line production techniques and mass merchandising

these builders may already be meeting prefab house values

If prefabbers are producing values that other builders must meet (see p. 102), then these builders with their on-site production techniques, programmed promotion and merchandising may represent a merchant-builder operation as significant as prefabrication. Like Wallace Johnson, Hamilton Crawford, Stanley Praver, Gross-Morton, Ray Burkland, and the Levitts and numerous California builders, Lee & Kornreich move about the country, building houses where demand is the greatest. After building over 100 houses in Groton, Conn. for personnel at the submarine base and Electric Boat Co., they chose as their next stop fast-growing Newark, Del., which has more than doubled its 1950 population (5,400) in two years.

Newark has big Du Pont and Chrysler plants and is close to industrial Wilmington. From which most of the home buying prospects are drawn.

Plush features. These houses in Newark's Chestnut Hill Estates are fast sellers because they offer customers the kind of plush values generally found only in higher-priced houses. Yet the average selling price for the two models is $80 per sq. ft. without land. The 1,282 sq. ft. house has two complete baths, big bedrooms, a 23' 9" x 18' 6" living-dining area with cathedral-like ceiling and a corner fireplace. The smaller, 1,030 sq. ft. house also has three bedrooms. Both houses have car porches, outside storage, high-quality windows (generally found only in more expensive houses), colored bathroom fixtures, built-in clothes hampers, vanities, extra-large double-mirrored medicine-cosmetic cabinets, heat-resistant counter and sink tops, perimeter heating. (Kornreich credits Big Builder Ray Burkland with getting slab construction accepted in the area. Burkland, like Lee & Kornreich, moved to Newark from Connecticut, will have built nearly 1,000 houses in the area before he is finished.) Minimum plots are 80' x 100'; grounds are landscaped; all roads are paved; sidewalks, curbs, sanitary and storm sewers are included. Developed land costs average $1,060 per lot.

There are three exterior elevations for each model, 18 color schemes. Says Mrs. E. T. Holm, sales manager: "There are more than 100 different houses before one is repeated—a sales feature that is of growing importance."

Steady sales. The builders averaged a steady eight-sales-per-week pace in selling 65 houses of the first 75 roofed in. They will build 25 more before they stop operations for the winter, confidently expect to have them all sold before the year is out. No mortgage trouble. Lenders as well as buyers like the project. The builders had no trouble getting mortgage money from T. P. O'Toole, Inc. in Wilmington once the first models were up. However, the builders' sales brochures caught the eye of an out-of-state bank, which sent officials to look over Chestnut Hill. Says Builder Irving Lee: "They liked our package so much they volunteered to buy our mortgages." The builders had 5% down payments, 25-year mortgages with T. P. O'Toole, Inc., got a 30-year no-down-payment deal from the new mortgagee, which allowed them to deal on the same terms as their competitors in the area. (The builders will not divulge the name of their new lender, pending additional financing they are working on.)

Stress on community. The sales brochures lay great stress on community: "Chestnut Hill Estates—distinctive new houses for better living. There's a difference when you live in a community—not just a development." Three imposing community gateways will cut down the number of direct entrances to the project, assure buyers their children can play in safety. To enhance the desirability of the community, Lee & Kornreich believed an informal rather than a gridlike street pattern was essential; so they hired a local engineering firm to do the site plan, on which Kornreich collaborated. Trees were saved wherever possible between property lines. Says Kornreich: "We couldn't save many because the grades changed too much. I try to save them wherever the grading permits." He lays the

2. Five cuts in one position are made by portable rafter cutting fixture, designed by carpentry sub, Florin & Lewis. It enables three-man crew to cut 250 rafters per hour. Once rafter is locked against stops, three portable saws make ridge, end, bottom and two notch cuts.

3. Precut lumber is trucked from central shop area. Material is loaded in reverse sequence so lumber used first is on top when truck is unloaded near slab. Builders have tried precutting lumber for two houses between two slabs, find cutting in central area saves time and money.
Larger, L-shaped house of 1,282 sq. ft. has two complete baths, sells for $14,500. All color styling is by Beatrice West. This house has white asphalt roof, blue-gray shingles; trim accents are white. Circulation from carport to rear door in dining area is good.

4. Complete frame for one house is on truck. On slab in foreground crew already has bored holes for bolts, nailed all sills in place, laid out framing à la Leed. Since carpentry crew finds lumber on truck in order of use, tight schedules can be met. System is only at mercy of weather.

5. Wall is tilted into place by framing crew after assembly. Architect Stephen Kornreich, who supervises entire construction operation, watches crews closely on first houses to interpret details.
tree-saving problem squarely on the doorstep of VA and FHA: "I'm sure most builders would save trees if they got a reasonable value for the cost of saving them. It costs money to dig wells or work around them. But try to get insuring agencies to see it."

**How economy was achieved.** Most of the economy achieved on these houses lies in the planning (back-to-back kitchen-bath plumbing in the small house, back-to-back bathroom plumbing in the big house), mass purchasing, the production-line techniques (shown in the photos at the bottom of these pages), builder-subcontractor teamwork and architect-builder collaboration. Precutting alone saves at least $150 per house.

Kornreich says: "Most builders can't achieve a project this size (450 houses proposed) because they can't get the proper coordination and cooperation. Builders need an architect, but the average architect doesn't look enough into the economies of mass production. The architect working with the merchant builder must keep asking himself: 'How can I design the house so it can be built the cheapest, most efficient way?'"

He credits his presence on the job as the chief way of getting the bugs out of any plan which is either not clear to workmen or not feasible for mass production.

**Construction techniques.** The builders use dry wall that fits exactly into the clear 8' space between finished floor and finished ceiling. They do not use roof trusses, because, says Kornreich, "as yet I cannot figure how they could be made to pay on an L-shaped house (most of the houses are L-shaped) and we have a cathedral-like ceiling in the living-dining area, anyway."

**Big-house complex.** The big, L-shaped "Delaware" model is by far the most popular house. From foyer to kitchen visitors comment on the spaciousness of the house; they like the two baths, the bigger bedrooms, the open kitchen. Four out of five sales are of this house; so the last 25 houses to be built this year will be all of this model. "It's true," says Lee, "that you have to offer more house for the money. People today want a house big enough to move around in. We try to give them not only space but livability and conveniences."

Most popular colors were those on the model house: a white asphalt-shingle roof, blue-gray shingles. "But," says Kornreich, "most people like the color of the model best on every project. We maintain exterior color control in the development to keep it looking good. Buyers are willing to settle for the color of any house if they like its location." Roof pitch is kept low (5 in 12), windows at a height that will not produce claustrophobia (4'-6').

**Design.** Although the smaller "Del-Mar" house has the traditional front living room, its kitchen is in the front of the house. The "Delaware" has a living room that runs the complete depth of one side of the "L." Architect Kornreich would have preferred a complete rear living room, says: "It makes more sense today in suburbia"; but like other keen builders Lee & Kornreich are making a gradual transition in this direction. They put a large window in the front but a complete window wall in the rear overlooking a flagstone patio.

* For a contrary opinion on proper location of living room, see p. 104.

Openness of kitchen to dining area does not frighten buyers because sales force is alert to explain efficiency of kitchen fan in removing odors.

For a contrary opinion on proper location of living room, see p. 104.

*6. Framed house awaits sheathers, window and exterior door crews, fascia nailers, roofers, siding finishers. Builders claim their erection system will produce ten houses per day in good weather.*

**Living room seems larger on L-shaped "Delaware" model than its dimensions imply, mostly because ceiling slopes upward from 8' height at walls to 10' height at center. Two-way fireplace is one of biggest sales features.**

*6. Framed house awaits sheathers, window and exterior door crews, fascia nailers, roofers, siding finishers. Builders claim their erection system will produce ten houses per day in good weather.*

Photos: Lubitsch & Bungarz
Storage walls are prebuilt and sanded in builders' own shop on project, hauled in sections to each house. Builder Ed Holmes, who has four sons in his family, became sold on the storage-wall idea after putting them in a house built for himself.

**Open planning of house fits casual entertaining of contemporary life.** Dining area, at first partially separated from living area with storage partition as shown here, was later completely opened up to living room. Only the partition between basement stair well and bath is not a storage wall.

**Storage walls make a Salt Lake City best seller**

LOCATION: Salt Lake City, Utah

HOLMES & JENSEN, builders

M. E. HARRIS JR., architect, site planning

FINANCING: Prudential Insurance Co.

Prudential Federal S & L

Kitchen cabinets run to full ceiling height, have open space at counter height. Photo is not of house shown in plan. Builders offered drop table, breakfast bar at first, later substituted floor-to-ceiling cabinets which their customers liked better.

**Hallway storage wall** (left) 10" deep is located centrally for table and bed linen. Bathroom has its own linen closet (see plan). Multipurpose room (below) could be used as part of living room at buyer's option as shown in plan or fitted with fixed panel and two sliding doors for separation.
Open-room technique for finishing interior is made possible by use of roof trusses. After plastering of ceilings, laying of hardwood floors, storage walls are anchored by shims at 8'-2" ceiling height. Finish trim is applied top and bottom.

Extra tolerance between 8'-high storage walls and ceiling is necessary to avoid gouging plaster when storage units are tilted into place. Even largest units can be brought through doors. Builders finish floors after installing storage walls so they do not have to remove scratches a second time.

This $13,500 house probably has more storage space than any other production house its size.

Storage walls make these houses the fastest sellers that Builders Holmes & Jensen have had in several years. The houses are packed with as much (if not more) storage space for their size as any production house ever built. Neatly forming all but one partition in the house are 62 lin. ft. (about 50 sq. ft. and 650 cu. ft.) of storage walls. Designed by Ed Holmes, the units are nulled, 20 at a crack, in the builders' own shop on the site.

An all-masonry three-bedroom house of 1,134 sq. ft. sells for $14,900; a two-bedroom, 924 sq. ft. house for $13,500. Biggest sales bursts came in May, June and August, a time when some other builders' sales were in the doldrums. Thirty of the 35 houses are sold. (Other Salt Lake City builders who are bigger work in different price classes: Alan Brockbank, past NAHB president, builds higher-priced houses, is getting started with US Steel prefabs; Cannon-Papanikolas builds lower-priced houses. Holmes & Jensen, who worked with Alan Brockbank on big Rose Park, will join Cannon-Papanikolas on a new project in the spring.)

Mortgage volunteer. Buyers are not the only ones enthusiastic about the houses: Prudential Insurance, which shares some of the mortgages with Salt Lake's Prudential Federal S & L, is so pleased with the house it volunteered to buy more mortgages next year if the builders did the same house.

Talent and ingenuity. The storage-wall house should be a tip-off for small and big builders alike:

- Builders who find sales resistance to dry wall in their localities can find in storage walls a partial answer to the high cost of wet plaster. Only the outside walls of this house are wet-plastered. The builders pay for their plastering on a square-yard basis, find their plastering bills are lower (but probably not low enough because the subs still insist their job is made no easier). Although storage walls cost the builders half again as much as stud walls, the sales appeal of so much storage far outweighs the additional cost, and the builders are gradually lowering their storage-unit costs as they gain more experience with them.

- Small builders can take heart from the sales success Holmes & Jensen had on this small project: although they had built as many as 100 houses per year in the past, they decided to build fewer houses last year and this. Says Builder Ed Holmes: "We still make about as much money as we ever did but we're having a lot more fun."

- The builders recognize what HOUSE & HOME has been pointing out about nonload-bearing storage partitions: in houses using roof trusses or other clear-span methods of framing, partitions are not needed to support the roof; to construct these walls as load-bearing stud walls is an extravagance.
Need for increased storage space (particularly when attics and basements are eliminated) becomes paramount in more compact houses. Holmes & Jensen, with a 1,143 sq. ft. house and a full basement, are indeed offering the buyer a big dividend.

**Design pay-off.** The builders handled all sales themselves and are certain that storage walls and contemporary design were the two most important factors in selling the houses. Says Grant Jensen: “We found our houses appeal to folks because they know storage walls fit into contemporary life. We find folks today have ideas that are as up to date as their way of life.” Both Holmes and Jensen heartily endorse the sentiments expressed in an editorial by Alan Brockbank (H&H, Sept. ’53) titled “Better design or else….”

**Always an architect.** The builders have always used an architect, would not tackle a job without one. Design fee plus royalties for repeats in this tract came to $50 per house. Says the architect, M. E. Harris Jr.: “That figure is possible only if similar site conditions exist, but my work with these builders was particularly gratifying because I helped bring realistic design to many buyers who would not otherwise get it.” His three-bedroom house is adaptable to mass-building techniques because: 1) it is an economical rectangle; 2) it permits variation of exterior appearance because it could be turned several ways without suffering from poor orientation; 3) its ground-hugging lines made it highly salable.

**Close cooperation.** The builders cooperated closely with Harris during the design stage, retained him for color consultation and siting as well. They are sold on contemporary design themselves, say: “There is a definite trend away from the gabled roof and the granddaddy type of architecture. People now have more of a feel for indoor-outdoor living; so they like window walls. They want a private patio or garden; so orientation is important. They en-

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![Strategically placed sign](image1)

*Strategically placed sign, only one on the small development, was on right-hand side of street close to house where storage walls were being assembled. Sign calls attention to storage walls and electric dishwasher.*

![Weeping joint brickwork](image2)

*Weeping joint brickwork was design variation for some houses. Control of outside appearance was maintained by builder on advice of architect. Some houses were finished in brick; others, like this, are of lengthy pumice block.*

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**Site planning** was done by architect who placed all houses on lots, which average 70' x 110', are worth $1,500 in developed state. Site was former pear orchard and many of the trees were saved. Streets are paved; there are curbs and gutters, no sidewalks.
Typical houses. Roof pitch, 4 in 12, was lowest builders have ever used. Roof is covered with asphalt shingles as is Newark, Del. best seller (p. 146). Previous houses of builders had little or no overhang. Deep setbacks from street help justify window walls in living room, facing street. Note width of chimney for fireplace, furnace.

Back or side patio of concrete cost buyers 30¢ per sq. ft. Space, although small, suggests greater use of outdoor area: at small additional cost buyers can cover over area with canvas awning or glazed plastic. Note how orientation of house takes advantage of shadows cast by afternoon sun. Dining area overlooks patio for pleasant view.

Carports were used by builders for first time. They found no sales resistance even though only 10% of builders in area use them, most preferring garages. Setbacks were staggered; some houses, as one second from right, were set narrow end to street but protected on patio side by privacy fence. Wider lots would have helped even more.

tertain more casually; so open planning and less formal arrangement of rooms are important. Above all they want more house with more conveniences—and storage walls make both possible.”

Other buyer appeals. These other features tipped the sales scales: kitchen fan, hardwood floors in all rooms except kitchen and bath where linoleum was laid, tile drainboards in kitchen (tile is also laid on all window sills, but this is fairly standard practice in the area), tile top surrounding bathroom wash basin with cabinets beneath, brick fireplaces ($55 extra if built of stone). Because easily removable real estate items such as ranges and refrigerators are not packaged in the mortgage in Utah, they were not included. Builders do offer a built-in electric dishwasher and (at $800 additional) air conditioning.

Construction techniques. The builders fabricate their own trusses right on the job, figure they save 20% in time and $50 per house. They are able to employ their 12- to 15-man crew even on rainy days because the use of trusses helps get more houses under roof quickly. Dividend: workmen do not have to worm their way through a maze of studs to get the storage walls in place. Since the units were new to workmen, the builders spent a great deal of time on supervision. Holmes handles construction details (his wife helps with decorating advice); Jensen is the money and tax man (he had several years’ banking experience).

Tiling of plywood partition between bathroom and basement stair well is done with mastic, which is waterproof, lighter in weight than mortar. This still costs the builders a thwacking $2 to $2.50 per sq. ft, even though tile setters can set it faster than with mortar.

Electric-service main panel and bathroom rough plumbing is concentrated in this partition. All warm-air registers are set low in the outside walls except for the kitchen and bath, where they are placed in the cabinet base after storage walls are in place. All electric outlets are also installed after the storage units are in place. Kitchen plumbing is in the outside wall, makes no problem of cutting through storage units. Bathroom plumbing is in the plywood partition, again where it does not interfere with full use of storage units.

Says Jensen: “Constant improvement in the storage walls and new methods of assembly are reducing our costs, so the future holds great promise. We believe we are just one step ahead of the competition by building a modern, all-storage-wall house.”
Builder Nathaniel Bliss wanted a new house that people would remember after they had seen all 21 houses at the Parade of Homes in San Fernando Valley near Los Angeles last month. Because he knew the competition would be rough, he asked his architect, Lucille Raport, to give him something special which he could build on buyers' lots for around $15,500.

The results were definitely successful. Bliss sold his Parade house with no trouble, got firm orders for eight more, which is about one-third his anticipated production next year, and got a long list of prospects.

People remembered his house and its “Bird Cage” name; they liked the many good features; and while his house included a few sales stunts which were largely showmanship, it had a basically sound design that stood up in comparison with the 20 other houses among which it was built.
1. A catchy name, “the Bird-Cage House,” was suggested by Architect Raport. It refers to a plastic screen outside the two bathroom windows, where live birds were kept during the Parade, and also to the larger slatted wood screen at the street end of the house outside the bedroom windows. The two screened areas were functional as well as decorative, for they gave privacy to the rooms where privacy is most desired. Both screens were optional, however, and buyers could take them or leave them. Most buyers are using them in one form or another.

2. Flexible garage with glass wall instead of doors (see photograph) brought many questions and stimulated interest. As the driveway led up to it, it was clearly a garage and yet it did not look like a garage. It became a sales asset for the house when visitors learned that here were 400 sq. ft. of highly usable space which could be put to any kind of special or multipurpose use. The glass area could be put in the end or either side. Sketches were displayed to show how a carport could be added to the house if the garage were enclosed.

3. Paved rear terrace (photograph below) cost very little extra to the builder, yet suggested outdoor living to his prospects. The patio is well located for privacy and it is highly usable because of the two sliding doors leading to it from the dining room (at the right in the photograph) and from the living room. If buyers wanted an overhead trellis or any additional terrace construction, Builder Bliss had an attractive offer: included in every sales figure was some architectural service for extras or variations which the buyer might want.
4. Strategically located kitchen is adjacent to front entrance and garage. It is open to the dining room, yet can be curtained off. The kitchen is also well located for serving buffet meals in the living room or terrace. Photo at left was taken from the dining room looking through the kitchen to bedroom hall. Buyers may have a partition or pass-through or other form of divider between kitchen and dining room (photograph above).

5. Two baths, well equipped and lighted, were another sales attraction. Bath at right had a tub, the other a shower. Unusually large windows with the birds outside were popular. (Bird cage had tree limbs and swings.) At night the lighted windows cast interesting shadow patterns on the semitransparent screen. Both baths had better than average storage and lighting.
6. Spaciousness was one of the most appealing features of the house, which seemed to be larger than its 1,515 sq. ft. (plus garage). Underscaled furniture and underfurnished, uncluttered decorating makes all rooms seem larger.

7. A sensible floor plan ties the sales features together. Traffic pattern is good because people can get around the house without making a runway of the living room. Children can get from outdoors to bathrooms easily. The two principal bedrooms are separated from the living area, and living room is at the quiet end of the house.
Wood on steel: This system takes advantage of the strength and light weight of steel to span the whole width of the house with 180 lb. open joists, 24'-8" long on 4' centers. Across these are laid 4' x 8' panels of \( \frac{3}{8} \)" plywood prenailed to 2 x 4's on 16" centers, which clip on to the steel members.

New prefab subfloor is laid in 1 hour
Developed by Detroit prefabber, Modern Homes Corp., this new floor system relies on slim steel joists designed to lick flooring bottlenecks the way trusses have streamlined roof construction. Credit for pioneering this system goes to Bob Lytle, Modern’s president, and his brother George Lytle, AIA, who claim that it cuts floor costs in a crawl-space house 24% and makes them as cheap as slabs, that it cuts flooring costs in basement houses up to 22%. It also enables a builder to floor, frame and lock up a non-slab house in only one day—just as fast as a slab house—provided, of course, that truss roofs are also used.

Other advantages claimed:

- No piers, columns or floor beams; the cellar is clear.
- Wires and pipes can run right through the open joists.
- Resilient and easier to walk on than a slab at no extra cost.

Although similar prefab floors have failed in the past, the Lytles say these joists are designed especially to avoid the pitfalls that trapped other steel floor fabricators. For instance, previous steel joists were so heavy and unwieldy that shipment and installation were difficult. The heavy, old types could be placed only at the bottom of a prefabricated truckload and the entire house package had to be unloaded first to reach the floor assembly. On the other hand, a batch of these new lighter-weight joists, 180 lb. each, can be loaded on a truck last, unloaded and set in place easily by only two men.

Although many builders say the cards are stacked against anyone cutting conventional floor costs more than 10%, the Lytles point to actual costs of conventional vs. bar-joist floors (right) from a variety of houses in their Detroit development. For costs of a conventional floor in a basement house, however, an oak finish is compared with the cheaper asphalt tile that goes with the bar-joist floor. According to the Lytles this is because “most builders use a hardwood floor in basement houses,” whereas they use asphalt tile.

... in a house which boasts five other good ideas

1. One-piece window trim is mitered and bundled to eliminate on-site fitting and sanding, is installed quickly as around this window. Each L-shaped section combines functions of stop, casing, stool and apron. Section legs are 3/4" or 5/8" for dry and wet walls respectively.

2. Sewer crock plenum and 6" tile ducts give fire- and rust-proof perimeter heating. Down-flow furnace discharges warm air directly into low-cost 18" dia. crock which can be bought anywhere. Unlike sheet metal, tile ducts do not float during pouring of slab, do not need concrete under them.
3. Vented overhangs feature 6''-wide screened opening running full length of 42''-wide overhangs. This has a double advantage: plenty of ventilation prevents attic condensation in winter and a thorough air wash cools attic in summer. Displaced warm air goes out gable louvers (below).

4. Tilted gable siding produces neat, low cost vents in place of usual sheet-metal louvers. Bottom edges of siding are tilted out—leaving a 1/6'' screened opening. Without accompanying use of vented overhangs, however, each gable should have 1 sq. ft. of vent for every 200 sq. ft. of attic.

Flexibility keynotes this $16,000 prefab house

One of the biggest challenges confronting a builder is to provide a low-cost house to suit the varied demands of all his lots. The trick is to standardize on one flexible floor plan that will unfold in different ways for different orientations, and to avoid monotony. Accepting this challenge Architect George Lytle, AIA, of Modern Homes has created a contemporary, 1,144 sq. ft. house featuring the horizontal look and a decidedly flexible plan.

On wide lots the basic plan spans 58' as shown here. Front and rear elevations, pictured above, are equally attractive so the living area can be oriented to the rear by simply reversing the garage. Or the plan can be turned end over end without altering outside appearance or inside convenience. The open living area pivots around an island fireplace, centrally spotted to permit full freedom for furniture in corners and along the walls. This whole area is bracketed by big windows in front and rear which contribute an added feeling of spaciousness.

On narrow lots with a front living area, here is the plan. Now the house is only 40' wide and either of the two dining-room doors can become the main entrance. The roof is pitched 4 in 12 and overhangs are 42'' wide giving, in this case, a protected walk from garage to front door. (However, a garage door right into the house is also provided.) For further variety the garage can be switched to any of the four corners, thus giving the choice of a living area in the front or rear.

On wide and narrow lots with the living area in the rear. This version not only looks big from all sides; it is especially adaptable to corner lots. These plans demonstrate how flexibility is enhanced by two free-standing units: a clothes closet set at the front door to suggest a foyer, a high bookcase spotted anywhere around the fireplace to create a wall.

Regardless of orientation and whether built over a slab or crawl space, Architect Lytle figures a total construction cost of $11,600—about half goes for the prefab package. In addition, his breakdown lists $2,000 for overhead and profit, $400 for financing and sales cost and finally a $2,000 builder allowance for land.

This all adds up to a price tag of $16,000, delivered in Detroit. (Long-distance trucking from Detroit or from Modern's new Port Jervis, N.Y. plant boosts the costs a few hundred dollars.) And if sold for crawl-space or basement construction, a set of Modern's new bar joists (as detailed on the two preceding pages) is sent along with the house package.