## Home Economics

## Publiked by the Urivenixy of Minami-Columbian <br> Exenuin Dibiuion <br> Collue of Home Emommisa

# Residential Construction Cost Estimating 

Joe. D. Logan<br>Instructor, Housing E Interior Design Dept.

Several methods are currently being used to determine the cost of building a new home and even in determining the cost of remodeling an older home.

Currently, the two most used methods for estimating construction costs are:

1. Estimating cost per square foot.
2. Itemizing building costs.

## How Much Can You Afford?

To determine "how much you can spend" or can afford on a home, you should divide your monthly take home pay by four. This amount will represent a rough estimate of how much a family can "afford to spend" on house payments, taxes, insurance and general maintenance per month. In other words, about one-fourth of your monthly pay will be spent on housing.

## The Square Foot Method of Estimating Building Costs

To illustrate how to use the square foot method of cost estimating, take the example of a house that has outside dimensions of $24^{\prime}$ wide and $44^{\prime}$ long. By multiplying the width by the length it can be determined how many total square feet of living space there is in the house.

> Width $\times$ Length $=$ Total Square Feet  $$
\begin{aligned} & \text { of Living Space }\end{aligned}
$$ $$
44^{\prime}=1056 \text { Sq. Ft. }
$$

(Note: Living space would include all rooms, walls, closets, stairs, cabinets, halls and finished storage area. Living space does not include the unfinished basement, garage, carport or outside storage areas).

Assume the house in the example above is a one-story house with a basement. Using the appropriate figure out of Table I below, the estimated cost of this home can be calculated:

1056 Square Feet of Living Space
x \$35 Per Square Foot (One Story/Basement)

[^0]Table I. Approximate Costs per Square Foot, Including Land Costs for Residential Construction.
One Story House/Basement $\$ 35$ per square foot
One Story House/Crawl
Space $\$ 30$ per square foot Second Story of a Two Story House
One Story House on a Slab
Cost to Finish a Basement
Garage
Carport
$\$ 24$ per square foot
\$30 per square foot
$\$ 12$ per square foot
\$13 per square foot
*Note these cost estimates will greatly fluctuate depending on some of the following considerations: site conditions; labor conditions; the architectural design of the house; the various methods of construction; the availability of materials; and, other miscellaneous considerations.
*Consult your local contractors or lumber dealers to gather more accurate and up-to-date figures for your area. The figures or estimates above give the estimator a "ball park" estimate and definitely cannot pinpoint the actual construction costs.

## Itemizing Building or Construction Costs

Most contractors and builders want the most accurate possible means available to pin-point construction costs. This can best be done by itemizing each construction step, function, or material used in building the structure.

Many estimators use the itemizing method haphazardly. They forget to include some portion of the estimate because they do not have a systematic method to arrive at all of the items that need to be included in the total cost.

Table II can be used as a checklist for estimating and bidding purposes. It will definitely help in eliminating errors and forgetting items that need to be included.

For the general contractor or subcontractor Table II will save valuable time. It has been estimated that general contractors spend from 4-6 hours "estimating" each residence they bid on. With the use of Table II it is hoped this "estimating time" can be cut in half. This savings in time plus the increased element of accuracy can free the builder for more supervision on the job and can directly relate to increase in net profit.

Table II. Check List for Estimating and Bidding Purposes

|  | ROUGH <br> ESTIMATE | BID <br> ESTIMATE | ACTUAL <br> COST |
| :--- | :---: | :--- | :--- |
| LEGAL FEES |  |  |  |
| CLOSING COSTS |  |  |  |
| INSURANCE |  |  |  |
| LOT |  |  |  |
| PLANS |  |  |  |
| SURVEY AND STAKING |  |  |  |
| BUILDING PERMITS |  |  |  |
| TAP FEES |  |  |  |
| EXCAVATION |  |  |  |
| DYNAMITE BLASTING |  |  |  |
| PIERING |  |  |  |
| ROCK AND GRAVEL |  |  |  |
| FILL DIRT |  |  |  |
| FOUNDATION |  |  |  |
| SLABS |  |  |  |
| STEEL AND REINFORCING |  |  |  |
| MASONRY WORK |  |  |  |
| MATERIALS (Lumber) |  |  |  |
| LIGHT FIXTURES |  |  |  |
| ELECTRICAL |  |  |  |
| PLUMBING |  |  |  |
| HEATING AND AIRCONDITIONING |  |  |  |
| SHEETMETAL WORK |  |  |  |
| PAINTING AND STAINING |  |  |  |
| WALL PAPERING, PANELING, SPECIAL |  |  |  |
| SHEETROCK |  |  |  |
| PLASTER AND STUCCO |  |  |  |
| CARPET |  |  |  |
| VINYL AND CERAMIC TILE |  |  |  |
| BLOWN INSULATION |  |  |  |
| ROOFING LABOR |  |  |  |
| WINDOWS |  |  |  |
| GLASS (Stationary) |  |  |  |
| MIRRORS |  |  |  |
| SLIDING GLASS DOORS |  |  |  |
| CABINETS |  |  |  |
| HARDWARE |  |  |  |
| CURTAINS |  |  |  |
| APPLIANCES |  |  |  |
| LANDSCAPING |  |  |  |
| SPECIAL MILL WORK |  |  |  |
| CLEANING |  |  |  |
| LABOR |  |  |  |
| FREIGHT AND SHIPPING |  |  |  |
| MISCELLANEOUS ITEMS |  |  |  |
| REAL ESTATE COMMISSIONS (If Applicable) |  |  |  |


[^0]:    \$36,960 Estimated cost

