

An Estimating Checklist

by Sal Alfano

Twenty-five years ago, when I estimated my first whole house, I did it the old-fashioned way — with pencil and paper. Since this was my first big project, I double-checked the takeoff totals to make sure I hadn't missed anything. Just when I thought I was finished, I discovered that I hadn't added sales tax to the materials prices. At 5% on \$30,000, I had almost short-changed myself by \$1,500.

I eventually solved the sales tax problem by investing in estimating software that added the tax in automatically. But the near-miss got me thinking about the rest of the takeoff, where I could just as easily have forgotten to price some crucial item. From that day on, I always used a checklist to make sure I never accidentally omitted something from the takeoff.

My first checklist was a simple hand-written sheet that I ran through the copier for each new bid. Later, I transferred the list to a spreadsheet and printed out a fresh copy for each estimate. The version shown here (see Figure 1) is all decked out with colors and fancy formatting, but the plain-Jane variety will do. The important thing is that the list is complete and that it's organized in a way that makes sense for the way you estimate.

Organizing the Checklist

I've never trusted the square-foot estimating method, so I've always used a combination of unit-pricing and stick-by-stick counting. And because I found it made the most sense to follow the order of construction when doing the takeoff, my "New Construction" checklist begins with *Site Prep* and *Excavation*, and ends with *Painting*.

I built my first checklist by mentally following the course of construction,

and listing each distinct phase in the process. Since the purpose of a checklist is to prevent omissions, I made sure to list items that were easy to forget, like "Temporary Power" and "Site Access." The list grew as I added new items from each new estimate. Some, like "Excavation: Bridge," I only used once or twice, but the fact that they were on the list served as a reminder during takeoff. Others, like "Landscaping" and "Seeding," didn't apply to many of my early jobs, but eventually they became a regular part of the construction service I offered.

Whether you estimate by hand or with software, a checklist will help you stay focused and keep your estimate organized

It isn't necessary to color-code the list, but I find it's a useful way to organize sections of related work. The order of the section headings jumps around a bit, because the number of checklist items varies with each section and I wanted to fit the whole list on a single sheet of paper. But work that is related chronologically is grouped together. The *Foundation* and *Foundation Treatment* sections, for example, are listed one over the other, so I can just go right down the list and take off everything that relates to the foundation while I'm working on that page of the drawings. The framing sections are a little more elaborate, and are divided into floor levels for estimating multi-story houses.

Using the Checklist

I used a simple code to check off each box on my list. When I'd finished with a particular line item, like "Framing — 1st Floor: Sills," I put an "X" in the check box. If I needed more information before I could take off a particular line item, I drew a circle around the check box as a visual reminder to come back later and finish (Figure 2).

Items that were "not in contract" got an "N" in the checkbox. Anything I wanted to specifically exclude got an "E" so when I wrote up the contract, I could go down through the checklist again and pick off items to list under "Exclusions." If the job contained an item that wasn't on my list, I added a line in the appropriate section and checked the box. For example, I'd never run into concrete "bollards" in residential construction, but they appeared on the plan for a commercial building I built, so I added them to the list in the *Foundation* section.

My checklist also includes several items unique to the way I built a house. In keeping with my policy of chronological takeoff, I created separate listings for similar materials depending on where and when they would be installed. For example, I almost always wrapped the foundation in rigid foam, so the *Foundation Treatment* section includes "Perim. Insul" and "Fdn. Coatg" to remind me to price the foam, plus the material and labor needed to cover the foam above grade. But foam also has its own section (*Insulation — Rigid*), because I often wrapped the frame in foam as well.

Secondary Checklists

Some of the items on the master checklist apply to detailed subsections of work. "Decks" and "Porches," for example, in the *Framing — Other* section

New Construction Checklist

Site Prep <input type="checkbox"/> Survey <input type="checkbox"/> Soil test <input type="checkbox"/> Septic Design <input type="checkbox"/> Temp Power <input type="checkbox"/> Job Phone <input type="checkbox"/> Clear/Grub <input type="checkbox"/> Flora Protect <input type="checkbox"/> Port-O-Let <input type="checkbox"/> Demo/Salvage <input type="checkbox"/> Site Access <input type="checkbox"/> Storage	Excavation <input type="checkbox"/> Driveway <input type="checkbox"/> Bridge <input type="checkbox"/> Culvert <input type="checkbox"/> Curtain Drain <input type="checkbox"/> Haulage <input type="checkbox"/> Cellar Hole <input type="checkbox"/> Piers/Pads <input type="checkbox"/> Stone <input type="checkbox"/> Sand <input type="checkbox"/> Drain Tile <input type="checkbox"/> Septic Sys. <input type="checkbox"/> Backfill <input type="checkbox"/> Finish Grade	Other Earthwork <input type="checkbox"/> Util. Laterals <input type="checkbox"/> Topsoil <input type="checkbox"/> Landscaping <input type="checkbox"/> Seeding <input type="checkbox"/> Retaining walls <input type="checkbox"/> Blasting <input type="checkbox"/> Compaction <input type="checkbox"/> Compaction Test <input type="checkbox"/> Spec'l Surfaces <input type="checkbox"/> Paving <input type="checkbox"/> Site Drainage <input type="checkbox"/> Fuel Tank	Roof Vents <input type="checkbox"/> Gable <input type="checkbox"/> Soffit <input type="checkbox"/> Ridge <input type="checkbox"/> Shed Flashing <input type="checkbox"/> Chimney <input type="checkbox"/> Step <input type="checkbox"/> Siding <input type="checkbox"/> Custom	X-Trim <input type="checkbox"/> Corner Bds <input type="checkbox"/> Frieze/Skirt <input type="checkbox"/> Parting/Bed <input type="checkbox"/> at Windows <input type="checkbox"/> at Doors <input type="checkbox"/> Rake Fascia <input type="checkbox"/> Eave Fascia <input type="checkbox"/> Soffit <input type="checkbox"/> Special	Insulation Fiberglass <input type="checkbox"/> LL Walls <input type="checkbox"/> LL Clg <input type="checkbox"/> 1st Flr Walls <input type="checkbox"/> 1st Flr Clg <input type="checkbox"/> 2nd Flr Walls <input type="checkbox"/> 2nd Flr Clg <input type="checkbox"/> Other <input type="checkbox"/> Air Baffles <input type="checkbox"/> Vent Channel <input type="checkbox"/> V.B.	Insulation Rigid <input type="checkbox"/> LL Walls <input type="checkbox"/> LL Clg <input type="checkbox"/> 1st Flr Walls <input type="checkbox"/> 1st Flr Clg <input type="checkbox"/> 2nd Flr Walls <input type="checkbox"/> 2nd Flr Clg <input type="checkbox"/> Other <input type="checkbox"/> Spray Foam <input type="checkbox"/> Tape <input type="checkbox"/> Caulk
Foundation <input type="checkbox"/> Footings <input type="checkbox"/> Walls <input type="checkbox"/> Pads <input type="checkbox"/> Tubes/Piers <input type="checkbox"/> Bollards <input type="checkbox"/> Slabs <input type="checkbox"/> Stairs <input type="checkbox"/> Walkways <input type="checkbox"/> Bulkhead <input type="checkbox"/> Pre-Cast <input type="checkbox"/> V.B.	Framing — Lower Level <input type="checkbox"/> X-Walls <input type="checkbox"/> I-Walls <input type="checkbox"/> Grdr-Steel <input type="checkbox"/> Grdr-Wood <input type="checkbox"/> Col - Steel <input type="checkbox"/> Col - Wood <input type="checkbox"/> Sleepers <input type="checkbox"/> Subfloor	Framing — 2nd Floor <input type="checkbox"/> X-Wall <input type="checkbox"/> I-Walls <input type="checkbox"/> Grdr-Steel <input type="checkbox"/> Grdr-Wood <input type="checkbox"/> Col - Steel <input type="checkbox"/> Col - Wood <input type="checkbox"/> Rim Joists <input type="checkbox"/> Joists/Hangrs <input type="checkbox"/> Subfloor <input type="checkbox"/> Sheathing	Roofing <input type="checkbox"/> Unit Cost <input type="checkbox"/> Felt <input type="checkbox"/> Drip Edge <input type="checkbox"/> Flashing <input type="checkbox"/> Roofing <input type="checkbox"/> Ice&water <input type="checkbox"/> Other Coatg	Drywall <input type="checkbox"/> LL Walls <input type="checkbox"/> LL Clg <input type="checkbox"/> 1st Flr Walls <input type="checkbox"/> 1st Flr Clg <input type="checkbox"/> 2nd Flr Walls <input type="checkbox"/> 2nd Flr Clg <input type="checkbox"/> Knee Walls <input type="checkbox"/> Patching	Finish Floor <input type="checkbox"/> Carpet <input type="checkbox"/> Inlaid <input type="checkbox"/> Hardwood <input type="checkbox"/> Tile <input type="checkbox"/> Spec'l Coatg <input type="checkbox"/> Finishes	Other Finish Walls/Clgs <input type="checkbox"/> Wood <input type="checkbox"/> Stone <input type="checkbox"/> Tile <input type="checkbox"/> Metal <input type="checkbox"/> Tub Encl. <input type="checkbox"/> Spec'l Coatg
Foundation Treatment <input type="checkbox"/> Slab V.B. <input type="checkbox"/> Slab Insul. <input type="checkbox"/> Crawl V.B. <input type="checkbox"/> Waterproofg <input type="checkbox"/> Perim. Insul. <input type="checkbox"/> Fdn Coatg <input type="checkbox"/> Floor Drains <input type="checkbox"/> Compctn Test	Framing — 1st Floor <input type="checkbox"/> Sills <input type="checkbox"/> Rim Joists <input type="checkbox"/> Jsts/Hangrs <input type="checkbox"/> Blockg/Bridg <input type="checkbox"/> Subfloor <input type="checkbox"/> X-Walls <input type="checkbox"/> I-Walls <input type="checkbox"/> Sheathing	Framing — Roof & Ceiling <input type="checkbox"/> Rafters/Blckg <input type="checkbox"/> Trusses/Bracg <input type="checkbox"/> Clg Jsts <input type="checkbox"/> Subfascia <input type="checkbox"/> H-clips/Felt <input type="checkbox"/> Custom Vent	Windows <input type="checkbox"/> Manuf'd <input type="checkbox"/> Site-Built <input type="checkbox"/> Skylights <input type="checkbox"/> Custom <input type="checkbox"/> Accessories	Doors <input type="checkbox"/> Manuf'd <input type="checkbox"/> Site-Built <input type="checkbox"/> Custom <input type="checkbox"/> Locksets <input type="checkbox"/> Weatherstrip	Cabinets <input type="checkbox"/> Kitchen <input type="checkbox"/> Vanity <input type="checkbox"/> Built-Ins	Accessories <input type="checkbox"/> Shelving <input type="checkbox"/> Hardware <input type="checkbox"/> Bathroom <input type="checkbox"/> Stairs <input type="checkbox"/> Other
Interior Walls <input type="checkbox"/> Lower Level <input type="checkbox"/> 1st Floor <input type="checkbox"/> 2nd Floor <input type="checkbox"/> Other <input type="checkbox"/> Blocking <input type="checkbox"/> Toilet Partition	Framing Other <input type="checkbox"/> Temp Stairs <input type="checkbox"/> Porches <input type="checkbox"/> Decks <input type="checkbox"/> Walkways <input type="checkbox"/> Outbuildings <input type="checkbox"/> Garage	Prep for Drywall <input type="checkbox"/> Blocking <input type="checkbox"/> Res. Channel <input type="checkbox"/> Soundboard <input type="checkbox"/> Strap Walls <input type="checkbox"/> Strap Clg	Masonry & Chimneys <input type="checkbox"/> Block Walls <input type="checkbox"/> Brick Veneer <input type="checkbox"/> Stone Veneer <input type="checkbox"/> Stucco <input type="checkbox"/> Fireplace <input type="checkbox"/> Chimney <input type="checkbox"/> All-Fuel	Plumbing <input type="checkbox"/> DWV <input type="checkbox"/> Well/Spring <input type="checkbox"/> City HookUp <input type="checkbox"/> Supply Pipg <input type="checkbox"/> Floor Drains <input type="checkbox"/> Water Htr. <input type="checkbox"/> Solar H.W. <input type="checkbox"/> Fixtures <input type="checkbox"/> Faucets	Heating & Ventilation <input type="checkbox"/> Fuel Tank <input type="checkbox"/> Furnace <input type="checkbox"/> Ductwork <input type="checkbox"/> Boiler <input type="checkbox"/> Distrib. Piping <input type="checkbox"/> Controls <input type="checkbox"/> Fresh Air <input type="checkbox"/> Controls	Electrical <input type="checkbox"/> Service <input type="checkbox"/> 2nd Service <input type="checkbox"/> Sub Panel <input type="checkbox"/> Devices <input type="checkbox"/> Fixtures <input type="checkbox"/> Fans <input type="checkbox"/> Mech. Circs <input type="checkbox"/> Phone <input type="checkbox"/> Smoke Alarm
Special Systems <input type="checkbox"/> Alarm Sys. <input type="checkbox"/> Intercom <input type="checkbox"/> Dumb Waiter	Painting <input type="checkbox"/> Exterior <input type="checkbox"/> Interior <input type="checkbox"/> Doors <input type="checkbox"/> Windows	Misc. <input type="checkbox"/> Trash <input type="checkbox"/> Permits <input type="checkbox"/> Insurance <input type="checkbox"/> Temp heat <input type="checkbox"/> Staging <input type="checkbox"/> Equip Rental <input type="checkbox"/> Demolition	Job Name: Number: Date: Bid Due: Prep By:			

Figure 1. This checklist serves as an aid during takeoff, and is designed to roughly follow the chronological order of construction. The list can be easily created using a standard spreadsheet, then printed out for each new project.

Windows	Doors
<input checked="" type="checkbox"/> Manuf'd	<input checked="" type="checkbox"/> Manuf'd
<input type="checkbox"/> Site-Built	<input type="checkbox"/> Site-Built
<input checked="" type="checkbox"/> Skylights	<input checked="" type="checkbox"/> Custom
<input type="checkbox"/> Custom	<input type="checkbox"/> Locksets
<input checked="" type="checkbox"/> Accessories	<input checked="" type="checkbox"/> Weatherstrip


Figure 2. To ensure that nothing is forgotten, mark each box on the list as you move through the takeoff. An "X" means the item is included; a circle around the checkbox indicates the takeoff for this line item is still incomplete. An "N" stands for "not in contract," and an "E" means the item is specifically excluded from the work.

open up a whole subdivision of work. For these I created secondary checklists that again followed the order of construction. The Deck checklist, for instance, started with excavation and concrete tubes, and included sections for pressure-treated framing, deck boards, railings, stairs, and so on.

Similarly, my secondary Electrical list included a whole list of devices, such as standard duplex outlets, GFCIs, 240-volt outlets, single-pole switches, two-way, three-way, and four-way switches, fixtures, and so on. With my electrician, I developed unit pricing for each item in the secondary list, so I was usually able to come up with a complete price without having to send him the prints. The

same was true for plumbing piping, fixtures, and fittings, and other subtrades.

Whether you estimate by hand or with software, a checklist will help you stay focused and keep your estimate organized. It's also an easy way to remember where you left off if you're interrupted in the middle of the takeoff.

Your checklists will probably be different from mine, but they'll be easier to build if you have something to use as a pattern. You can download several Excel templates from www.jlconline.com/public/articles/1999/9904/checklists.xls. 

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