

Construction Takeoff: Why Do You Need it?

Construction often proves itself to be a complex endeavor. A single project often displays several interesting areas that are worth studying for greater chances of producing superior output. Among the top of the various recommended topics to learn more about would be construction takeoff. This is an essential process that is a part of any [project management](#) endeavor or for any project, be it simple renovations or larger scale building creations. Below are the many facts and tidbits that business owners and project managers alike can put to good use. By the end of this article, we can assure you that you'll be able to see just how important construction takeoff is to any project you find yourself involved in.

What is Construction Takeoff and Why is it Necessary?

In a broad sense, a construction takeoff is something that provides you with the list of necessary materials for a particular project. If we go deeper into its definition, a (construction) takeoff involves not only the materials listed but also the costs of each one. For that reason, the alternative term for this is a material takeoff. Estimators will take the required materials written into the blueprint and take them into account when looking to make a final project [cost estimate](#).

Kicking things off the ground concerning construction projects requires many things. A business plan is one of them, as are documents such as a [construction checklist](#) and a construction work estimate. Construction takeoffs are closely related to that last one because, without this, it would be difficult to pinpoint just how much you will be spending on materials alone. As easy as it is to pinpoint the purpose of construction takeoffs, there are always parts that are not so easy. Hence misconceptions happen, so it is good to be clear on what these takeoffs involve and what they do not.

What is Included

For starters, a construction takeoff is going to include the materials and the associated prices and costs. All of the materials listed must be required to finish the project for it to count. Besides the raw materials like lumber, steel, sand, and concrete, prefabricated components will also be included. Examples of these will be light fixtures, electrical cabling, tiles, pipes, and windows, among others. Quantities of the required materials are also included together with the costs.

What isn't Included

Every construction project will need a list of materials you should procure for use. Simply listing the specifics down does not turn your list into a construction takeoff since there would be prices involved. Other things that this doesn't include would be an account of the labor costs involved in the project. Costs like equipment rental fees, storage fees, transportation, shipping, and office overhead costs are also not included in construction takeoffs.

How to Perform a Construction Takeoff Project

Because of the time-consuming and complicated nature of construction takeoffs, it's wiser for you to look for the most efficient ways of creating one. The less time you spend on this, the more time you have for other areas of the construction process, such as bidding brand new opportunities. Additionally, one of the first things you need to do is to make sure you have the necessary knowledge regarding material measurement units. Below is a list of materials and their corresponding measurement units to serve as your point of reference:

For plumbing, mechanical, and electrical

In this category, there are two separate units of measurements to look out for. Those are 'each' and 'linear feet.' For the former, you can expect air handlers, receptacles, bathroom fixtures, light fixtures, and data outlets to be measured in that particular unit. Concerning the latter, conduit, wires, copper pipes, cable trays, and ductwork are the ones measured in linear feet.

For general construction

General construction will refer to roofing, flooring, concrete, painting, and more. The two units of measurement here are 'square feet' and 'cubic yards.' For square feet, you can expect to include siding, flooring, drywall, carpets, roofing, and ceiling tiles. On the other hand, cubic yards is an appropriate measurement unit for concrete, landscaping, and excavation.

What are the 2 Different Methods of Construction Takeoff?

If you want to make sure that your project would get you results, then it is best to hire a professional like a quantity surveyor to either perform the takeoff for you or at least help you out. Whether you decide to do it yourself to get somebody else, it is still useful to take note of the two different methods. These are the manual takeoff and digital takeoff. Due to the essential differences between these two, it is worth looking into each of them in greater depth:

Manual Takeoff

This is when the process is undertaken without the help or use of construction or building cost estimate software. You can either perform the takeoff by hand or by reading the existing blueprint and using a separate word processing software to create the takeoff. A high level of skill is practically required to ensure that the process is not only accurate but also incredibly efficient at what you need it to do. The scenario, for example, may call upon the need to calculate length, volume, and area. Those without impressive mathematical skills may find the manual method too complicated in such circumstances.

Digital Takeoff

The critical difference between this and its manual counterpart is the fact that the digital method requires the use of construction software. There are multiple of those, each with varying features for business owners and project managers to choose from. Among the advantages digital takeoffs have are greater accuracy, a decrease in production time, and lowered expectations in expertise from its maker. Other than that, the creation process is expected to remain similar, with the obvious benefit of the most complex parts now becoming automated.

Construction Takeoff Main Takeaways

Having learned about the two primary methods of takeoff creation, it is time we take a closer look at what benefits one can reap from digital takeoff. There are multiple kinds of software available to you, and to encourage greater fulfillment of its potential, you can refer to the short but detailed list below of what you can expect out of them.

- The manual takeoff requires a high level of skill to create properly. As long as you have the right construction cost estimation software to use, then you can expect

the benefit of simpler calculations. The software does this as it picks materials from the document, with the quantity calculations done automatically.

- The adjustment of materials, quantities, and prices with ease is another excellent benefit you can reap from construction takeoff software. Features like this are important due to the numerous adjustments that typically happen before bids are even accepted. Streamlined estimation processes are made possible and even easier than ever before with the right software at your disposal.
- The use of takeoff software allows for the production to be integrated into your overall cost estimate process. Estimators can utilize a program and create material takeoffs without too much of a hassle. Due to this being simply one step in the entire estimation process, then it is possible to continue making progress on the same estimate afterward.

There should be no doubt in anyone's mind by now as to how valuable a construction takeoff is. With the knowledge of its purpose, creation process, and benefits firmly in mind, you are now in a position to adequately prepare one for your projects. Just make sure you also have everything you could possibly need to turn your plans into reality, like the actual blueprints, spreadsheets, the estimating sheet, and time and material contract. [Budget planning for your construction projects](#) has never been easier.