7 Pitfalls...

... of Creating Estimates in Spreadsheets!
In today’s highly competitive environment of tendering for Building Services work, few estimates do not contain errors or omissions of one kind or another. However, too many errors on the plus side can result in uncompetitive tenders and ultimately not winning the work. Worse still, too many errors on the minus side can cause a company to lose money on the contract.

Here are key mistakes made by contractors tendering for work:

1. **Incorrect Measurements**

   Errors in takeoff/measurements from plans and drawings result in corresponding mistakes in the cost of the materials and labour prices associated to those items. Many estimators are still manually measuring drawings with a scale rule, which is not only time consuming but can be prone to errors.

   When measuring drawings, consider using electronic takeoff methods. Ensure any package you consider allows you to measure: lengths, paths, counts and also calculate square meterage. It’s also useful to be able to easily zoom in and out of the plan and use the takeoff application on a separate screen to your Estimating system.

2. **Accurate Pricing/Discounts**

   When pricing a job, you need to be sure that both the trade price of the item and the discount/net price you receive is correct. Manufacturers are regularly changing their product ranges and prices, so you need to ensure your tenders reflect this and any changes that occur during the tender period can be applied and the estimate updated quickly and easily.

   Ensure you have the correct tools and data to interact with your supplier. If your product details are aligned with those of your supplier, then obtaining product information and applying discounts received from the supplier become simple and straightforward. Be wary of low cost databases that are not as well maintained and do not match those of your supplier.
3. Errors in Calculation

Estimates in Building Services projects contain large amounts of arithmetical calculations including material costs, labour costs, sub-contractor costs and preliminaries. When combined with supplier discounts and percentages applied for profit, it is advisable to use a robust software application. One small error when trying to model this process in Excel, can result in catastrophic errors.

Look at trusted estimating packages that have been used by large companies on major projects. Even if you are a smaller company, most reputable software companies will have a 'cut down' version of their product. This allows you to use the best software for your business, at a more affordable price.

4. Using Incorrect Units of Measure

Using a wrong unit of measure can result in substantial cost increases or decreases. Ensure the takeoff unit of measure is consistent with the price. For example, be careful not to estimate a cable-tray per metre and use a price quoted per 3m lengths. Estimators traditionally work in single units whereas prices can be in multiples e.g. cable-tray in 3m lengths and glands in pairs. Look for a system that allows you to define the unit of measure to ensure consistency or better still look for one that provides and interprets prices/unit of measures into the correct format for the user giving accuracy and speed/ease of use.

5. Making Allowances for the Project

Some jobs will be more complex/time consuming than others. You may need to apply a difficulty factor to the project. For example, working on a prison will result in increased fit times to take account of extra security checks and the complexity of not being able to leave tools unattended as would an occupied refurbishment.

Consider estimating systems that are flexible with options to adjust labour, subcontract and materials globally, by specific area and/or by type of equipment/materials allowing you to truly calculate the prime cost for that project. Also you may want to 'mark-up' by percentage, add your adjustment as a monetary value or use a target price – so as to ensure all this can be managed.
6. Inaccurate Labour Installation Rates

One of the highest risks in estimating is accurately costing labour. Seemingly small errors are often significant on site. Ensuring you have correct labour installation rates is essential. Look for a system that allows you to configure your company standard rates and ensure they are consistently used by every estimator giving accurate prime cost on all projects. No more costly errors or conflicting rates presented to the client.

Whilst you may have your own installation rates, there can be a lot to keep on top. One option is to obtain this information from a trusted industry source and keep this updated in your system completely removing a layer of work and cost management from your business.

7. Omitting Items the Cost Estimator Deems to be Minor

Sundries and fixings are frequently added as an afterthought in the form of a lump sum and may not cover the true cost especially when items such as site huts, scaffolding, scissor lifts and hire tools etc. are needed. If an overall allowance is not made for this, then the profitability of the job is at risk.

Ideally a system will allow you to create kits or assemblies which then automatically add the ‘bits and pieces’ such as connectors and fixings ensuring they are never forgotten and will include a prelims library for adding all the sundry costs to the tender.

Good estimating systems will also include reporting tools that allow you to retrospectively look at how a project has been estimated. By looking at this key detail you can ascertain whether “Billy” estimates more accurately than “Pete” or whether your hospital jobs are more profitable than perhaps schools. This is great management information to be viewed on a dashboard or graph and enables your business to learn and grow profitably.
Meet Pete, Senior Estimator at Construction Team Ltd.

Pete uses spreadsheets for his estimates, always has done and he’s sceptical of changing

Meet Billy, Cost Planner at Construction Team Ltd.

Billy is new to Construction Team Ltd but has brought his expertise with estimating software with him

Pete sticks with his spreadsheets

Pete measures everything out with a scale rule

... and it takes ages

Pete searches through product catalogues, websites and calls suppliers for prices

This is going to take forever

Pete can only add his profit as a single line on his estimate

That’ll have to do...

Billy uses an estimating software

Billy uploads all of his measurements to a 2D takeoff platform. He can see there are some sizing errors and he corrects them

Billy’s software is linked to a data service which instantly gives him fit times and accurate prices with his suppliers’ discounts

Well... that was easy!

Billy spreads his profit across the areas where he knows he’s going to get some variations!

Cha-ching!
The client comes back and wants to know if Pete can knock £5,000 off the job.

Billy gets the same call and knows at the push of a button he can meet his client’s budget and see instantly whether he can make money.

Pete’s won the job and looking forward to a promotion.

A response comes in, they’ve won the contract!

They may have won the job but Pete’s measurements and prices were wrong and they’re going to have to run the job at a loss.

Not only was the project making a profit, but the business has also made some extra money on the variations. [good job he carefully distributed his margin when he set the job up!]

*sniff* *sob*

This isn’t a problem for you, is it?

This isn’t a problem for you, is it?

No....?!

Not a problem, consider it done!

So tired....

Woooo!

Brilliant, well done everyone!

I’m sorry, but you’ve made too many mistakes!

Congratulations

Promotion
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