



## **The Benefits of Detailed Quantity takeoffs**

Does profit erosion take place on your company's projects? Do you wonder where and when things got away from your team and the losses began or started to mount on a project?

Many of us do not consider that profitability starts at the quantity takeoff stage of a project. Sure many of us talk about the "blown takeoff", but in fact even good takeoffs structured and handed off poorly can take winning bids and flip them to losing projects, as we watch profitability start to seep out of a project.

Nothing makes an owner or manager cringe like the knowledge that from day one a project started losing profitability. Many of us do not insist that our estimators hand off organized, complete and well detailed quantity takeoffs to project managers, or superintendents to perform the work contracted. We need to realize that if we do not improve how our quantity takeoffs are structured and then passed on to the field to perform we are losing money already even if we cannot see it.

The first act of any bid process competitive or negotiated process is the Quantity Takeoff. This is the process of reading blueprints to "takeoff" or "measure" the quantities for the specific trade or product being bid. A detailed and organized quantity takeoff is essential for the start of an accurate and competitive (and profitable) construction proposal. A non-detailed takeoff could possibly lead to a poor, less profitable, and financial damaging projects.

There are several benefits one can obtain from a detailed quantity takeoff. The ideas of thoroughness, pricing, scheduling, billings, cost evaluation, and design changes come to mind.

Depending on the size of a project and the specific trade, quantity takeoffs must be completed with the management of the job in mind. An estimator should look at a project and determine how a job will be actually be completed while he/she is "taking off" the quantities from the blueprints. For example, quantities can be takeoff by location: interior or exterior or exterior, elevation by elevation, floor by floor, building by building, or room by room. The more detailed the more efficient one can be at estimating the pricing of the project and eventually billing the project accurately. Each trade will dictate the amount of detail needed.





Once the takeoff is completed and organized, accurate pricing can take place to determine the overall costs for a proposal. If the takeoff was broken into areas, each segment of the job can be priced individually or as a whole. Labor and production rates can be determined by area depending on the access or difficulty of each segment. For example, stucco applied to the north side of a building may only require a reach of only 0' to 10' tall, whereas at the south side of the building it may require a reach of 0' to 30' tall, thus the need for more scaffolding, and possibly less labor productivity.

Material purchases can be planned for and controlled better with a detailed quantity takeoff. Depending on the size of the job and the contractors' cash flow, materials can be purchased, by area based on the overall schedule of the job. On large projects materials can be purchased by areas scheduled to be completed, and deliveries can be made accordingly. By doing this, subcontractors' can bill for those materials in advance, receive some profit from material mark-ups, and pay vendors on time. Most importantly, the material purchases can serve as a check and balance against the takeoff. If actual material use is in line with quantity takeoff then you know your takeoff was accurate.

Scheduling of personnel is easier with a quantity takeoff. Can you imagine responding to a screaming superintendent with actual quantity and the manpower to perform versus robbing another project to man a project in response to incorrect information? The subcontractor can also schedule his/her labor force for this job as well as others, so labor can effectively be organized for not only one job but many projects.

Depending on the size of the project, accurate and timely billings can be submitted to the General Contractor, so the identification of each area complete is noted on the billing form. This allows the General Contractor and the owner to determine quickly the correct amount of work completed for accurate payment. As billings are being processed, the subcontractor can evaluate the job cost for each and every area completed. This is imperative for making adjustments to the current project, but the information gathered can be used for upcoming jobs with the same conditions.

As a project continues, inevitably there will be design changes to the job. This can happen before work is completed or as the job is in progress. If a change occurs in a particular area or the project where work is eliminated or added, pricing adjustments can take place fast and accurately if the take-off is organized properly and are in detail.

Completing the quantity takeoff in a detailed manor takes more time, but the benefits of a having the detail will save the owner and project manager in time, money, and accuracy on the job.





The takeoff process is very important as it starts the process of every bid and proposal. If you have the ability to interpret and read blueprints in detail, it would be to your benefit to be as detailed as you can in the collection and sorting of that information. Not only will you fully understand each area and scope of your work, you will have information at your fingertips to manipulate a bid proposal to offer competitive pricing and possibly have better negotiating power as well. Finally, you will have great information to successfully run the project smoothly and more efficiently. In the end it will pay dividends when the project makes the company money!

