Business

Using Cost Books for Estimating

by Bob Kovacs

As moderator of the estimating forum at jlconline.com, I'm often asked if cost books are a reliable way to get cost figures to use for estimating. There are many cost books available, updated yearly, by RS Means, Craftsman, BNI, Saylor's, HomeTech, and others. They obviously serve some purpose, or they wouldn't be published year after year. The question is, what's the right way to use them?

Where the Numbers Come From

The introductions of these books often contain a little blurb along the lines of "We contact dealers, manufacturers, distributors, and contractors

around the country to compile national average costs for the items listed." Because the costs are national averages, there's usually a table in the back of the book that provides multipliers for most major cities. The multiplier allows you to adjust the dollar amounts in the book to fit the cost of building in your area.

Each book includes a list of items like material cost, labor productivity in hours, labor

cost in dollars, equipment cost, and profit and overhead. Material cost is typically shown together with the unit of measure for the item. Sometimes it's difficult to determine exactly which materials the price includes, especially with "assemblies," groups of items that show up as a single entry in the book. For example, does the cost

of a prehung door take into account nails, casings, and shims? What's included in an assembly such as an 8inch masonry wall? Some price books explain the assumptions; others leave it up to you to determine the details.

Cost books are updated yearly, and material prices are based on costs at the time of publication. That's okay for some items, but what happens when prices change between updates? Plywood and OSB went through the roof in 2003, but the 2003 books were published in late 2002.

Labor rates. As with material costs, you need to understand what is and isn't included in the labor rates in the

book. Most books include a "productivity factor" — how much time it takes Joe to install one unit of a given item. They also contain a "craft code," which indicates who will be doing the work — carpenter, mason, or whoever. The final component is the "labor rate," the cost per hour for the trade that performs the task. Craft codes and labor rates are usually summarized in a table. It's important to review not only the labor rate for each trade but also the burdens that are applied to them. Some books don't apply any labor burden; it's assumed to be in the overhead and profit.

Overhead and profit. Every cost book publisher seems to handle overhead

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The author sometimes uses a cost book (such as Craftsman's National Repair & Remodeling Estimator, shown here) to bid a task for which he has no historical job-cost data. He modifies the published numbers by comparing them with numbers for a similar task for which he knows his cost. If you use numbers directly from a cost book, don't forget to apply the area modification factor (left).

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and profit differently. Some don't list it at all, assuming you'll add it in at the bottom of the estimate. Others put it in a column next to the labor, material, and other costs. Usually, it's a straight percentage multiplier with an explanation of what it includes.

Proceed With Caution

Given their limitations, you have to use cost books carefully. If you take a number straight from the book, don't forget to use the multiplier for your area. And you should always verify that the material pricing in the book is correct. Compare the listed labor rates and labor burden multipliers to your known costs; both figures can vary wildly from your own payroll costs, even after you've applied the location multiplier. Finally, verify that the listed markup percentages are correct for your company.

So what's the point of using a price book if you have to verify all the costs that are in it? For me, there are two. The first is to find a productivity factor for an unknown task. The second is to price a subcontracted item that it's hard to get a bid on or that I've never priced before.

Like most estimators, I look at my own job-cost data to see how long it takes to do things. If I don't have data for a particular task, I'll look up its productivity factor in the cost book. Then I'll check the book by looking at its rate for an item that I do have data on.

For example, say I want to estimate running crown but have no historical cost data on it. However, I have a lot of historical cost data for baseboard, so I can check the crown rate by looking up the rate for base. The cost book says that a carpenter can install 100 linear feet of base per hour, while my data shows that my carpenters run 80 feet an hour, or 80% of the rate in the book. So if the book says a carpenter can install 16 linear feet of crown per hour, I'll assume that my crew can do it at 80% of the listed rate, or 12.8 linear feet per hour.

If I can't get a price from a subcontractor for an item I need to estimate, I'll find a similar item in that trade that I have sub pricing on, and compare the book cost for that item to what I've had to pay for it. Again, I apply the percentage variance to the listed cost for the unknown item. Whenever possible, I'll also list that item as an allowance, with the qualification that hard costs for the item couldn't be determined before presenting the estimate. If that's not possible, I'll add some contingency to the

number, to cover any possible variance that may occur from using this method.

Recommended for Remodelers

Which cost book you use is mainly a matter of personal preference. My advice is to head to the library or bookstore and thumb through as many as you can. Find one that has data on the tasks you regularly estimate. Look up the cost data for categories where you know your own costs; choose a book with costs that are as close as possible to your own.

Of all the cost books, I prefer Craftsman Book Company's National Renovation and Insurance Repair Estimator or its National Repair and Remodeling Estimator. Both books seem to have the best breakdown of items used in remodeling (though they are organized slightly differently and use different rates for the various trades, for some reason). If you consider these books, take a look at both and choose the one that has an item breakdown and labor rates that are close to the ones you use.

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