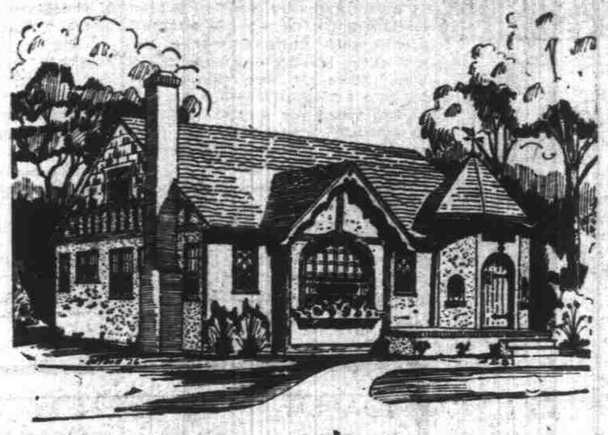
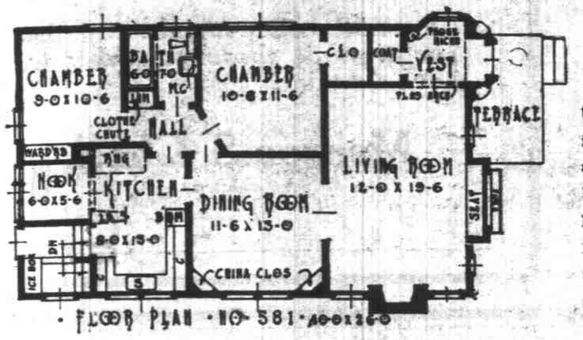
Rooms in Two Units in New Cottage Plan





Plan No. 581

An attractive five-room cottage, with the exterior featuring a modified form of French and Norman architecture, has been planned by Harry B. Boland, head of the Universal Plans Service. The shape of the house makes it ideal for the small city lot.

Separation of the house interior into two major units is one of the features of the floor plan. The division is between the living quarters and kitchen and the sleeping quarters. The living room, dining room, kitchen and breakfast nook are combined into the larger unit, separated from the two bed chambers and bathroom by a central hall. In this manner communication within any one unit can be carried on without passing through the other.

One of the features of the plan is the number of built-ins, especially in the kitchen. The house was planned to keep the energy for house-keeping at the minimum.

Two sets of blue prints of this plan will be furnished at moderate cost on application to the

COSTS OF BUILDING COMPARED BY STEIN

Neer Considers Statement Excellent; Not a Good Comparison However

In commenting on the difference in construction costs between frame and brick construction to a Statesman representative last Wednesday F. E. Neer, of the Salem Brick & Tile company, who is considered one of the leading authorities in the northwest on burnt clay materials said, "With the tremendous amount of construction in all types of building now going on and contemplated in the northwest it is a fact that controversy over building costs as comparisons is waxing warm. Although it is not a good comparison insofar as the difference in price of brick is concerned I consider the following statement of J. J. Stein, of Denver, the best I have seen and submit it to the people of this community. The same general comparison will apply in Salem or anywhere in the northwest."

Following is Mr. Stein's statement:

An article was published in the October issue of Building Magazine wherein the National Lumber Manufacturers' association., comparing prices of building materials, pretended to show that a national difference of approximately $500 exists between frame and brick construction. This is proven by means of a comparative table of costs for each type.

The article appears below:

"In reply to a number of inquiries for comparative costs of construction of frame and brick dwellings, the engineering department of the National Lumber Manufacturers' association has compiled the following comparative estimates for superstructural walls of a typical six-room dwelling, the area being that determined from representative plans issued by the Architects' Small House Service Bureau.

"The quantities of material and labor are taken from the literature of the Common Brick Manufacturers' association for an eight-inch wall. Those for frame construction are taken from a widely used authority on building cost estimates. The material prices are f. o. b. job, average prices for the country in June, 1926, as published by the Department of Commerce, and the labor costs are an average of those given for the country by the American Contractor in its June, 1926, issue.

"Comparative estimate—2,000 square feet wall area. Eight-inch brick common, furred vs. frame construction."

The table below was included in the article:

BRICK	
24.64 M at $17.10	$429.00
1.42 tons hyd. lime, $20.89	29.70
50.7 sacks portland cement, 85 cents	43.10
14.3 cubic yards sand, $2.11	30.20
1,960 lin. ft. furring strips, .015 cents	29.40
12 lbs. nails, 4 cents	.50
196 hrs. brick tenders, 71 cents	139.60
60 hrs. carpenters' time, 96 cents	57.60
200 hrs. bricklayers' time, $1.85	370.00
	$1,032.10
FRAME	
Studs and plates, 1,520 B. M. at $44.48	$ 67.60
Sheathing, 2,340 B. M. at $44.05	103.10
Siding, 2,440 B. M. at $60.00	146.30
Nails, 112 lbs. 4 cents	4.50
Carpenters' hours, 108, 96 cents	103.60
Laborers' time, 18.6, 47 cents	8.70
222.2 yds. paint, 18.6 gals. (3 coat work lead and oil), $3.00	55.80
Painters' time, 60 hours, 97 cents	58.20
	$547.80
Saving	$474.30

After careful study of the comparison I find 12 important mistakes which when rectified will bring the difference of cost nearer to a correct figure—about $200.

1. Carpenters' time given for brick house is absurd! Is it possible that in erecting a solid brick wall that there is only one-third less carpenter time necessary than for an entire frame wall? The only need for a carpenter in building a brick wall is to set the frames, and only this unit of work brick wall cost.

2. The table of comparison takes 2,000 square feet of wall area. How about openings? True, they are omitted from both types but for a very good reason. All openings in a brick wall are actual saving in both material and labor, while most of the openings in a frame wall must be considered as a total loss, or assumed that they take care of the necessary wastage of lumber.

3. Comparing wall areas is decidedly unfair to brick. Every residence is assumed to have a fireplace, chimney and interior flue, yet these items are charged to the brick cost, while no allowance or charge appears in the frame wall cost.

4. Brick tenders' time is given as 196 hours, bricklayers' time as 200 hours. Why one tender to every brick layer? Assuming average construction, one tender will care for at least two bricklayers and hence the time given for tender should be cut down one half.

5. It is manifestly unfair to attempt to compare a well built brick house with an ordinary type of frame house. The standards for each should be at least equal. I refer to the use of cement mortar—perfectly proper and necessary, but not for the purpose of comparing costs with a frame house that lacks, (1) building paper, (2) concrete fire stopping, (3) bridging for studding, (4) ribbons, (5) fire stop blocking, (6) bracing. Lime mortar construction is far superior in standard to the frame house considered. The mortar cost given is entirely too high, both as to quantity and price.

6. For reasons stated above, a furred brick wall is standard in the eastern sections, but should not be the basis of comparison with a standard type of frame wall. Hence a credit is due brick on furring strips, and the frame house must be charged with labor and material of lathing.

7. The price of brick is not a true reflection of brick costs, except in some very large cities.

8. Now study the laborers' time in the frame table; 18 hours at a ridiculously low labor scale. 18 hours for the laborer, 108 hours for the carpenter (compare these with the figures given for the brick tender and bricklayer—196 hours and 200 hours respectively). Does the laborer just work 1½ hours of each day?

9. The article states that quantities of time for brick were taken from the literature of the Common Brick Manufacturers' association. True, but again not fair. Referring to the literature mentioned, I find that the bricklayer and tender is arrived at by using the highest grade of brickwork possible. Using the tables for ordinary brickwork with lime mortar, the time for bricklayer and tender will be cut down at least 15 per cent, and probably more.

10. The lumber prices are questioned as being representative of the average national price. The labor hours (carpenter) are not capable of being verified and reports from this territory disclose that the figures are much too low. The painting costs are also questioned, but since no reference as to the authority is given, they too, cannot be checked.

11. Where is the allowance made in the frame table of cost for waste? Surely there is wastage and under-run in lumber.

12. Since the article ends by stating that the saving is $473.30 rather than the apparent difference in first cost, why not include in the table the difference in insurance premium, which would have to be added to the frame cost?

Correct in Cost Figure

Below is a table giving a more nearly correct figure regarding the difference in cost between brick and frame house.

BRICK	
24.64 M $15.00	$369.66
Mortar (ready mixed)	80.00
Nails	.50
Cost of setting frames	20.00
85 hrs. of brick tenders, 71c	60.35
170 hrs. bricklayers' time, $1.35	231.50
	$761.95
FRAME	
Studs and plates, 1,520 B. M. @ 44.48	67.60
Sheathing, 2,340 B. M. @ 44.05	103.10
Siding, 2440 B. M. @ $60	146.30
Nails, 112 lbs., 4 cents	4.50
Carpenters' hrs., 108, 96 cents	103.60
Laborers' time, 50 hrs., 47 cents	23.50
222.2 yds. paid, 18.6 gals. (3 coat work lead and oil), $3.00	55.80
Painters' time, 60 hrs, 97 cents	58.20
	$562.60
Saving	$199.35

Since the article has chosen to compare 2,000 square feet of wall area, it is assumed that there are no windows or openings in it, and therefore no carpenter's time should be calculated. However, I have put in a figure in the table which should amply cover the cost of setting the frames for an ordinary small dwelling. I have omitted the furring strip item from the brick estimate, as this should not be included in a fair comparison. The motar item is given as a lump sum.

In regard to the lumbermen's table, I have conceded all the items used with the exception of the laborers' time, which should be raised, and which I have done. The price of lumber used, the carpenter's time, and the painting cost in the Lumbermen's association table are open for argument, but there is no way to check these items so they remain as is.

More Items to Be Considered

In the table which I submit the difference is noted to be about $200, but consideration must be given to the following items which would lower the difference further.

1. Brick work (cost of chimney.)
2. Cost of building paper.
3. Cement fire stopping.
4. Cost of bridging for studding.
5. Ribbons and fire stopping blocking.
6. Bracing.
7. Wastage of lumber (a considerable item.)
8. Difference between fire insurance premium.

No doubt it is understood that these figures are an attempt to determine the true cost more nearly, and while they may not apply in certain localities I think they should show that brickwork cost figures are usually arbitrary and not properly analyzed. The case in the lumbermen's table of the carpenter's time offers an example of this. The 2,000 square feet of wall area has been figured solid, and as mentioned before, no allowances have been made for openings. The lumber engineers have figured the mixmum number of openings and added the carpenter's time for setting the frames, and yet there were no frames to be set. The brick should have been credited for openings, or the carpenter's time omitted.

ANNOUNCE SPECIAL LUMBER CAMPAIGN

West Coast Company to Conduct National Drive for Douglas Fir

SEATTLE, Wash.—(Special)—A special national campaign in behalf of Douglas fir structural timbers is announced to begin in June by the West Coast Lumber bureau of this city. Details of the plan were agreed on during the week between a special timber grading committee of the West Coast Lumbermen's association and bureau officials. Extensive advertising and field work, both of a technical nature, and directed chiefly toward architects and engineers will be used by the bureau to bring a larger amount of this class of trade to West Coast mills.

"Douglas fir mills in Washington and Oregon can supply the most exacting requirements in structural timbers," the bureau stated, "and on many of the most important pieces of timber construction undertaken in America during recent years, Douglas fir structural timbers were specified by responsible architects and engineers. However, the quality, size and availability of our structural timbers are not as well known to the technical men as they might be and this is the reason for the campaign."

Architectural, engineering, building and lumber trade publications will be used for the structural timber advertising campaign and a special drive to coordinate with the publicity is planned by the bureau's field staff of technical engineers. These will work in cooperation with sales representatives of bureau member mills and with retail dealers stocking the structural grades of Douglas fir.

Quite a number of West Coast mils are now cutting all the structural grades and others have signified their intention of backing up the program by adding these stocks to their regular lists.

The structural grades are different from other lumber grades in that they have been established by the Forest Products Laboratory, the American Society of Railway Engineers and other technical bodies on the basis of thousands of timber tests while the ordinary lumber grades have been made either by the manufacturer or the retail dealer to suit the necessities of manufacturing or selling. Strength, stiffness and toughness are the principal factors for which structural timbers are graded and the method of determining these in individual timbers is based on laboratory testing experience with the same species. The percentage of summer-wood, rings per inch, direction of grain and location and size of defects are the important considerations in cutting and grading structural timbers. Properly cut and graded structural timbers are accepted by engineers and architects as standard materials subject to established strength tables.

"The present differential between No. 1 common Douglas fir and other structural timbers is from $15 to $30 per thousand," the bureau declared, "and yet our timber, when cut and graded in the best way is unsurpassed from every standpoint for this purpose. Moreover, it can be readily obtained in sizes that can not be secured from logs of other comparable species. It is this better priced cutting that our timber campaign is aiming at."

The Vanity Hat Shoppe, 337 Court, offers the new crocheted straws, silk combinations and novelties in either large or small hats at $3.95, $4.95, $6.75. (*)

Numerous tests under a variety of conditions have revealed that 95 per cent of the driving in the new Paige Eight, with four-speed transmission, is done in fourth speed, according to factory executives at Detroit. The new transmission, they say, permits of sustained high speed with a saving of 30 per cent in gasoline over the ordinary high speed.