# Database Item Titles Should be Chosen With Care

by Morris D. Carey, Jr.

Regardless of which estimating software program you purchase, the estimating database (price book) that you create will be the real secret to your estimating success. Last month we looked at divisions and subdivisions and a few line items. This month we'll study a few more line items, as well as the terminology and abbreviations.

#### What's in a Name?

As you enter data into your computer program, you will find yourself abbreviating words quite a bit to get them to fit in the spaces provided. The spaces always seem to be far too small to hold the words necessary to tell the story. It can be tricky because the terms you use, and how you abbreviate them, can be important.

If you are a contractor selling to other contractors, the task can be performed with model numbers and widely used construction terms. However, if you are creating a price book that will be reviewed by con-

### Table 1: Sample Subdivisions With Line Items

12 MASONRY S/I Masonry/Veneers Min Masonry work <33 sf S/I 5' x 4' F.P. Face S/I 5' x 8' F.P. Face S/I 5' x 16" Flsh Hearth S/I 5' x 16" x 12"H Hearth ea ea ea S/I Masonry w/New Brick ea w/Mfg Used Brick w/Slump Stone ea 13 METAL FIREPLACE S/I Metal Fireplace Install Metal Fireplace Supply Fireplace Flue Xtra for offsets @ 36" Superior RD3800 FP ea @ 42" Superior HCE4550 FP ea Xtra for Blower Xtra for Brass Trim

sumers, improper wording could result in trouble.

When I first set up trash removal as a line item, I called it "Dumpsters and Offhaul," and the unit of measure I showed was "ea" (each). On some jobs I would remove a portion or all of the debris with my own trucks. Several customers complained that I didn't use a dumpster, and wanted a credit. I had to give the credits: I believe the customer is always right. And arguments don't help you get referrals for more work.

I made two mistakes in my debris removal line item. First, I specified dumpsters as a method that I would use to remove trash, and the customer expected just that. Second, I used an "each" count to specify how many dumpsters would be provided to the job, and the customer expected to see exactly that many dumpsters whether I used other means or not. And, even though my contract stipulated that, as the contractor, I had the exclusive right to determine methods and means, the consumer

tends to focus on the specific items listed.

The solution was simple! I changed the line item to read "Debris Offhaul," which denotes a general activity rather than a particular method. Next I stopped using "each," and converted my takeoff unit of measure to "sf" (square feet of work area).

Now our customer sees "Debris Offhaul \$1.45/SF." Behind the scenes, our estimating system converts each 200 square feet of work area to the value of one dumpster, and, if we decide to use a company truck instead, the customer is none the wiser.

The nice thing about setting up your own database is that you can create your own acronyms and abbreviations that have special meaning to you, and apply to the specific things that you sell and the specific way you sell them. The only bad thing is that you can use the wrong description or unit of measure and really confuse the consumer.

As you create your abbreviations, remember to consider your customers and how they will interpret your shorthand. To overcome this, our company has added the abbreviations we use in our electronic estimating system to the abbreviations section of our general specifications sheet. It becomes page one on every set of plans we draw.

If you don't use a general specifications sheet, you may want to consider adding your abbreviations directly to your contract. You might create a contract addendum called "Special Abbreviations and Terminology," to be used in your plans and estimate.

## Looking at Line Items

As I mentioned last month, when creating and assembling items into an estimating program database, it's a smart idea to insert the information into the system the same way you want to see it presented on paper. For example, if you would like to see "Install Mudsill" before "Frame Roof" in the estimate printout, then that's the order you should follow when setting up the database. Computers are very literal that way—you get out exactly what you put in.

Last month, we looked at how I broke down stucco in an estimate. This month, we'll look at masonry and masonry veneers.

I set up the items in Divisions 12 and 13 to cover the situations we deal with in our company (see Table previous page). Your's will probably be different, but here's how we do it.

Min Masonry Work. As with most of our estimating divisions and subdivisions, we have a minimum price category. This one is a minimum for masonry work when there is less than 33 square feet of brick, stucco, or stone supplied and installed. Experience has shown that when the work is 33 square feet or less, we still have to pay the masonry

contractor the same price.

The problem with using a line item that says "minimum" is that it doesn't really describe what's being done. To remedy this, CMS, the makers of Easyest and Espri (9320 Carmel Mountain Road, Suite C, San Diego, CA 92129; 800/327-9267), are coming out with an update to their program later this year that will do behind-the-scenes calculations that will address the issue of minimums. The program will look at a group of items, compare them to a minimum (stored in the database), and use either the standard price in the system or re-price all the items to a fixed amount if they aren't up to minimum. CMS will be the first estimating program I know of to solve this problem.

S/I 5'x4' F.P. Face: ea. This means "supply and install a 5-foot-wide by 4-foot-high fireplace face" and is a masonry item we sell often. Since masonry is a type of work that we subcontract, we don't need to price our parts individually. Naturally, if we were masonry contractors, this item would be listed by all its parts (brick, mortar, labor, etc.). As a general contractor, our interest is in establishing standard configurations that fit a certain price—like selling a sink or a faucet.

S/I 5'x8' F.P. Face: ea. This item is simply a variation of the previous one, and is another common fireplace face that we sell in our company.

S/I 5'x16" Flsh Hearth: ea. This item is a 5-foot-wide flush hearth that is 16 inches deep. In addition to overall area (covered by the dimensioned listings above), the price of fireplace faces varies based on the type of stone and the type of hearth (flush or raised). We have taken the liberty of establishing each of those variables as separate line items. We don't do this for every possible combination: We want as many line items in our price book as are necessary to provide the detail we need. but not so many that we are overwhelmed with paperwork.

S/I 5'x16"x12"H Hearth: ea.

S/I 5'x16"x12"H Hearth: ea. Here we list the raised hearth as yet another option. Combining the two faces and two hearths, we can get four different prices for four different fireplace combinations.

"supply and install masonry" is by square foot used. Under "S/I Masonry," you'll notice that new brick, used brick, and slump stone are counted individually for these small jobs. This covers all the applications that can't be dealt with by a standard configuration. If we did a great deal of 32-inch-high exterior veneer work, we would add that to our system by the linear foot, and use the program to convert the takeoff to square footage. Computers are the greatest for that type of conversion!

## Help for Mac Users:

I recently attended the 1990 Mac

World Magazine Computer Fair at Moscone Center in San Francisco. The show was fantastic. Mac or PC, these kinds of events make me feel like a kid in a candy store. Apple Computer—and the Macintosh—have really come a long

I met a fellow who is an expert in CAD software for the Macintosh, and I'm very impressed with what he showed me. His name in John Stebbins and he writes for the MAC Construction Forum, a newsletter about Macintosh hardware and software (P.O. Box 1272, Sandpoint, ID 83864; 208/263-3078).

Stebbins, as it turns out, is a hardcore Macintosh fan. And, in my estimation, he is probably one of the country's foremost authorities on CAD software for the Mac.

During the fair, he helped me review ArchiCAD and Architrion—two different CAD programs that generate an estimate at the same time as they generate building plan drawings. I also looked at a pretty powerful project scheduler and a full-blown construction accounting system. I'll be writing more about them once I've had a chance to run a few tests.

With Stebbins' help, I have been in touch with Apple Computer and am making arrangements to get equipment that will help me review Mac software for this column.

I haven't really changed my opinion about the Mac versus the PC. The PC has a heck of a lot more construction-oriented software than the Mac. But if you have a Mac and don't want to or can't buy another computer, all the PC software in the world won't help.

I am also investigating the possibility of using available interface equipment that allows the Mac to operate PC software. Working with Apple and Stebbins, I hope to help bring the

two worlds together—at least in our industry.

In the interim, if you need help with your Macintosh, contact Stebbins. He's an ex-contractor, an outstanding teacher, brokers software for the Macintosh, and does a bit of consulting too. He definitely knows what he's talking about when it comes to CAD on the Mac. He also is a dealer for several Mac construction software programs. You can contact Stebbins at the Design/Build Institute, 14252 Culver Drive, Suite A-233, Irvine, CA 92714.

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