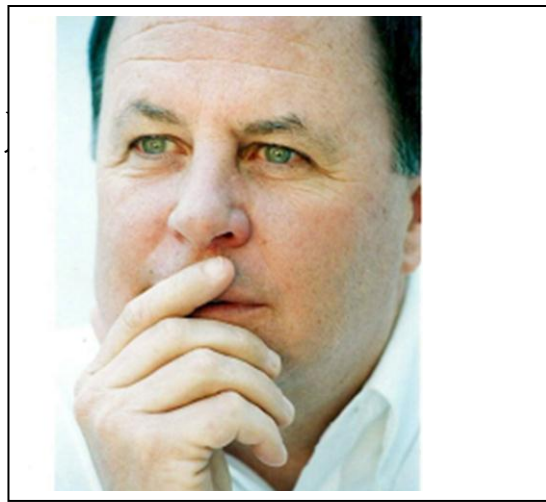




Understanding the Overhead Calculator



How to Determine a Fair Price

Understanding the Overhead Calculator

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THE COMPONENTS OF AN ESTIMATE

Let's start with a review of grammar. In reality, the numbers we supply to the prospect relating to the project in which they have indicated interest have no resemblance to what *Funk and Wagnalls Standard Desk Dictionary* defines as an estimate:

estimate-n, 1) a rough calculation based on incomplete data. 2) a preliminary statement of the approximate cost for certain work. 3) a judgment or opinion.

Remodelers generally provide a firm price for their work, unless they are among those who work on a time and material or cost plus basis. Otherwise, labeling proposed price figures as an *estimate* establishes its stature among other oxymoronic terms which have crept into our language; tight slacks, clearly misunderstood, plastic glasses, almost exactly, silent scream, good grief, alone together, soft rock, etc. Such terms are carried to further extremes when we enhance the word *estimate* with such adjectives as "exact" or "firm." On this solid grammatical foundation we begin the process of determining the very numbers by which we will live and die in our businesses. Perhaps it is because of this faulty foundation that *estimating* is sometimes misunderstood.

The culmination of the estimating process is the determination of the *price* that we present to the customer in hopes of convincing them to exchange their dollars for our products and services. In order to arrive at a *price*, savvy remodelers realize that they must know more than the cost of the sticks and bricks, labor and subcontract of which the project is built. To determine the proper price at which to propose the job to the client, remodelers recognize that they must be able to identify two types of costs, *job cost* and *overhead*, associated with their particular business and each project undertaken. These two costs are then enhanced by the addition of another factor known as *profit*.

$$\text{Job Cost} + \text{Overhead} + \text{Profit} = \text{Price}$$

The first of these, *Job Cost* is the *sticks, bricks, etc.*, included in a particular project. *Job Cost* represents the sum total of several broad categories of expenses; materials, labor, subcontractors, plans and permits, and cleanup, which can be directly related to each individual project. *Job Costs* are bills that can usually be identified by the fact that they include a Job Address. For example, the weekly time card of an employee who spends his time in the field will indicate how many of the total hours worked during a particular week were dedicated to an individual job address. Additionally, the plumber's draw for roughing in the plumbing in a room addition will be identified by the job address. The lumberyard provides material for a job, whether the materials are delivered or not the bill for materials generally includes the job address as a way of identifying where the materials were used. **When we speak of *estimating*, we are referring to the act of projecting in advance the *Job Costs* associated with a proposed project so that these costs can be combined with other factors to formulate a price.**

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The second factor, *Overhead*, is the sum total of the on-going costs associated with being in business, these are items which typically are not directly related to any particular job. *Overhead* could include such items as the phone bill, rent, advertising, tools and trucks or equipment items which are not generally consumed during production of a particular job, but are used in the production of a number of different jobs. Sawz-all blades may be consumed on a particular job, for instance, while the saw itself would be used on a number of jobs. The salaries of office staff and the owner's salary are often difficult or impossible to apportion to individual jobs, thus are more accurately included in overhead. This *overhead* calculation is not the result of an *estimate*, but is the result of a compilation of historical information obtained from last year's check book, except in the case of the remodeler who is; 1) just starting out or; 2) experiencing rapid change in volume.

Before we present our proposal to the customer for consideration, we must add to this total of *job cost* and *overhead* the final factor, *profit*, to arrive at the price we seek from the customer. **Profit is the just reward for the effort and risk the remodeler undertakes to produce the job.** It is only in this total form, with the factors of *job cost*, *overhead* and *profit* included that the evolution of our *estimate* is complete. It is at this point that we consider our numbers to be a proposal to the customer. In it's final form the *price* has evolved far from an *estimate*, having been enhanced by all of the factors that allow us to propose a solid dollar figure for which we will provide the services and products required of the project.

The ability to estimate job costs accurately is one of many indicators of the level of professionalism a remodeler has achieved. A further qualification is the amount of time required to produce the estimate. The ultimate measurement of estimating excellence might be the ability to estimate quickly and accurately in the home, streamlining the entire buying process for the client and saving the remodeler countless hours that would be best invested elsewhere.

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IDENTIFYING JOB COST

Job Cost is the sum total of several broad categories of expenses which can be directly related to each individual project.

Identifying *Job Costs*:

- 1) *Labor*: the contractor's cost for compensating hourly employees which includes both the hourly wage of the particular employee and additional costs known as *labor burden*. Included in the labor burden are payroll tax expenses required by law to be contributed by the employer on behalf of the hourly employee, as well as any optional benefits which the employer may provide for the employee.

Required expenses typically associated with employee labor in addition to hourly rate:

FICA (Social Security Taxes)...typically	6.2 % of first \$109,000. of wages
FUTA (Federal Unemployment Taxes)...typically	8% of first \$7000. of wages
SUTA (State Unemployment Taxes)...varies by state	1.5-6.5 % of first \$8500. of wages
MEDICARE	1.45% of all wages
WORKER'S COMPENSATION...varies by state/trade	<u>5-240 % of all wages</u>
TOTAL LABOR BURDEN.....	14.95% to 254.95 % of wages

Optional (additional) benefits which the employer may provide:

- Truck or mileage allowance
- Tool allowance
- Paid Vacation
- Health Insurance
- Contribution to pension or retirement plan

Other considerations;

- Time spent in office meetings or training/yr
- Liability insurance may have a charge based on annual labor costs.

- 2) *Materials*: costs associated with any item consumed on the job, including lumber and building supplies, saw blades, heating fuel, plastic or other temporary protection, as well as any equipment rented or bought for the production of an individual project. Usually bills from suppliers include such items as sales tax and delivery charge, and include a job address where the materials were used, allowing for easy identification and compilation as a job cost. Contractors are aware that in instances where an individual may pick up materials for several jobs during one visit to a supplier, that person must have the items for each job put on separate bills with separate job addresses. This practice avoids the uncertainty of having to recall on which job the material was used at some later date.
- 3) *Subcontractor*: costs which may include both labor and materials provided by non-employees, which include the building trades, commissioned sales people, professional consultants, dumpster fees, etc. Contractors are aware that there are numerous rules that must be followed in documenting the status of an

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employee vs. sub-contractor, including the filing of 1099 tax forms with the IRS on an annual basis. The most common mistake contractors make using sub-contractors however, is in not documenting coverage status as related to Worker's Compensation Insurance. The requirements vary from state but simply stated, the contractor must have in his possession verification that the sub-contractor is covered by worker's compensation, or verification from the appropriate agency that coverage is not required. Many contractors require their sub-contractors to itemize labor and material for each job. By itemizing the dollar amount for labor the general contractor is minimizing his exposure for back premiums he may be liable for in the event that at the time of an audit his documentation is lacking as generally Worker's Compensation is only due on labor.

- 4) *Plans, Permits, and Fees*: costs associated with the act of obtaining a building permit. These costs would include the cost of physically delivering the building permit application and 'walking it through' the building, zoning, and other departments required in the approval process. Also included are the costs of drawing plans, required review and consultation with professional engineers as well as any special fees that may be levied by the city, county, or other jurisdictional body. In many areas around the country fees for water use, sewer use, storm drainage, school districts, etc. can be significant and cause wide variations in the costs of building permits. There are some states which impose a "business opportunity tax" which is periodically computed as a percentage of the contractors gross sales and must be identified as a job cost by allocating the appropriate amount to each project sold.
- 5) *Clean-up*: The costs of dumping fees, hazardous waste containment and disposal, transportation of waste, etc. are costs which can be expected to climb on a continuous basis as existing landfills are filled up. The considerable costs of opening new landfill sites in the face of today's regulations, as well as the added cost of transportation as these new sites are located further from the metropolitan area have a definite impact.

Contractors know that in order to identify Job Costs, they must identify and calculate the costs in the above five categories and arrive at a Total Job Cost.

Job Cost

- 1) Labor
- 2) Material and Rental Equipment
- 3) Subcontractor
- 4) Plans, Permits & Fees
- 5) Clean-up
- Total Job Cost

The equation we work from to determine the proper price to present to our prospect:

$$\text{Total Job Cost} + \text{Overhead} + \text{Profit} = \text{Price}$$

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IDENTIFYING OVERHEAD

Overhead is the sum total of the expenses required to operate a business other than job costs.

Overhead is the sum total of the on-going costs associated with being in business, these are items that typically are not directly related to any particular job. In the remodeling industry, remodelers are aware that they must accurately define their Overhead Costs. This is as important for the fledgling company as it is for the well established. In the newly established or smaller company, it is not unusual for the owner/remodeler to wear many hats. This may be a temporary condition that the owner hopes to out-grow at some point in time. In order for the owner to accurately gauge profitability and know the financial impact of additional employees who may ultimately perform his job, the owner must compensate himself for every job he performs. For example, if the owner is playing the part of the production manager, salesman, and part-time carpenter, he or she must be compensated at what could be described as "replacement cost" for each of those activities. When the time comes to hire a salesperson, for example, if the owner had been performing those functions, he or she could see the feasibility of paying a new person at the same rate of compensation. The result is that there is no increase in job cost or overhead, the associated costs of adding a new person are simply shifted from the owner to the new hire, leaving the owner free to devote his energy to the remaining activities. If the owner were compensating himself at less than his replacement cost, the expense of a new employee could immediately increase Overhead by an amount that would be hard to ascertain.

Established remodelers identify and categorize Overhead by simply studying the history of their company, as written in the checkbook. Every check that is written in the business is typically charged to either Job Cost or Overhead. The established remodeler reviews his check book for the previous period, monthly, quarterly, semi-annually, or annually and assigns each check which is not a Job Cost item to one of the several Overhead categories, such as rent or lease, advertising, communication, transportation, etc. Surplus funds that cannot be allocated to any of these categories might belong to that elusive category known as *profit*. The new remodeler who is just starting out projects a realistic number for the appropriate categories.

In either application, the Overhead Projection is a living document that is updated and reviewed periodically to determine if the performance of the business is within the projected ranges established. The need for periodic review is based on the fact that as volume increases or decreases the overhead numbers will change although not necessarily in direct proportion to the increase or decrease of volume. Overhead may vary up or down in reaction to the efficiency of management, the number of employees, the volume of work produced, the efficiency with which money is collected and numerous other factors.

Overhead might be described as the sum total of the expenses required to operate a business. It can be expressed as a percentage of total or gross sales. By identifying overhead as a percentage of gross sales, remodelers identify the percentage that must be added to the Total Job Cost in order to arrive at a sales price sufficient to cover all of the

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Job Costs, as well as the Overhead. In the remodeling industry overhead figures for remodelers producing \$500,000 in gross sales might be in the range of 25% to 40% or higher. As the volume increases, the overhead figure typically increases also, as the business usually becomes less efficient until a volume well over \$1,500,000 is attained.

The equation we work from to determine the proper price that is presented to our prospect:

$$\text{Total Job Cost} + \text{Overhead} + \text{Profit} = \text{Selling Price}$$

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IDENTIFYING PROFIT

Profit is the just reward for the effort and risk the remodeler undertakes to produce the job. As remodelers we are often buried in work to the extent that often there is no realization of what is happening in the outside world, especially when it comes to what kind of profit is realistic to achieve in business. In the world outside, the restaurant chain serving a business man's lunch will recognize 20% net profit on their product. There have been times when the computer purchased for the office was priced to include a 100% net profit. A major computer software developer whose name is almost a household word worldwide recently disclosed that its' net profit on software is 73%. That rental car used on vacation last year may have produced a 21% net profit for the leasing agency. Profit is the reward business owners deserve for the risks undertaken to operate the business. How does the risk remodelers are exposed to relate to the risks the restaurant owner, the auto leasing agency or the computer manufacturer endure? Unlike the computer manufacturer, the remodeler's factory is someone else's living room, and conditions for employment in the factory are dictated by the homeowner. Unlike the restaurant owner, the remodeler's labor must be highly skilled in various trades and the liability for uninsurable risks is much greater for the remodeler. The restaurant pays most of the employees a minimum wage, which is not the case with the remodeler's employees. Changes in plywood prices might have a far greater impact on the remodeler than a change in the cost of coffee would to the restaurant, as the restaurant could simply revise the menu in the face of higher costs, while the remodeler may be locked into a contract when the higher cost is discovered. The leasing agency knows their costs within a few percent on the car they provide, yet the remodeler can be continuously surprised by unforeseen cost factors ranging from hidden construction defects, tightened building codes, or unrealistic customer expectations. Faced with an unhappy customer, the restaurant can simply offer a complementary meal while the remodeler can be put out of business by a customer who doesn't pay.

The concept of the risk/reward ration dictates that the remodeler must receive more compensation than the restaurant owner for example, in light of the fact that he assumes more risk in his business. Yet how many remodeler's net more than 20% per year after honestly compensating themselves for all the duties they perform in everyday business?

The remodeling business is one of the toughest businesses in which to succeed. The failure rate of remodelers in the first five years of business is thought to be 90%. In order to succeed the remodeler must remove as many of the uncertainties as possible. One of the keys to success is to have a quick and accurate system of estimating, based on scientifically determined, verifiable numbers which can be used over and over so that it is possible to generate proposals with as short a response time to the customer as possible. The Unit Cost system of estimating when used either manually or by computer provides that key.

The equation we work from to determine the proper price that we will present to our prospect:

$$\textit{Total Job Cost + Overhead + Profit = Price}$$

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HOW TO DETERMINE FAIR PRICING

For contractors, there are only two ways to get money out of the business; by writing a check for overhead or by writing a check for job cost. In order to identify these two categories of costs as well as your income for the period you are studying, make three headings on a piece of paper and begin a column under each of the headings of 'overhead,' 'job cost' and 'income.' Looking back through your checkbook identify which check amounts belong in the 'overhead column' or the 'job cost' column. 'Income' is easy to spot, as it is made up of various deposits in your checkbook.

Realize that if you can easily associate a check you have written with a job address it likely is 'job cost.' If you cannot easily identify a check with a particular job address it likely is 'overhead.' For example, a check to a lumberyard is likely to be a job cost, while a bill for the telephone usually wouldn't be, unless you had a particularly long- term job and had arranged for a telephone to be installed.

As an example, we'll say that the results of this exercise for the last year looked like the numbers in the *Typical Annual Overhead Costs/Volume* on the following page. We'll use the numbers from the second column with a volume of \$400,000;

Income	Overhead	Job Cost
\$400,000	\$156,736	\$231,264

These numbers indicate that your efforts to produce \$400,000 worth of remodeling generated a profit of \$12,000 ($\$400,000 - 156,736 - \$231,264 = \$12,000$) or 3% ($\$12,000 / \$400,000 = .03 = 3\%$). Perhaps you feel you deserve a higher level of profit for your efforts, for whatever reason.

If you desired a 10% net profit (the kind of profit you can fold up and put in your pocket before taxes, in this example), for every \$400,000 of volume you do you would like to have a profit of \$40,000 for your efforts. To achieve this, you need to determine the kind of markup necessary to increase your job cost (\$231,264) by enough to pay your overhead (\$156,736) in this example and leave that desired profit of 10%. In other words, you need to increase your job cost by the sum of our overhead of \$156,736 plus the desired profit of \$40,000. Remember the equation from the previous pages;

$$\text{Job Cost} + \text{Overhead} + \text{Profit} = \text{Sales Price (Income)}$$
$$\$231,264. + \$156,736. + \$40,000. = \$ 428,000$$

Now you need to figure out a mathematical shortcut. Let's determine by what factor you need to multiply \$231,264. in order to create \$428,000. Remember your algebra, the steps are as follows;

1. $\$231,264. \times 'X' = \$428,000$ ('X' being the unknown)
2. $'X' = \$428,000 / \$231,264$ (divide both sides of the equation by the same number)
3. $'X' = 1.85069$ (round this number to two decimal places and call it 1.85)

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4. $\$231,264 \times 1.85 = \$427,838$ (test your answer... because you rounded down, your answer is a little smaller than your target of \$428,000)
5. In this example, you need to increase our job costs by a factor of 1.85 to create the money to pay your overhead and leave 10% net profit before taxes.

Byline...

Mike Gorman delivers seminars and provides telephone and on-site coaching with clients ranging from Fortune 500 companies to individual contractors regarding sales, marketing, estimating, lead carpenter, as well as systematizing the business. His background as a "Big 50" and "Top 500" remodeler provides his platform. Mike speaks from proven experience, he is not a theorist. His recent book;

If I Sell You I Have a Job,

If I Serve You I Create a Career!

has filled a void in sales training for remodelers and custom home builders. When you decide that you don't want to be working as hard in five years as you do now, or for questions about his column, coaching, consulting, seminar schedule or other materials, email Mike at: mike.gorman.email@gmail.com or check the website at www.techknowledgeonline.net .