

K&B Remodeling — On Budget, On Time

by Peter Feinmann

Product checklists, detailed time sheets, and clear contract language help keep complex K&B jobs on track

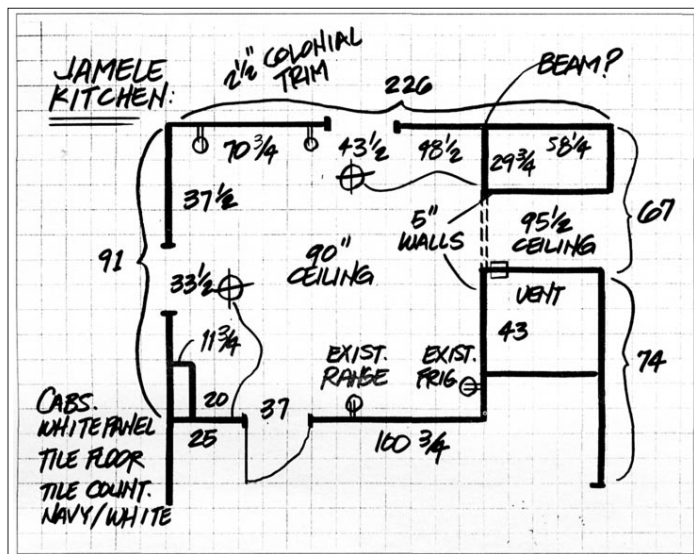
To estimate any type of remodeling project, you need accurate information. This is especially critical for kitchens and bathrooms because there are so many pieces and minute details. Over the years, I've developed checklists and standard procedures to help get the information I need and avoid oversights.

Sizing Up the Job

You can't afford to make mistakes taking dimensions for a K&B remodel because so many of the elements, like cabinets, fixtures, and appliances, are fixed in size. I make a 1/4-inch scale drawing of the room using the Freehand Design System (1211 Gorham St. #5, Newmarket, ON L3Y 7V1; 416/836-0277), which has a ridged working surface that guides your pencil and makes it easy to draw straight lines (see illustration, right). The Freehand tablet is laid out in a 1/4-inch grid, which makes it easy to draw to scale. Graph paper will work, too, but the Freehand system makes the whole process more professional looking, and the drawing is easier to read when I get back to the office.

Here are some of the rules I follow to make sure I know what I measured and how I measured it.

- **Measure every wall in order**, moving either clockwise or counter-clockwise around the room. Don't move to the next wall until you've recorded all the dimensions you need.
- **Measure in inches** and never mix feet with inches. Inches are less confusing, but only if you're consistent. By always recording dimensions in inches, you can be certain that a notation of "65," for example, means 65 inches, not 6 feet 5 inches.
- **Assume nothing is square or plumb.** This will ensure that you allow for filler strips and for extra labor to scribe edges.
- **Measure from trim to trim** (outside to outside) on doors and windows. If you do this consistently, you'll rarely have to crowd or cut around a piece of trim to get a cabinet to fit. Also note the type and size of the trim so you can price matching stock.



When taking field measurements before a remodel, the author uses the Freehand Design System to make a quick and neat scale drawing that can be easily read at the office. All dimensions are in inches, and window and door openings are always measured from the outside of the casing.

Electrical Requirements

Purpose	No. of Circuits	Volts	Amps	Poles
Kitchen:				
Small Appliance*	2	120	20	2
Dishwasher	1	120	20	1
Microwave	1	120	20	1
Refrigerator	1	120	20	1
Range	1	120/240	50	2
Wall Oven	1	120/240	30	2
Cooktop	1	120/240	40	2
Lighting	1	120	20	1
Bath:				
Whirlpool Tub	1	120	20	1
Lighting/Fan	1	120	20	1
Small Appliance*	1	120	20	1
Utility:				
Washer	1	120	20	1
Dryer	1	120/240	30	2

* May require GFCI protection

Figure 1. Use this chart to calculate how many circuit breaker slots you'll need to accommodate the kitchen and bath wiring. Be sure to count double-pole circuit breakers as two slots, even though they supply only one circuit.

- **Measure the height of each window sill** from the finish floor to the bottom of the sill, the height from the top of the sill to the top of the head casing, and the distance from the head casing to the ceiling.

Compare the total of these dimensions (don't forget to add the thickness of the sill) against the overall floor-to-ceiling dimension to make sure windows are aligned and to check for sags and bows in the floor

and ceiling. These dimensions are also useful if a countertop passes under the window or a soffit passes over it.

- **Check the structure**, noting headers and columns that need to be moved or replaced. This is especially important if the proposed design will open up the space.
- **Measure existing appliances and fixtures** that the client plans to keep. If you don't do this now, you may not find out that they don't fit the new design until literally the last day of the job.
- **Measure hvac components** both for size and location. Be sure to measure the overall dimension of register covers and finish grilles so you won't have to trim them down later.
- **Count existing electrical outlets, switches, and lights.** If you plan to use existing devices, locate each one with two dimensions. Measure to and from the outside edges of the cover plate to avoid having to shave the cover down later because a cabinet was positioned too close. These numbers will help you determine what you need to do to comply with code as well as help you calculate how many outlets and light fixtures need to be moved or added.

Looking for Trouble

Good estimating isn't only about what you can see, it's also about what you can't see. Here's a list of things to check before you start to price a kitchen or bath job.

Plumbing. In older homes, sinks and toilets are often on the same trap, so I assume we'll need to run new waste lines in the floor all the way back to the existing stack. When the new design calls for relocating the toilet, make sure that the new location isn't right over a joist. If there are any signs of galvanized or brass piping, figure on replacing the water supply lines all the way back to the main shutoff, since such old piping is usually too fragile to survive a remodel.

Salvaged fixtures and fittings can create real problems, particularly with very old styles. It's often impossible to take them apart without breaking something, and replace-

ment parts are hard to find. Sometimes, disassembling an old faucet that's working perfectly can jar something loose that keeps it from working properly when you reinstall it. Our estimate covers the cost to disassemble salvaged items, but it doesn't include the cost to replace a fixture or fitting that has concealed damage or one that is ruined, through no fault of ours, while we are taking it out.

Electrical. Always check the service panel to make sure there is enough juice for an upgraded kitchen and dedicated circuits for whirlpool baths and steam units (Figure 1, page 28). Upgrading or adding a panel when you haven't

figured it into your price is an expensive oversight.

Salvaged light fixtures are sometimes more trouble than you expect. I know a builder who agreed to reinstall a glass chandelier without first inspecting the fixture. It had hundreds of glass teardrop shapes that had to be hung individually on tiny hooks. It took him all morning to perform what he thought would be a 20-minute installation.

Walls and ceilings. We usually spend a couple of days leveling floors and ceilings, and flattening walls. This prep work makes it much easier to install cabinets and countertops later on, so we include these costs in our price.

Hidden defects. Even though I try to allow for concealed conditions, like inadequate structural members or electrical wiring that runs through a new door opening, I don't have x-ray vision. What I can't include in the estimate, I provide for in a hidden defects clause in the contract (Figure 2, page 28). It protects me from having to pay for unforeseen conditions and alerts the clients to the possibility of additional charges for concealed problems.

Tips for the Office

The success of a K&B remodel also depends on how well you administrate it. Here are some of the steps I take in the office to smooth things along in the field.

Upgrades. If the estimate includes labor costs for a mid-priced bathroom and our clients upgrade the job significantly, we will be faced with a lot of unforeseen expenses, like needing more labor to install more complex systems, as well as additional supervision time for subs. I always make sure the clients understand that more expensive material requires additional labor costs.

Allowances. I keep overhead and profit for allowances in the base price. This means, for example, that when I

give a client a \$200 allowance for a toilet, I am actually charging \$280. The \$80 is included in the overall cost of the job, and covers operating expenses to purchase and warranty the fixture. If the clients select a slightly more expensive fixture, I charge them the difference between the allowance and what I actually pay for the fixture. If an allowance grows into a major change in the scope of the work that requires additional management and labor, I treat it as an upgrade.

Labor. Pricing labor is one of the most difficult parts of estimating a K&B remodel. Our lead carpenters use a special form to keep track of how they use their time on projects (Figure 3). By comparing actual labor time to estimated labor time, I can identify those parts of the job that give us the most trouble. Over time, the accumulated data about how long it takes to perform each phase of the work helps take the guesswork out of estimating.

Fixed price subcontracts. I encourage subcontractors — especially electricians, plumbers, and tile installers — to subcontract their work for a fixed price. This streamlines estimating and administration. I back them up by providing detailed plans, specs, and scheduling information so there are few surprises.

Faxes. When I need to exchange information with a supplier or a sub, I use a fax machine whenever I can. It not only speeds up the estimating process, but it provides a paper trail. Using a fax also gives me a way to leave detailed messages for a sub who is away from his office during the work day.

Scheduling

As a group, contractors do not have a great reputation for getting jobs done on time. The major culprit is poor planning. Kitchen and bath jobs are especially vulnerable to delays because there are so many interdependent parts. If the countertop is delayed, for example, that pushes back sink and faucet installation, which in turn delays tiling the backsplash. Because of this chain reaction, a delay in one small detail can bring a job to a standstill.

There are several key things that help keep our jobs on track.

Design/build. In my experience, I always lose money on kitchen and bath projects designed by someone else. Consequently, I try to handle everything, including design. It's much easier to manage and orchestrate a complex project from its inception than it is to jump in later.

When clients insist on using their own designer, I limit our responsibility. I once had a client who purchased her cabinets directly from a supplier who also did the design work. Near the end of the job, the client realized that the refrigerator was too close to a doorway, and implied that our company was at least partly responsible

Hidden Defects

Feinmann Remodeling warrants that it will use its best efforts to discover any hidden conditions prior to the commencement of construction. However, any hidden conditions not reasonably discoverable prior to the commencement of construction which in any way interfere with the safe and satisfactory completion of the work will be corrected at additional expense to the Owner. Feinmann Remodeling will submit a Change Order documenting the reasonable costs of repairing such hidden defects prior to continuing work.

Figure 2. Include a hidden defects clause in contracts to protect yourself against unforeseen conditions discovered on the site.

Job Task Sheet							
Job Name: JAMELE		Carpenter: B. RICHARDS					
		10/4	10/5	10/6	10/7	10/8	
Tasks	Est. Hrs.	Mon.	Tues.	Wed.	Thurs.	Fri.	Total
Finish Carpentry	40						
Kitchen Cabinets	8						
Kitchen Counters + OAK CAP	8			1 1/2	1		2 1/2
Appliances	8						
Window Trim							
1st Fl.	14		1				1
2nd Fl.	12						
Install and Trim Doors							
W/D Closet	8					1	1
D.R. Door	2	1/2					1/2
Hall Closets	10		1 1/2				1 1/2
Ext. Door Trim	4						
Master Bedroom	12					2 1/2	2 1/2
Install Vanity	4						
Baseboard							
Family Room	4					3	3
Kitchen	4		3 1/2			1	4 1/2
Master Bedroom	8						
Study	2				1		
Study Oak Cap	4	1/2		1	3		4 1/2
Punch List	24	1	3	1/2	3 1/2	1/2	8 1/2
Cleanup	8		1/2	1/2			1
Total Hours	176	2	9 1/2	3 1/2	7 1/2	8	30 1/2
Total Days	22						
Supervision	20						

Figure 3. Using a Job Task Sheet, which shows one employee's hours for one week, helps the lead carpenter quickly find out where a job is falling behind schedule. Over time, the numbers can be used to hone labor estimates for future jobs.

Kitchen Selection Checklist

Cabinetry	Countertops	Lighting																																													
Allowance: \$ _____	Allowance: \$ _____	Allowance: \$ _____																																													
Supplier: _____	Supplier: _____	Supplier: _____																																													
Salesperson: _____	Salesperson: _____	Salesperson: _____																																													
Brand: _____	<div style="display: flex; justify-content: space-between;"> <div> Material <input type="checkbox"/> laminate <input type="checkbox"/> wood <input type="checkbox"/> tile <input type="checkbox"/> solid surface <input type="checkbox"/> marble <input type="checkbox"/> granite </div> <div> Type/Color _____ _____ _____ _____ _____ </div> </div>	<div style="display: flex; justify-content: space-between;"> <div> Total of each type: _____ Incandescent _____ Fluorescent </div> <div> _____ Halogen _____ Use existing </div> </div>																																													
Model: _____	Edge treatment: _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Qty.</th> <th>Manuf.</th> <th>Location</th> <th>Model</th> <th>Type</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>Sink</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>Desk</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>Ceiling</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>Island</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>Peninsula</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>Soffit</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>Table</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>Undercab.</td><td>_____</td><td>_____</td></tr> </tbody> </table>	Qty.	Manuf.	Location	Model	Type	_____	_____	Sink	_____	_____	_____	_____	Desk	_____	_____	_____	_____	Ceiling	_____	_____	_____	_____	Island	_____	_____	_____	_____	Peninsula	_____	_____	_____	_____	Soffit	_____	_____	_____	_____	Table	_____	_____	_____	_____	Undercab.	_____	_____
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_____	_____	Table	_____	_____																																											
_____	_____	Undercab.	_____	_____																																											
Door style: _____	Custom details: _____	Service: _____																																													
Wood species: _____	<div style="display: flex; justify-content: space-between;"> <div> Backsplash Allowance \$ _____ <input type="checkbox"/> full laminate <input type="checkbox"/> tile <input type="checkbox"/> stone </div> <div> <input type="checkbox"/> 4" laminate <input type="checkbox"/> 4" solid surface <input type="checkbox"/> with cove </div> </div>	_____ Keep existing _____ Upgrade _____ 100 _____ 150 _____ 200 amps																																													
Finish: _____	Grout color: _____																																														
Hardware: _____																																															
Laminate pattern: _____																																															
Accessories: _____																																															

Figure 4. A checklist reduces layout mistakes by putting crucial specifications at the lead carpenter's fingertips. It also serves as a record of the client's product selections.

because we had reviewed her designer's plans. Since then, I have made it a point in cases like this to meet with clients and their designers to discuss the design, but I don't "approve" anyone's final designs but my own.

Product selection. When it's time to select cabinets and accessories, I refer our clients to suppliers I have worked with before and who have given good service. To ensure some quality control over products, I always meet with clients at least twice to review their selections.

Whether the cabinets are purchased through our company or from another source, I like to schedule the delivery. There is no other way to ensure full control over the project schedule. In cases where I haven't been able to follow this policy, I've run into trouble. This past winter, for instance, we did a high-end bathroom job for which the owner provided all

of the fixtures. The whirlpool tub was delivered with the wrong size motor, the mixing valves were missing rough-in parts, and a wall-hung glass sink came without instructions on how to mount it against a mirror. The delays and extra meeting time caused by these problems sunk the schedule, and the profit went out the window.

Following Through

Once the design, product selection, and ordering are complete, I pass control of the job over to the production crew. I always provide a complete package of plans and specs to the lead carpenter. The centerpiece is a checklist of products that gives complete information on everything that's going into the job (Figure 4, previous page). Whenever there's a question about rough-in dimensions, the size of an appliance, or other details that could delay progress, the lead carpenter

can use the checklist to get the information.

Using a lead carpenter for each job also helps keep the schedule on track. When I walk through the job and introduce a client to the lead carpenter at a preconstruction meeting, I explain that the lead carpenter has the authority to make on-site decisions. Not having to check with the office for every small decision eliminates a lot of wasted time. The lead carpenter is on site all day every day, so he can keep close tabs on progress and make adjustments quickly. I usually visit the site at least once a week to help iron out any special problems, but the lead carpenter takes care of most problems.

Be realistic. None of these measures will work if you don't establish a realistic schedule in the first place. Small things can make a difference. For example, most cabinet suppliers

will tell you it takes "six to eight weeks" to fill an order. If you then tell your clients the cabinets will take six weeks to arrive when you know they might take eight, you're doing everyone a disservice. If you set accurate expectations up front, things will go smoothly later.

I also give clients and subcontractors a bar chart that shows when all of the important phases of construction are scheduled to begin and end (Figure 5). I plug actual numbers from the estimate into a computer spreadsheet to build the chart, and I'm careful to allow lead time for material orders. When the schedule changes because of a change order or other delay, I update the bar chart and send everyone a new copy (this is much easier on a computer than doing it manually).

But before you can commit to a specific period of time, you need to have all of the details ironed out, including all product selections and delivery times. Don't let estimating devices, such as allowance prices, deceive you and your clients into postponing decisions that will affect the schedule. An allowance price for a bathroom fixture, for example, doesn't mean that it makes no difference which fixture is chosen — it merely establishes a budget. To meet your schedule, you need to know which model in what color from which supplier is to be delivered when. Without complete information, you can be sure the job will not finish on time. ■

Peter Feinmann is president of Feinmann Remodeling in Arlington, Mass., a design/build company specializing in kitchens and baths.

Project Schedule																											
Job Name	11/13				11/20				11/27				12/4				12/11				12/18						
Demolition	x	x																									
Rough Labor		x	x		x	x	x	x	x																		
Rough Plumbing					x	x	x	x	x																		
Rough Electrical						x			x																		
Inspections									x	x																	
Plaster									x	x																	
Finish Work													x	x	x	x	x	x									
Tile Installation														x	x												
Bath Plumb./Elec.																	x	x	x								
Flooring																				x	x						
Punch List																								x	x		

Figure 5. The author gives everyone involved with a kitchen or bath remodel — including the client — a copy of the job schedule. If the schedule changes for any reason, everyone gets an updated copy.