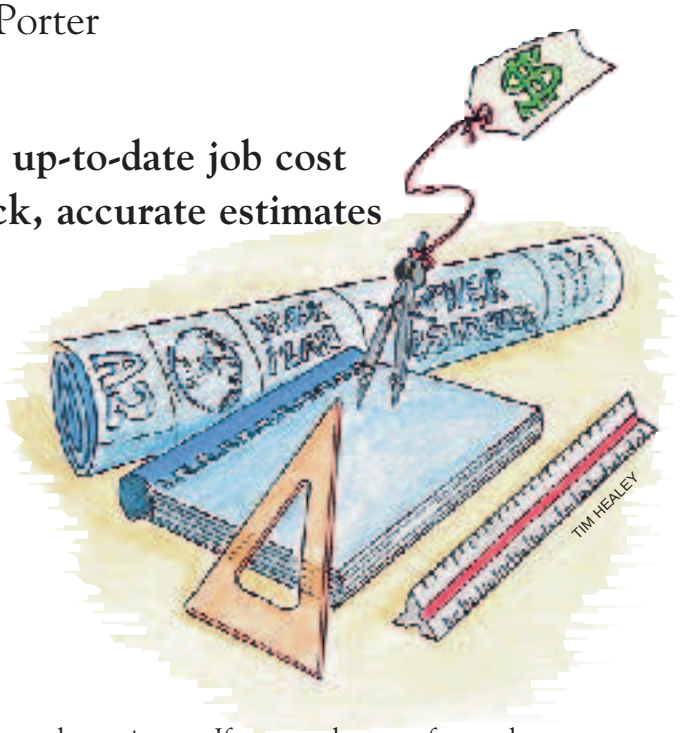
Estimating Basics for Remodelers

by Clai Porter

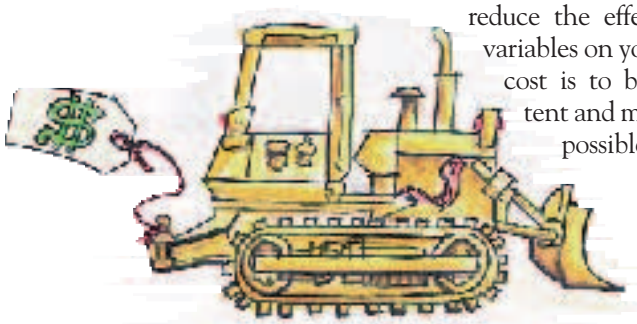
A complete checklist and up-to-date job cost records are the keys to quick, accurate estimates



I've been an architect and a design-build remodeling contractor for more than 25 years, and while my company has had its ups and downs, it's a successful business. We do about $1 million every year; we enjoy trusting, long-term relationships with our subs; and more than 50 percent of our work comes from previous customers and their referrals.

While many things contribute to this success — we build a sound, attractive product and have good customer service — I attribute a substantial part of our success to that most mundane area of the remodeling business: estimating. In a way, this is ironic, for my no-free-estimates policy (I charge $50 to $100 per estimate, credited toward the job if we get it) strikes some people as rather unfriendly. Yet the very fact that I charge for estimates allows me to do my estimates accurately and carefully. As a result, the whole job runs more comfortably. The customers pay what they expect to; neither we nor our subs must cut corners to do quality work within budget; and everyone goes home happy, at least most of the time.

As every remodeler knows, remodeling is full of variables — another way of saying, "You just never know." One thing I do know, however, is that the best way to reduce the effect of those variables on your expected cost is to be as consistent and methodical as possible in putting together estimates. If you use the same forms, the same information, the same rigorous methods, you'll produce consistent and reliable estimates.



Good Information

Accurate estimating requires two things: good cost information, and a good way to use it. The first thing to recognize is the importance of having good job-cost records on which to base your estimates. For tasks you haven't done before, the various estimating manuals are useful guides (see "Estimating Resources"). But for tasks you have done or subbed out before, the best information is your own job-cost records. I keep my cost records in a loose-leaf binder that sits over my desk. The dividers match the line items on my estimating sheet, and I update each category and subcategory every quarter. Updating these costs keeps them fresh in my memory, so that I know my costs cold. And when the cost for a task or item changes, it alerts me that I either need to change my next estimate accordingly or make some adjustment in the way I do things to keep costs under control.

For work done by subs, I have guaranteed cost schedules, usually in unit costs, from my subs. Since I have only three field employees, these costs usually amount

Cost Summary Sheet

Project Name_____ Job No._____ Area_____
Date_____ No. of Units_____
Financing by_____ Loan Officer_____
Closing Date_____

Line	Category	Contract Amount	Current	Total to Date
▲ 001	Excavation/Backfill			
▼ 002	Concrete Foundation			
◆ 003	Concrete Flatwork/Driveway			
◆ 004	Drainage/Hot Mop			
⬢ 006	Lumber — Frame/Finish			
★ 010	Windows/Sliding Glass Doors			
★ 012	Weatherstripping			
◆ 013	Garage Doors			
● 015	Finish Hardware			
● 016	Appliances/Hoods			
⬢ 018	Miscellaneous Items/Railings/Decks			
◆★ 019	Metal Gutters			
★ 020	Roofing			
★ 021	Plumbing			
★ 023	Heating/Sheet Metal Work			
★ 024	Electrical Wiring/Fixture			
★ 025	Venting			
★ 026	Metal Fireplace			
■ 027	Masonry Fireplace/Veneer			
⬢ 028	Siding			
◆ 030	Drywall			
◆ 031	Tape/Texture			
◆★ 032	Paint			
◆ 034	Carpet & Drapes			
◆ 036	Insulation			
▼◆ 037	Formica/Resilient/Ceramic Tile			
● 039	Shower Doors/Mirrors			
● 040	Cabinets/Vanities			
★ 041	Millwork/Bifolds			
▲ 043	Housecleaners			
▲ 044	Topsoil/Lawn/Landscape			
▲ 045	Rockery			
▲ 046	Building Permits			
⬢ 047	Underground Utilities			
■ 050	Change Orders			
■ 055	Payroll Taxes			
⬢ 060	Labor — Foundation			
⬢ 061	Labor — Framing			
⬢ 062	Labor — Finish			
⬢ 063	Labor-Cleanup/Demo/General			
▲ 064	Design & Plans			
⬢ 065	Special Equipment			
⬢ 066	Accessory Buildings			
◆ 067	Roads/Walks			
⬢ 068	Site Improvements			
★ 069	Elevators			
▲ 070	Construction Overhead			
075	Construction Interest			
076	Construction Loan Fee			
080	Indirect Sales Cost			
081	Sales Commission/Profit			
082	Mortgage Discount			
083	Direct Sales Cost (Title Ins., Legal, etc.)			
090	Land			
	Subtotal			
	Total Due this date			

Key

- ▼ Linear feet
- ★ Unit price
- ⬢ Detailed takeoff
- ◆ Square foot (of floor space)
- ▲ Lump sum
- ■ Subcontractor's price
- ● Allowance
- ■ Not applicable

This annotated Cost Summary Sheet shows which estimating techniques the author typically uses for different categories. His choice for a given category is determined partly by the nature of the work or material, partly by his experience and confidence in estimating the category, and partly by factors such as whether he subs the job out or whether customer preferences may affect costs.

to a good part of my estimate. Nevertheless, I typically estimate the subcontracted work myself unless there's something peculiar about the job, in which case I call the sub and ask for a site visit.

I get my material costs, guaranteed for 30 days, every month from my lumber company. Because lumber prices are volatile, I usually include a clause in the estimate and contract stating that lumber prices are guaranteed for only 30 days. For the rest of the costs, I have six-month guarantees from my subs and suppliers, so I guarantee the prices for that long to my prospective customers.

Along with historical job costs, a good cost manual or two, and your subs' costs, you'll also need the plans and specifications (even if the specs are just notes on the plans). The specs will be filled out more in your walk-through with the customer. I like to have all products — flooring, windows, doors, and so on — specified as much as possible before I do my estimate. When I can't get a solid spec (this is almost always the case for plumbing and lighting fixtures, which tend to get picked out later), I include an allowance in the estimate.

Finally, you'll need to do a thorough, methodical walk-through, using a checklist to ensure you leave nothing out. I use my long budget form as my checklist (more on this later), noting every item we'll need and jotting down any special requirements or needs as well.

Putting the Information to Work

Once you have costs and the specs and scope of work from the plans, specs, and walk-through, you need a consistent way of putting your information to use. I rely heavily on my forms, which I have been using for almost 25 years. We run our entire business on these forms. We use them for estimating, for contract specs, for schedule of values, for job-cost tracking, and for monthly billing. When I got a computer (I use a Mac), I simply put these forms in a spreadsheet program. I update them periodically to include new products or techniques, but the forms have remained basically the same.

There are actually three forms. One is a summary page with a line for every major cost category (see "Cost Summary Sheet," at left). The other two forms feed into the summary page. One is a 12-page, detailed breakdown of the major categories (see "Estimating Categories") and the other is a five-page lumber take-off form, which details everything from sills and studs to trusses and sheathing.

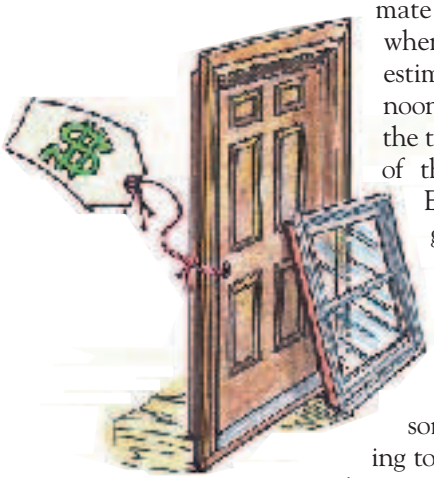
Use 'em or lose 'em. These forms are not there for occasional reference. Their whole purpose is to force consistency. Even though I have these lists virtually memorized, I never do an estimate without checking every single line to make sure I haven't omitted anything. The few times I've failed to do this, I've left something out and had to buy it as a gift for the customer. As every good estimator knows, omitting an

item leaves you no chance to get paid for it. It's much better to at least guess the cost; then you will probably be only a certain percentage off. When you fail to include an item, however — when you've in effect estimated its price as zero — you get killed, because then you're off 100 percent. Thoroughness is absolutely critical. That's why I'm as deliberately repetitive in my approach as possible.

Don't forget the "extras." Being thorough means accounting for the unknown, and that means anticipating change orders. I include a paragraph on my estimate sheet and on my contract that states, "Change order fee: $50." I don't always charge the $50; it's there to discourage unnecessary changes and to compensate me on those jobs where the customers springs another $25 change on you every two days. The customer that brings in a single change order for $2,000 I'm not going to charge. But the clause is there if I need it.

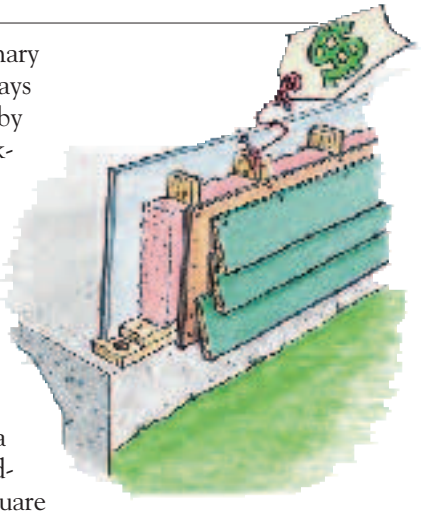
Being thorough also means charging (and estimating costs for) all those tasks peculiar to remodeling: Dust control. Floor protection. Daily cleanup. The time spent talking with customers. The barriers you erect to keep children from getting hurt. Hidden conditions. These costs exist because you're working in an existing, occupied house. If you don't account for them in your estimates, you'll get eaten up. That's why I include either line items or contractual language to account for these areas.

Best time of day to estimate. Most estimators find that their ability to construct a thorough, accurate estimate varies depending on the time of day. This is one for you to figure out, based on when you perform best — morning, afternoon, or whenever. One person may estimate best in the morning, when he's fresh; another may estimate better in the afternoon, when she doesn't have the tasks remaining in the rest of the day to distract her. Evening is usually not as good a time because you're often tired and likely to cut corners or leave things out. At nine at night, it's simply too easy to forget something, and too tempting to not call that sub or look up that cost — not to mention that you can't check prices with your suppliers. Unless you know you work well then, it's better to save the estimate for the morning. (For the same reason, I don't like to do estimating walk-throughs in the evening — everyone is tired and hungry, there are kids and phone calls distracting the clients, and details tend to get overlooked or left out.)



Estimating Options

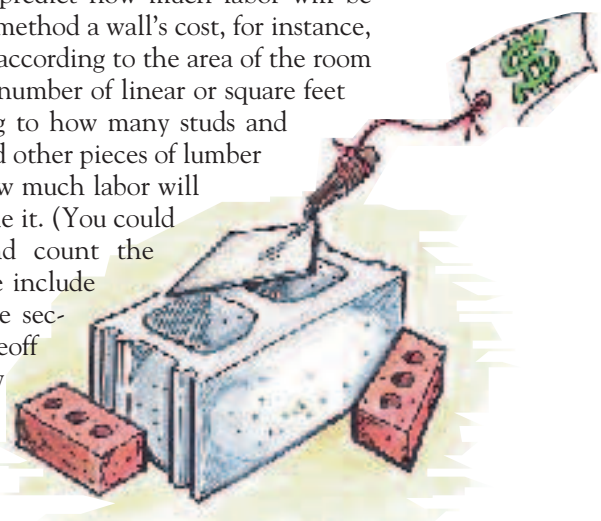
There are several ways to estimate a job or any given part of a job. I prefer to mix them up, using different estimating methods for different cost categories (as indicated on the annotated Cost Summary Sheet). There are three basic ways to estimate: by the square foot, by unit cost, and by a detailed breakdown of the entire job.



Square-foot estimates. One option is estimating a job or part of a job according to its typical or historical cost per square foot of floor space. This is a fast method, and accurate as long as a job isn't too complex. I know that in my area, for instance, a sun room is going to cost (including markup) $125 to $150 a square foot if it's fairly straightforward, or $175 to $200 a square foot if there's a lot of roof glass or other complications. Entranceways run about $200 a square foot. These figures are reliable as long as there's nothing unusual in the job. However, I'm uncomfortable using the square-foot method too extensively for kitchens, baths, or other projects in which there are many variables.

Unit-cost method. This is where you price discrete parts of the job, usually as an installed cost. The most obvious example is for actual individual items, such as windows or light boxes, that will be so much per item, installed. But the "unit" may also be a unit of measurement. For instance, you might know that drywall costs $1 a square foot, including hanging, taping, and texturing; or that a concrete slab will cost you $3.50 a square foot. All contractors use unit costs at some time. Some entire estimating systems, such as Home-Tech's *Professional Cost Estimating*, are based on this method. It's an efficient way to estimate, for it includes many indirect items as well as labor in one fell swoop, and it's generally accurate as long as your historical data is sound and the job in question isn't too unusual.

Detailed takeoff. Sometimes called the "stick" method, this is the most detailed and laborious method, and theoretically the most accurate — but you have to remember every detail. Here you specifically list every single item that will go into the job and for each line item add a markup to cover overhead and profit. You must also accurately predict how much labor will be involved. Under this method a wall's cost, for instance, will be estimated not according to the area of the room it will enclose or the number of linear or square feet of wall, but according to how many studs and plates and headers and other pieces of lumber will go into it and how much labor will be required to assemble it. (You could take this further and count the nails, but most people include those in the hardware section.) I use this takeoff method for all my lumber needs, simply because I'm most comfortable estimating this way. I don't



Estimating Categories

The author uses a 12-page checklist, saved as a spreadsheet file, that details the categories on the Cost Summary Sheet. He checks every line on each estimate to make sure nothing is overlooked. Shown below is the format for Line 001, Excavation/Backfill; the line items for the rest of the categories are listed underneath.

	Budget	Revised Budget	Cost	Increase Decrease
Line 001 – *Excavation/Backfill:*				
Site preparation & demo				
Clearing & grubbing				
Topsoil stripping & piling				
Trees boxed & planked – tree wells				
Rough site grading w/cut & fill				
Foundation excavation & backfill				
Finish grading				
Sidewalk, parking & street cutting				

Line 002 – *Concrete Foundation:* Concrete/Rebar & bolts; Wire mesh; Vapor barrier; Perimeter insulation; Vent & area wells; Basement fndn., waterproofing

Line 003 – *Concrete Flatwork & Driveways:* Concrete flatwork; Driveways; Patios; Curbs

Line 004 – *Drainage:* Foundation tile & gravel; Dampproofing

Line 006 – *Frame/Finish:* Lumber; Finish; Trusses; Misc.

Line 010 – *Windows/Sliding Glass Doors:* Labor & matl. – windows; Labor & matl. – storm sash; Labor & matl. – window walls, incl. glaze; Labor & matl. – sliding glass doors

Line 012 – *Weatherstripping*

Line 013 – *Garage Doors:* Labor & matl. – garage doors; Door opener

Line 014 – *Warehouse Inventory:* Structural steel; Rough hardware & framing anchors; All nails; Glue & caulking; Base & rowlock flashing

Line 015 – *Finish Hardware:* Bath accessories; Shower doors; Grab bars; Fire extinguisher; Mailboxes; Finish hardware; Handrails; Medicine cabinets; HM doors; Toilet partitions

Line 016 – *Appliances/Hoods:* Ranges; Hoods; Refrigerators; Dishwashers; Disposals; Washers; Compactor; Shipping; Uncrate & set

Line 018 – *Miscellaneous Items/Decks:* Synthetic deck covering; wrought-iron rails

Line 019 – *Metal Gutters:* Gutters & downspouts – labor & matl.

Line 020 – *Roofing:* Asphalt shingles & felt; Built-up roofing; Tar & gravel roof; Labor & matl. – install drip edge & vents

Line 021 – *Plumbing:* Labor & matl. – bath & kit. install; Labor & matl. – gas piping; Labor & matl. – laundry taps; Labor & matl. – water heater pans; Labor & matl. – laundry trays

Line 023 – *Heating & Sheet Metal Work:* Labor & matl. – electric baseboard; Labor & matl. – ceiling heat; Labor & matl. – furnace & duct work; Labor & matl. – stack on air condition; Labor & matl. – pad for compressor

Line 024 – *Electric Wiring/Fixtures:* Labor & matl. – elec. serv. incl. wiring; Labor & matl. – bath fan hookup; Labor & matl. – furnace hookup; Labor matl. – kitchen fans; Labor & matl. – air conditioners; Labor & matl. – disposals; Labor & matl. – light fixtures

Line 025 – *Venting:* Labor & matl. – metal & cntr. flashing; Stoop flashing; Labor & matl. – vent fan & dryer ducts; Labor & matl. – metal roofs on bays

Line 026 – *Metal Fireplace:* Labor & matl. – metal fireplace; Chase tops

Line 027 – *Masonry Fireplace/Veneer:* Brick, block & stonework in place; Lintels, metal or precast, Ties & reinforcing; Cleaning; Caulking; Trim

Line 028 – *Siding:* Siding & trim

Line 030 – *Drywall:* Labor & matl. – all drywall

Line 031 – *Tape & Texture:* Labor & matl. – all tape & texture

Line 032 – *Paint:* Labor & matl. – painting; Labor & matl. – wallpaper

Line 034 – *Carpet & Drapes:* Carpets & pads; Ext. stairs carpet & pads; Labor & matl. – shades; Labor & matl. – install drape rods; Labor & matl. – draperies; Labor & matl. – venetian blinds; Clean carpets

Line 036 – *Insulation:* Ceiling; Wall; Floor; Sound insulation

Line 037 – *Formica/Resilient/Ceramic Tile:* Formica tops; Labor & matl. – all ceramic tile work; Labor & matl. – vinyl; Labor & matl. – metal edging & strips; Labor & matl. – rubber base

Line 039 – *Shower Doors/Mirrors:* All glass & glaze, incl. doors, wndws. & mirrors; Shower doors installed

Line 040 – *Cabinets/Vanities:* Kitchen & bath cabinets; Labor

Line 041 – *Millwork/Metal Bi-Folds:* Matl. – for int. & ext. doors; Metal or wood bi-fold closet doors w/hdwe.; Labor & matl. – only glass sidelights

Line 043 – *Housecleaners*

Line 044 – *Topsoil/Lawn/Landscape:* Trees; Shrubs; Seeding & sodding

Line 045 – *Rockery:* Walls & retaining walls

Line 046 – *Building Permits*

Line 047 – *Underground Utilities:* Gas; Water; Sanitary sewers; Storm sewers; Site lighting; Site electrical

Line 050 – *Change Orders*

Line 055 – *Payroll Taxes*

Line 060 – *Labor - Foundations*

Line 061 – *Labor - Framing*

Line 062 – *Labor - Finish*

Line 63 – *Labor - Cleanup*

Line 064 – *Architectural & Engineering:* Engineering & plans; Test hole; Plat

Line 065 – *Special Equipment:* Garbage cans; T.V. antenna system; Telephone jacks; Central vacuum

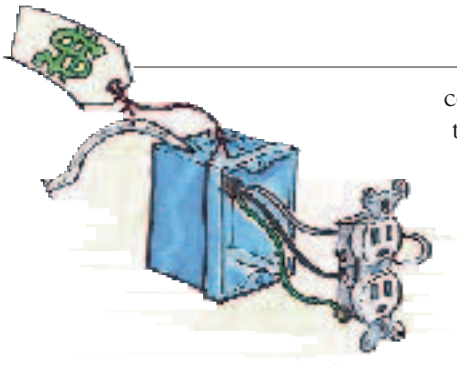
Line 066 – *Accessory Buildings*

Line 067 – *Roads & Walks:* Paving streets; Paving parking areas; Curbs & gutters; Walks & steps; Surfacing playground areas; Surfacing special areas

Line 068 – *Site Improvements:* Equipment-playground & spec. areas; Fences; Street & project signs; Trash removal areas; Swimming & wading pools; Water foundations & art objects

Line 069 – *Elevators:* Labor & matl. – elevators

Line 070 – *Construction Overhead:* Clerical; Superintendent; Promotion; Travel & moving superintendent; Auto allowance; Insurance; Equipment rental; Utilities; Office supplies; Telephone; Postage; Breakage & theft; Dumpsters; Small tools; Sanitation; Street sweeping; Gas & oil – equipment; Miscellaneous



count every stud on the drawings, but I know that so much length of wall will contain so many studs and I enter it on my lumber sheet accordingly. I always work up my lumber list myself, rather than asking the yard to do it, simply because I trust my own numbers more.

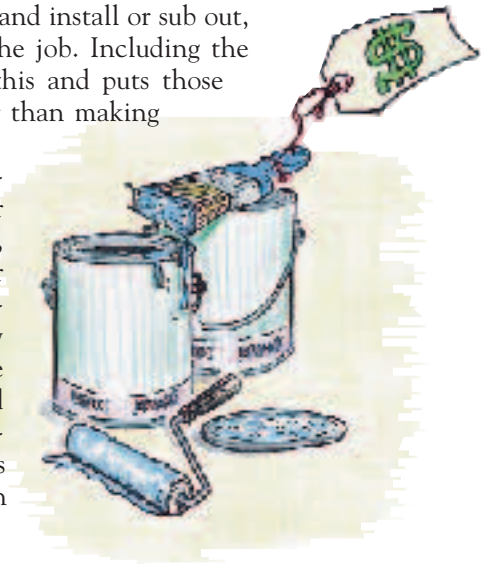
Allowances. Allowances are the roughest sort of estimate, being simply a reasonable prediction as to how much will be spent on a given item. (For obvious reasons, the amount of the allowance for any given item will vary depending on how upscale or budget-dominated the particular job is.) I use allowances mainly for items the client will choose later, such as appliances and lighting and plumbing fixtures. It's important that the estimate note that those costs are allowances so that the clients understand that they must choose items that fit in that budget or pay more out of their pockets. That's why the word "allowance" is important — so the customers understand they've been put on a budget.

Presenting the Estimate

Once my estimate is done, I let it sit for a day, then come back and look at it to make sure I didn't leave anything out. Then I present the estimate promptly. I try to let no more than five days pass from my walk-through or completion of plans until I present my estimate at an office or site meeting. The goal of this meeting is to close the sale and sign a construction contract. In practice, however, most sales are closed at a subsequent meeting once the customers have had time to digest the information.

There remains the matter of how much of my estimating work the client will actually see. While I do all my estimates with the same level of care, I don't necessarily present the same level of detail to the customer. If it's to be a lump-sum job, I usually just present the one-page summary sheet. If it's to be a cost-plus contract (which I don't especially like because of the added paperwork), I give the customers the supporting 12- and 5-page itemizations. Either way, I give the estimate to the customers, and it is theirs — they paid for it, and they keep it even if they don't use my firm.

Overhead and profit. I include a net 25% combined markup for each line item (including allowances) rather than showing them as one separate markup at the end. This prevents the problem of showing to the customer what seems like a huge markup at the end of the estimate. My 25% markup is perfectly reasonable, and most customers understand that you have to mark your costs up to cover overhead and profit. They're much less likely to object if those costs are presented as part of each item — which, if you think about it, is actually a more accurate and realistic way to view overhead and profit anyway. After all, you incur overhead (and attempt to make a profit) with every item you buy and install or sub out, not all at once at the end of the job. Including the markup item by item reflects this and puts those costs where they belong, rather than making them seem like an extra.



I believe that this straightforward, realistic approach makes for the most acceptable estimate, even when you come in higher than competing bids. Most reasonable clients (do you want any other kind?) will recognize the value of a thorough estimate and respond in a way that acknowledges the vagaries and difficulties of the remodeling business. Which is a nice way to start any job. ■

Clai Porter owns NCP Construction Ltd., a remodeling firm in Anchorage, Alaska. He also teaches estimating classes at the University of Alaska in Anchorage.

Estimating Resources

Home-Tech Remodeling and Renovation Cost Estimator
by Henry Reynolds (Home-Tech Publications, 1985; 800/638-8292). Softcover, 8½x11, 270 pages. $37.20.

Means Unit Price Estimating
by Edward B. Wetherill (R.S. Means Company Inc., 1986; 617/747-1270). Hardcover, 8½x11, 356 pages. $42.95.

National Construction Estimator
by Martin D. Kiley and William M. Moselle (Craftsman Book Company, 1995; 800/829-8123). Softcover, 8½x11, 586 pages. $31.50.

National Repair & Remodeling Estimator
by Albert S. Paxton (Craftsman Book Company, 1994; 800/829-8123). Softcover, 8½x11, 408 pages. $32.50.

Professional Cost Estimating
by Walt Stoeppelwerth (Home-Tech Publications, 1990; 800/638-8292). Softcover, 7½x10, 167 pages. $37.50.

Remodelers Handbook
by Benjamin Williams (Craftsman Book Company, 1977; 800/829-8123). Softcover, 8½x11, 414 pages. $18.50.